九州大学学術情報リポジトリ Kyushu University Institutional Repository

Research on Accounting Comparability, Earnings Management, and IFRS: Evidence from ASEAN Countries

イエニ, ジヤヌアルシー

https://hdl.handle.net/2324/5068159

出版情報:Kyushu University, 2022, 博士(経済学), 課程博士 バージョン: 権利関係:

# Research on Accounting Comparability, Earnings Management, and IFRS: Evidence from ASEAN Countries

Yeni Januarsi

Graduate School of Economics

Kyushu University Japan

2022

# INDEX

# ABSTRACT

Chapter 1: Introduction	7
Chapter 2: Legal and Extra-Legal Determinants of Accounting Comparability in ASEAN Countries	19
Chapter 3: Accounting Comparability and Earnings Management Strategies: Evidence from Southeast Asian Countries	44
Chapter 4: The Effect of IFRS Adoption on Equity Acquisition Premiums: Evidence from Selected ASEAN Countries	74
Chapter 5: Conclusion	110

References

# Abstract

Accounting information quality (AIQ) has been an essential property for an investor, regulators, and all users of accounting information. Accounting information considered as a high quality when the information is useful for users to make business decision making. According to the qualitative characteristics from conceptual framework of financial reporting (hereafter Conceptual Framework), the usefulness of financial information is enhanced if it is comparable, verifiable, timely and understandable. In other words, the comparability of financial statement important for creating high quality of accounting information and relevant for managers for decision making purpose. In addition, IFRS adoption also considered as property of accounting information quality because IFRS is information-oriented and improve the quality of financial reporting, thereby meeting the information needs of investors and reinforcing the structures of the stock market

This dissertation aims to study how accounting information relevant for management or a company for useful decision making. Especially, this study addresses the important of accounting comparability and adoption of international financial reporting standards (IFRS) as two essential accounting information properties which relevant for a managers or firms to be concerned when they need to make business decision making.

Although studies in accounting comparability are extensive (Florou and Pope, 2012; Christensen et al., 2013; Wang, Clare. 2014; Cascino and Gassen, 2014), limited studies directly examine determinant of accounting comparability. Prior research documented the importance of country's institutional factor as an essential determinant of the quality of accounting information. While previous research in the area of investor protection or the legal system is extensive, evidence on how the legal and extra-legal system determine accounting quality from the perspective of accounting comparability remain unexplored. Thus, the first research objective from this dissertation is to investigate whether country's institutional factors, legal and extra-legal system, can explain the differences in within-country accounting comparability across emerging economy, in ASEAN countries

In addition to studies the determinant of accounting comparability, prior works also investigate consequences of having high comparable financial statement. I also find that there are conflicting findings regarding the effect of accounting comparability on earnings management choices in emerging markets. Whether accounting comparability affects earnings management choices around ASEAN, emerging market countries remain an unexplored question. From the literature review investigation, I also find that IFRS adoption is one of the essential factors that can create better AIQ. However, limited prior empirical studies directly examined the consequences of IFRS adoption on acquisition activity. To address these empirical problems, this dissertation examines the following question: (1) What determines the accounting comparability around ASEAN countries? (2) Does greater accounting information comparability curb AEM and/or REM (3) Does the convergence of global accounting standards help the users of accounting information make better investment decisions?

Chapter 1 will present the literature review on accounting quality, point out the objectives of this dissertation and then present main results as well as contributions. Chapter 2 will examine whether legal and extra-legal factors may determine Southeast Asian nations' accounting comparability (ASEAN). Dick and Zingales (2014) compiled evidence that legal and extra-legal factors can have implications for business managers and investors, such as mitigating managers'

benefit of controls. It is plausible that different degrees of legal infrastructure, law enforcement, and compliance in emerging countries such as ASEAN may have different consequences on accounting comparability. By examining 4776 firm-year observations in five ASEAN countries from 2014 to 2017, I find that accounting comparability is positively associated with stronger investor protection, stricter enforcement of auditing and reporting standards, stricter tax enforcement, and more public pressure; however, accounting comparability is adversely associated with greater competition. The results are robust to additional tests. In addition to legal system variables, extra-legal determinants play an important role in affecting a country's comparability of financial statements.

Chapter 3 investigate whether the greater accounting comparability curb AEM and/or REM in five ASEAN countries. By investigating 1,195 listed companies, excluding financial firms, from 2014 to 2017 in five ASEAN countries, accounting information comparability showed a negative association with AEM and a positive association with REM. Thus, firms with more comparable accounting information tended to engage in greater REM during the fiscal period and conduct less AEM. This result remained when using alternative proxies for REM. Robustness and sensitivity tests also supported this finding. Our results on ASEAN firms supported the substitute hypothesis, consistent with the results for US firms (Sohn 2016; Zang 2012). One explanation is that during the investigation period of this study, 2014–2017, all five ASEAN countries had adopted the International Financial Reporting Standards (IFRS), which, like US GAAP, requires extensive disclosure.

Chapter 4 investigate whether the accounting information has a role in facilitating a more accurate assessment of investment decisions by examining whether the adoption of International financial reporting standards (IFRS) impacts the takeover's premium in selected ASEAN countries. I predict that following the adoption of IFRS in ASEAN countries, the takeovers premium will increase because due to information asymmetry, acquirers need more information to reduce the gap and assess the target firms. Since the IFRS regulation requires more disclosure to the capital market (Houge, 2018), it can help buyers obtain more information during the post-IFRS period. In addition, in line with the positive accounting theory (PAT) and agency theory, which suggest that comparability of a financial statement may play a role as a monitoring mechanism in reducing information asymmetry, IFRS adoption can create more comparable financial information (Barth, Landsman, Lang, and Williams, 2012, Meshram and Arora, 2021; Neel, 2017; Sohn, 2016; Wang 2014, Yip and Young, 2012). The comparable information can assess alternative opportunities to make a better investment decision, help the buyer determine a favorable target firm, and enhance the takeovers premium. To test our contentions, I used a sample of target firms from selected ASEAN countries (Indonesia, Malaysia, and the Philippines) before and after IFRS adoption, which resulted in 840 acquisitions deals over 20 years. In line with our prediction, we find a positive association between IFRS adoption and acquisition premium, suggesting IFRS convergence help acquirer make better investment decision in ASEAN countries. We also find that the role of the acquirer financial advisor on the premium is more robust in the pre-IFRS adoption period than in post-IFRS. Further, additional analysis shows that the positive effect of IFRS on the premium is more substantial among target larger firms, acquirers from different industries, and acquirers from other countries. Several sensitivity analyses also confirm our prediction.

Chapter 5 presents the conclusions of this dissertation. Overall, this dissertation suggests that accounting comparability, institutional factors, and convergence with global accounting standards can improve the quality of accounting information among ASEAN countries, thus supporting Soderstorm and Jun (2013). This dissertation contributes to the accounting information

quality in several ways. **First**, we documented a shift from AEM to REM as firms' accounting information increased in comparability, complementing prior study on how accounting comparability help to improve the quality of accounting information. **Second**, our study should be of interest to the standard-setter and accounting regulator because witnessing the trade-off between EM strategy due to higher reporting quality (more comparable financial statement) may cause an unexpected consequence. The current study signals to the accounting regulator and standards setter that they should prepare effective monitoring to mitigate this opportunistic behavior. **Third**, we showed that firms in emerging markets could record similar EM behaviors as developed markets, such as the US when situated in a compatible regulatory environment concerning financial reporting requirements. **Fourth**, this study provides cues for the government to strengthen legal and institutional infrastructure, such as investor protection, and extra-legal environments, such as law compliance and enforcement, to have better accounting information quality. **Five**, accounting information has a role in facilitating a more accurate assessment of investment decisions for M&As transactions.

# **Chapter 1: Introduction**

# 1.1 Overview

Prior studies suggest that accounting information quality (AIQ) play essential role in capital market because users will rely on high quality of accounting information for important business decision such as investment, lending, and borrowing (Amstrong, Guay, and Weber 2010; Chen et al., 2018; Chen, Hope, Li, and Wang, 2011; Ferracutti and Stubben, 2019; Zhai and Wang, 2016) also for various company actions, such as dividend policy and CEO compensation (Choi and Shuh, 2019; Trinh, Haddad, and Tran, 2022). Extend studies which examine the accounting information quality divide into two groups. The first group is a stream of research that investigates the consequences of accounting information quality to a number of economics phenomena, while another stream of research investigates determinant of accounting information quality.

This dissertation attempts to study how accounting information relevant for management or a company for useful decision making. Especially, this study addresses the important of accounting comparability and adoption of international financial reporting standards (IFRS) as two essential accounting information properties which relevant for a managers or firms for business decision making. Both properties are important because the comparability of financial statement and the IFRS adoption create better quality of accounting information as it can reduce the information asymmetry, enhance the quality and quantity of information provided in the capital market, more disclosure requirements and increase the transparency (Houqe, 2018; De Franco et al. 2011; Choi et al. 2014). The comparability of financial statement can become external governance monitoring which provide more reliable and credible accounting information for managers, companies, and all users of accounting information for better business decision making purpose. Jory et al. (2016) provide supporting evidence that availability of credible information can reduce the asymmetry of information, thus enhance the quality of accounting information. In addition, it is expected that the adoption of IFRS can improve the usefulness of financial statements, enhance the quality of financial information, improve comparability of financial statement and transparency, and fulfill the needs of international users of financial information (Rezaee *et al.*, 2010). Recent studies document that comparability of accounting information and IFRS are factors associate with AIQ (Soderstorm and Sun, 2007; Hsu and Yang, 2000; Babar and Habib, 2021; Diri et al., 2020; Cornett et al., 2009).

Extend research has been documented the importance of comparable financial statement research. Bruner (2004), Chen et al. (2018), and Rosenbaum and Paerl (2009) show the positive effects of comparable financial information on the allocation of capital. Comparable firms also have a greater analyst following (Choi et al., 2019), higher market liquidity (Roulstone, 2003), lower default risk (Cheng and Subramanyam, 2008), lower cost of capital (Leuz and Verrecchia, 2000; Imhof, 2017), and higher valuation (Lang et al., 2003). While empirical studies have primarily investigated the effects of financial statements comparability, relatively few studies have explored the determinants of accounting comparability.

Prior research documented the importance of country's institutional factor as an essential determinant of the quality of accounting information by showing that the legal system influence the quality of accounting information. Countries with strong legal setting have more transparent financial information (Bhattacharya, Daouk, and Welker 2003; Bushman, Piotroski, and Smith 2004) with less earnings management and more value-relevant (Ball et al. 2000; Hung 2000; Leuz, Nanda, and Wysocki 2003). High anti-director rights and common law countries, exhibit greater tendency to recognise a timelier reporting of losses and to manage earnings downward but exhibit lower value relevance of earnings as compared to cross-listed firms domiciled in low anti-director

rights and non-common law countries (Kamarudin et al. (2020). Ross et al., (2020) address the enforcement of standards, investor protection, and equity market of financing as country's legal factor in explaining accounting comparability.

In addition to legal system, Dick and Zingales (2014) and Haw et al. (2014) suggest that extralegal system become a formal institutional country factors that play a key role in explaining the quality of financial reporting. They record that, together, legal and extra-legal system limits the use of benefits of private control and strengthens the credibility of financial statements. While previous research in the area of investor protection or the legal system is extensive, evidence on how the legal and extra-legal system determine accounting quality from the perspective of accounting comparability remain unexplored. Thus, the first research objective from this dissertation is to investigate whether country's institutional factors, legal and extra-legal system, can explain the differences in within-country accounting comparability across emerging economy, in ASEAN countries. *The first question on this dissertation will be: do legal and extra-legal systems determine accounting comparability around ASEAN countries*?

In addition to studies determinant of accounting comparability, prior works also investigate consequences of having high comparable financial statement. Previous studies assume that accounting comparability plays a role as external monitoring for both peer firms. This is because when firms are more comparable, they become a benchmark for each other and this may promote more peer monitoring, result in less information asymmetry (Kim et al., 2016). In this case, accounting comparability may become one of the external corporate governance mechanisms and can help to enhance the quality of accounting information. Although studies in the area of accounting comparability are extensive, limited studies directly examine the effect of accounting information comparability on earnings management choices in ASEAN countries. It is also not

clear whether emerging market such as ASEAN countries behave on EM strategies due to high comparable financial statement. Thus, the second purpose of this dissertation is to investigate whether external corporate governance mechanism influence of accounting quality by investigating the effect accounting comparability on the trade-off between accrual earnings management (AEM) and real earnings management (REM). *The second question of this dissertation will be: Does greater accounting information comparability curb AEM, or REM*?

In addition to accounting comparability, the quality of accounting information also determined by the accounting standards. Soderstorm and Sun (2007) suggest that if the International Accounting Standards Board (IASB) continues to improve the quality of IFRS, it is expected that financial reporting under IFRS to become increasingly value relevant and reliable, thus increasing the quality of accounting information. However, opponents of IFRS adoption argue that a single set of standards may not be suitable for all settings and thus may not uniformly improve the accounting quality. The conflicting findings also documented in the literature. Furthered, since the differences in country characteristics, level of compliance, and level of difficulty of IFRS implementation, research on how IFRS adoption may increase the quality of financial information and thus, give favorable consequences on business decision making is still debatable. To address this issue, third aims of this dissertation is to investigate whether the adoption of IFRS adoption on takeover premium. *The third question of this dissertation will be: Does the IFRS adoption effect takeover premium*?

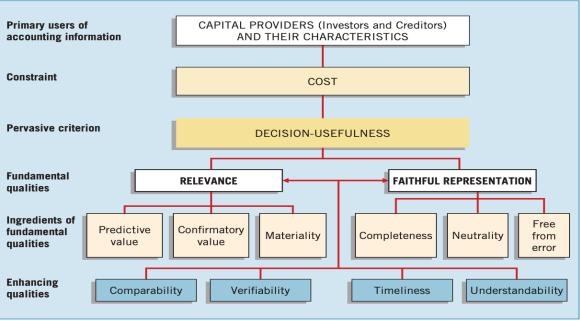
In the following chapter, we will discuss those issues in a more detailed way. The next section will explain the literature review and continue with a brief explanation regarding motivation of

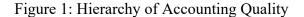
this dissertation. The main findings and contributions of this dissertation are also presented in the end of this chapter.

## **1.2.** Literature Review

# 1.2.1. Quality of accounting Information, Comparability of Financial Statement, and IFRS

Until now, the quality of financial accounting information is a complicated concept; therefore, its definition and measurement are not simple (Komala, 2012). Gelinas et al (2012) suggest that quality of information is information that give benefits for decision makers. In other words, accounting information considered as a high quality when the information is useful for users to make business decision making. For example, how does a company choose an acceptable accounting method, the amount, and types of information to disclose, and the format in which to present it? One can answer these questions by determining which alternative provides the most useful information for decision-making purposes (decision-usefulness). To be useful, financial accounting and reporting relies on IASB's conceptual framework of financial reporting (hereafter Conceptual Framework) to answer the questions. The IASB identified the qualitative characteristics of accounting information that distinguish better (more useful) information from inferior (less useful) information for decision-making purposes (Kieso et al., 2014).





Source: Kieso et al., (2014)

According to the qualitative characteristics which consist of fundamental qualities and enhancing qualities, information is useful when it is relevant and faithfully represents what it purposes to represent. The usefulness of financial information is enhanced if it is comparable, verifiable, timely and understandable.

Following the qualitative characteristics, the comparability of financial statement is one of the enhancing determinants of accounting information quality. Next questions is how we define the accounting comparability? Regulators argue that comparability increases accounting information's usefulness and enables financial statement users (here- after users) to identify the similarities and differences between economic phenomena (Financial Accounting Standards Board (FASB), 2010). The Financial Accounting Standards Board (FASB) (1980) states that "investing and lending decisions...cannot be made rationally if comparative information is not available."

Following the Financial Accounting Standards Board (FASB) (2010) and De Franco et al. (2011), comparability is defined as the extent to which similar economic transactions are accounted for similarly, and dissimilar transactions are accounted for differently. Thus, for a given set of economic events, comparability can be defined as the extent to which firms have similar accounting systems and hence produce similar financial statements (De Franco et al., 2011). It also reflects the quality of the information that enables users to identify similarities and differences in the financial performance of two firms (Francis et al., 2014). Furthermore, Krisement (1997) argues that the comparability of financial accounting information exists if all accessible information is based on the same type of facts. Comparability achieved when events are divided into groups of similar transactions, such as assets and liabilities.

Barth et al. (2012) suggests that accounting amounts are comparable if, when two firms face the same economic outcomes, the firms report similar accounting amounts. Further, Yip and Young (2012) address two equally important aspects of information comparability: the similarity aspect, which indicates whether firms engaged in similar economic activities report similar accounting amounts, and the difference aspect, which indicates whether firms engaged in different economic activities report dissimilar accounting amounts. They also argue that improvements on one side of comparability do not lead to self-improvement on the other. Although many researchers define different definitions and opinions on the comparability of financial statements, the literature provides a similar idea. Comparability of financial statement occurs when the information can be compared with similar information reported by other firms or by the same firm in other period and enable user of financial information to identify similarities and differences in the financial statement. Barth (2013) suggest that comparability is not consistency and also, not a uniformity. Consistency means that company use the same accounting methods or principles for the same items over time. Consistency helps achieve comparability however, consistency does not ensure comparability. Comparability also not uniformity. Comparability will results in similar things looks like similar and different things looking different. As a result, uniformity can make unlike things look alike, which impairs, not enhances, comparability.

In addition to comparability of financial statement, accounting standards - adoption of IFRS – also considered as property of accounting information quality. It is because IFRS is information-oriented and improve the quality of financial reporting, thereby meeting the information needs of investors and reinforcing the structures of the stock market. (Tarca, 2004; Barth et al., 2005; Lang et al., 2005; Tendeloo & Vanstraelen, 2005; Hung & Subramanyam, 2007; Iatridis, 2010). It would also suggest that by adopting IFRSs, firms act optimally and promote financial reporting quality and investor interests (see Fields, Lys & Vincent, 2001). Essentially, the adoption of IFRSs gives a positive signal of higher quality accounting and transparency (Tendeloo & Vanstraelen, 2005).

# 1.2.2. Development of IFRS adoption in ASEAN

ASEAN countries provide a unique set of IFRS convergence history. Currently, the ten members of ASEAN mostly converge with IFRS, except Vietnam. Unlike European Union countries that adopt IFRS in the same year (2005), ASEAN countries experience different convergence periods and strategies to adopt the IFRS. For example, Malaysia and Indonesia started to converge with IFRS in 2012, Singapore in 2003 and Thailand in 2013. Every country also chooses a different strategy for adoption. Some countries choose the big bang approach, while others believe in the convergence approach. The fact that ASEAN provides the various setting to converge with the IFRS, adopting the global accounting standards offers benefits and drawbacks to its adoption country.

Indonesia. Starting in 2007, Indonesia implemented a program designed to gradually converge its standards into the IFRS. The country actively revised most of its accounting standards until its formal declaration that such standards have been fully converged into the IFRS and are started by 2012. In domestic settings, Indonesia continues to adhere to the local accounting standards (i.e., PSAK) despite its substantial convergence into the IFRS. The capital market authority in Indonesia requires all listed companies to prepare financial statements in accordance with the IFRS.

**Malaysia.** Malaysia is one of the first ASEAN countries to adapt the IAS to local standards (Saudagaran & Diga, 2000) began publishing local accounting standards in 1977, which were based on the IAS, but several of the standards were excluded in the adaptation. Such standards include those on inventory accounting, depreciation, inflation, government grants, business combinations, special party disclosure, and accounting for financial institutions. Malaysia established its own regulations for the insurance and aquaculture industries. Some of its standards also were grounded in those used by Australia, Canada, New Zealand, the US, and the UK (Saudagaran, 2004). Malaysia's standards have been substantially converged into the IFRS since January 1, 2005. The country also revised the numbering of its standards for correspondence with related IAS or IFRS codes. In domestic settings, however, it continues to adhere to the local equivalent of the IFRS, namely, the Malaysian Financial Reporting Standards (Fitriyani et al., 2017)

**Singapore.** Singapore adapted the IAS to local standards in the mid-1970s (Saudagaran & Diga, 2000). In 1977, Singapore local accounting standards, which were based on the IAS, began

to be published, but several of the standards were excluded due to the inappropriateness for the Singaporean context. The convergence of accounting standards in Singapore also proceeded gradually. Since 2003, all companies have been required to apply the Singapore Financial Reporting Standards (SFRS), which are considerably similar to those of the IFRS. In January 1, 2005, the SFRS was already equivalent to the IFRS; that same year, the country implemented full convergence into the IFRS. The year 2012 was the final stage of the convergence process in the country (PWC, 2012).

**Thailand.** In 1997 began referring to the IAS. In 2011, Thailand announced that it would fully implement the IFRS for all companies that are listed in the Stock Exchange of Thailand (SET) 50 Index. In 2013, this implementation was expanded to companies listed in the SET 100 Index. The IFRS adopted in the country was published in 2009 (Fitriyani et al., 2017).

**Philippines.** After 1990, several standards were based on the IAS (Saudagaran & Diga, 2000); in 1997, the country fully shifted to these principles as its standard reference (www.adoptifrs.org). In 2005, the Philippines fully adopted the IFRS issued by the IAS Board. The initial application was characterized by some differences or exceptions; for example, some standards were implemented later in 2006 for insurance and mining companies (PWC, 2012). In domestic settings, the Philippines maintains the use of its IFRS-based local standards, namely, the Philippine Financial Reporting Standards.

### **1.2.3.** Country's Legal and Extra-Legal System

Various elements of institutional structures affect institutions and organizational behavior on the basis of institutional theory, such as societal norms, social experience, laws, and regulations. Each country's institutional factor provides opportunities that affect the actions in business managers, creditors, regulators and other market actors (Bushman and Piotroski, 2006). In accordance with this line of inquiry, Ball et al., (2000, 2003) posit that in addition to accounting standards, the country's legal environment and company's incentive for financial reporting frequently become two important determinants in assessing earnings quality. Soderstrom & Sun (2007) also address that investor protection as one of the determinants that may affect accounting earnings quality. Recent research suggests that strong investor protection, strong legal enforcement and a common legal system are key determinants of high-quality financial statement numbers (Daske, Hail, Leuz, & Verdi, 2008; Francis & Wang, 2008; Hope (2003); Leuz et al., 2003; Nabar & Boonlert-U-Thai, 2007; Francis et al., 2016; Oz and Yelkenci, 2018).

For instance, Leuz et al. (2003) examined the relationship between investor protection and earnings management across 31 countries using non-financial industry data. They found that strong investor protection at the country level reduced the earnings management activities of firms and thus led to higher accounting quality. Similarly, earlier research indicated that in countries with strong investor protection regimes, there was greater financial transparency (Bhattacharya et al., 2003; Bushman et al., 2004) and less earnings management. Francis et al. (2016) examine how real earnings management varies with the strength of a country's legal environment, using 245.180 firm-year-observations across 38 countries and multiple research design. They reveal that real earnings management increase with country-level legal strength. A very recent study by Kamarudin et al., (2018) examine wheather investor protection moderates the effect of cross-listing on accounting quality. Their results suggest that the strength of investor protection in home country plays an important role in determining the quality of accounting numbers of cross-listed firms. Overall, these research document that high quality financial reporting is influenced by country's legal system. Since accounting comparability has been identified as a key mechanism

that can enhance the quality of accounting information<sup>1</sup>, improvement on accounting comparability can be seen as an improvement on the quality of financial statement number. Thus, on current research, we posit that key features of institutional setting may enhance the accounting comparability between peers' firms.

In addition to legal system, extra-legal systems have been documented to influence the earning quality through reduced the level of earnings management and privat control benefit (Haw et al., 2014; Dick and Zingales, 2014). They argue that even though the extra-legal systems do not directly associate to the statutory protection of shareholder rights, they may reduce the private control benefit from insiders which may lead to the decrease of earnings income. Haw et al., (2014) document that extra-legal factors may be at least as important as legal institutions in limiting insider private control benefits. Consequently, we believe, ignoring the extra-legal system and focusing solely on legal system would overlook the possibility that might occur from extra-legal system to accounting comparability and thus country's institutional factor analysis is incomplete. Therefore, legal and extra-legal system should not, therefore, be overlooked in any future research

# 1.2.4. The Importance of Addressing Research on IFRS Adoption and Accounting Comparability in ASEAN

Several reasons motivate this study to address ASEAN countries when examining the determinant of legal and extra-legal system on accounting comparability. First, during the research period (2014-2017), ASEAN countries experience the ASEAN economic community (AEC). Legal and extra-legal system might change since the implementation of AEC. According to AEC blueprint from ASEAN secretariat (2015), the blueprint has 4 pillars, and we expect that implementing these Pillars has a potential effect on legal and extra-legal policy. For example, since

<sup>&</sup>lt;sup>1</sup> See De Franco et al., (2011) for more detail

pillar 1 and 2 address issue regarding competition policy, taxation, and intellectual property rights, implementing these issues may involve policy about, for instance, tax regulation or competition law among ASEAN country. Thus, we expect that the effect of legal and extra-legal determinant on accounting comparability will be stronger in the post-AEC period. Second, ASEAN implement high tax rate compared to other countries outside ASEAN. This condition has possibility to influence the extra-legal enforcement and compliance among ASEAN firms, which may affect the quality of accounting information. Third, even though ASEAN countries convergence with the IFRS, it is not automatically result in similar compliance of IFRS implementation which in turn may affect the comparability of financial reporting. One possible explanation is because there are some significant institutional factors that must be considered to obtain the maximum benefit of mandatory change (Christensen et al., 2013).

In addition, ASEAN also become interesting setting to examine how firms behave on EM strategy because of high accounting comparability. ASEAN countries are distinctly different from the countries investigated in previous studies in terms of market development and legal environment. Investor protection and disclosure requirements in the ASEAN may lag behind those in the US but are in a better position compared with frontier markets. Within the ASEAN, financial accounting has a micro-user orientation that emphasizes capital providers' information needs (Saudagaran and Diga 1998). Additional evidence from the ASEAN can further enrich the literature. In addition, corporate decision making relies heavily on accounting data, especially earnings information. On the one hand, this can motivate managers to provide more comparable financial statements, thus reducing managerial EM. On the other hand, the essential role of earnings information can also motivate managers to engage in EM in order to meet or beat the earnings expectation. Furthermore, ASEAN countries are characterized by high tax rates and

intricate tax regulations, which may provide incentives for managers to undertake EM. Empirical research is necessary to shed light on how accounting comparability affects EM in the ASEAN.

. Finally, it is important to examine study on the effect of IFRS adoption on equity premium in ASEAN countries for several rason. First, ASEAN capital market characterize by market inefficiency, corporate governance issue, fewer listed companies, less experienced investors, less demanding disclosure requirements, and less enforcement for having full disclosures lead to less transparent information in capital market. The adoption of IFRS can increase the transparency in capital market, which can be used for acquirer when assessing the target firms for takeover purpose. *Second*, information asymmetry become one of the main problems which discourages investors from taking business opportunities in foreign countries (Brennan & Cao, 1997; Jiang & Kim, 2004; Chung et al., 2017; Vo, 2020). By adopting IFRS, information asymmetry can be reduced and increase international mobility. Prior studies provide evidence that the implementation of IFRS can increase foreign direct investment (FDI). Following this argument, it is possible that government decide to convergence with the IFRS to invite foreign investor to invest in ASEAN countries and make the merger and acquisition in ASEAN region increase. For example, in Indonesia, government issue "Omnibus Law" or job creation Law. One of the main purposes of this law is to invite foreign investment and also simplified investment procedures for foreign investor to invest in Indonesia. In addition, the fact that from July to December 2019, 162 M&A deals were announced that amounted to approximately USD 22.4bn. Quarterly, the number of sales in Q3 increased by around 19% from Q2 when the global economic uncertainty was evident. From Q3 to Q4, both volume and value grew strongly with growth of 10% and 27%, respectively, and total weight in Q4 amounted to USD 12.5bn, suggesting that ASEAN is an important market for M&A transactions. Third, ASEAN is a region that is attractive to foreign investors. One of the

reasons is Southeast Asia is a crucial exporter to major economic blocs. It was the 4th largest trading partner of the U.S. in 2015, up from 5th place in 2009. It is also the EU's 3rd largest trading partner (after the U.S. and China) and Japan's 2nd most significant source of imports, just behind China. Considering how vital the ASEAN market is, still limited studies are examining M&A premium in the ASEAN region. *Fourth*, even though most countries in ASEAN converge with the IFRS, the compliance with the global standards is varies among ASEAN countries (Cascino and Gassen, 2015) which may impact the quality of the information in the local region. Since the takeover deal involves cross-border deals and buyers from a different industry, they rely more on infromation quality to assess the target firm, and it may impact the premium from M&A transactions. Accordingly, examining how IFRS adoption affects takeovers premium in ASEAN countries is an interesting empirical question.

#### 1.2. Motivation

Generally known in financial accounting literature that capital market and corporate action rely on accounting information quality to make business decision. When properties of accounting information quality associated with accounting comparability, earnings management, and adoption of international financial reporting standards (IFRS), mixed findings are documented in the fields and needs more studies to provide more sufficient explanation. In addition, most of the findings are documented in developed capital market and leave a concern how the result will be in the ASEAN market. In detail, I suggest several reasons what motivate current study.

First, prior studies document that most of determinant of accounting quality, which represented by accounting comparability, is IFRS adoption. The key emphasis on IFRS, raises a concern about other factors that may lead to variations in comparability of accounting within international level. This gap leads current study to focus on country's institutional setting as determinant of accounting comparability. While previous research in legal system is extensive, evidence on how the legal and extra-legal system determine accounting comparability around ASEAN countries is, however, heretofore unexplored. Thus, this reason motivates current study to investigate whether country's institutional factors, legal and extra-legal system, can explain the differences in within-country accounting comparability across emerging economy, in ASEAN countries.

Second, the mixed result regarding consequences of having more comparable accounting information, as representation of good quality accounting information, on earnings management strategy, with two competing hypotheses: substitute vs complementary hypothesis, become the second reason why I examine the association between accounting comparability and AEM/REM switch-off. In addition, too much focus on developed market and scarcity finds in ASEAN region, also give a huge rom for this dissertation to fill the gap in the literature.

Third, while many prior studies extensively examine takeover premiums from the finance and strategic management perspective, less attention has been given to explaining why premiums occur from a financial accounting perspective. The current study extends this body of work by examining whether the adoption of International financial reporting standards (IFRS) directly impacts the takeover's premium in selected ASEAN countries.

# **1.2 Main Findings**

Main findings from chapter 2 (two) to chapter 4 (four) are summarize as follows. Chapter 2, which investigate whether legal and extra-legal factors determine accounting comparability in ASEAN, xamining 4776 firm-year observations in five ASEAN countries from 2014 to 2017, I find that accounting comparability is positively associated with stronger investor protection,

stricter enforcement of auditing and reporting standards, stricter tax enforcement, and more public pressure; however, accounting comparability is adversely associated with greater competition. The results are robust to additional tests. In addition to legal system variables, extra-legal determinants play an important role in affecting a country's comparability of financial statements.

From Chapter 3, I examine whether the greater accounting comparability curb AEM and/or REM in five ASEAN countries. By investigating 1,195 listed companies, excluding financial firms, from 2014 to 2017 in five ASEAN countries, accounting information comparability showed a negative association with AEM and a positive association with REM. Thus, firms with more comparable accounting information tended to engage in greater REM during the fiscal period and conduct less AEM. This result remained when using alternative proxies for REM. Robustness and sensitivity tests also supported this finding. Our results on ASEAN firms supported the substitute hypothesis, consistent with the results for US firms (Sohn 2016; Zang 2012). One explanation is that during the investigation period of this study, 2014–2017, all five ASEAN countries had adopted the International Financial Reporting Standards (IFRS), which, like US GAAP, requires extensive disclosure.

Chapter 4 investigate whether the accounting information has a role in facilitating a more accurate assessment of investment decisions by examining whether the adoption of International financial reporting standards (IFRS) impacts the takeover's premium in selected ASEAN countries. To test the contentions, I used a sample of target firms from selected ASEAN countries (Indonesia, Malaysia, and the Philippines) before and after IFRS adoption, which resulted in 840 acquisitions deals over 20 years. In line with our prediction, we find a positive association between IFRS adoption and acquisition premium, suggesting IFRS convergence help acquirer make better investment decision in ASEAN countries. We also find that the role of the acquirer financial advisor on the premium is more robust in the pre-IFRS adoption period than in post-IFRS. Further, additional analysis shows that the positive effect of IFRS on the premium is more substantial among target larger firms, acquirers from different industries, and acquirers from other countries. Several sensitivity analyses also confirm our prediction.

Chapter 5 presents the conclusions of this dissertation. Overall, this dissertation suggests that accounting comparability, institutional factors, and convergence with global accounting standards can improve the quality of accounting information among ASEAN countries, thus supporting Soderstorm and Jun (2013).

# **1.3 Contributions**

This dissertation contributes to the accounting comparability, earnings management, and adoption of IFRS literature in several ways. First, this study provides cues for the government to strengthen legal and institutional infrastructure, such as investor protection, and extra-legal environments, such as law compliance and enforcement, to have better accounting information quality. Second, current study provide evidence on ASEAN firms in the existing literature which show somewhat mixed results, with two competing views regarding the effect of accounting comparability on AEM and REM. While some prior studies find results supporting complement hypothesis (i.g., Chen et al. 2012; Alberthnaty, Beyer, and Rapley 2014), others support substitute hypothesis (Anagnostopoulou and Tsekrekos 2016; Oz and Yelkeci 2018). Prior studies on this issue mostly focus on developed markets (Shon 2016; Chen and Gong 2019) or frontier markets (Martens, Yapa, and Safari 2020), with few studies focusing on ASEAN countries. One exception is Liem (2021), which examines Vietnamese firms but didn't include REM in the analysis, thus not distinguishing between the two competing hypotheses. This study reduces the literature imbalance by presenting evidence of using REM and AEM as supplements among ASEAN firms.

Third, current study provide evidence on ASEAN countries with features distinct from the more developed capital markets and frontier countries investigated in the existing literature. Wellstructured institutional settings can constrain EM (Shen and Chih 2005). Compared with advanced economies, the lower levels of governance and disclosure in emerging markets (Odell and Ali 2016) provides a unique setting for EM practices and is an avenue that has been under-examined (Martens, Yapa, and Safari 2020). The level of financial statement comparability and EM practices may be different in ASEAN compared to developed markets, because of the differences in the disclosure requirements, enforcement, and compliance. In the existing literature, it was not clear how firms in emerging markets such as ASEAN behave in using AEM and REM. This study fills the gap by showing that ASEAN firms with more comparable accounting information tended to engage in greater REM during the fiscal period and less AEM at the period-end. Fourth, while most prior studies have only investigated firms in a single country, this study investigates multiple ASEAN countries. This allows us to provide more rigorous evidence by including country-level institutional factors in the empirical tests, which can somewhat address the omitted variable problems. For instance, legal origins are related to corporate governance (La Porta et al. 1998), which can influence managerial uses of EM. Five, accounting information has a role in facilitating a more accurate assessment of investment decisions for M&As transactions.

# Chapter 2

# Legal and Extra-Legal Determinants of Accounting Comparability in ASEAN Countries

## Introduction

Comparable financial reporting among firms plays a crucial role in the accurate assessment of investments and decision-making. Informed decisions can be made when information about a company can be compared with the information from previous periods or alternative companies. Accounting comparability can be defined as the extent to which similar (dissimilar) economic transactions are accounted for in a similar (different) manner (FASB, 2010; De Franco et al., 2011). The International Accounting Standard Board's (IASB) conceptual framework for financial reporting identifies the importance of comparability of financial statements, which can enhance the quality of financial information. Prior studies have revealed the benefits of comparable financial information. Bruner (2004), Chen et al. (2018), and Rosenbaum and Paerl (2009) show the positive effects of comparable financial information on the allocation of capital. Comparable firms also have a greater analyst following (Choi et al., 2019), higher market liquidity (Roulstone, 2003), lower default risk (Cheng and Subramanyam, 2008), lower cost of capital (Leuz and Verrecchia, 2000; Imhof, 2017), and higher valuation (Lang et al., 2003).

While empirical studies have primarily investigated the effects of the comparability of financial statements, relatively few studies have explored the determinants of accounting comparability. Some studies have explored the impact of international financial reporting standards (IFRS) adoption on accounting comparability in national and international settings (Caban-Gracia et al., 2012; Callao et al., 2007; Falski, 2017; Neel, 2017; Yip and Young, 2012). While the majority of related studies have mainly focused on developed markets such as the United

States and the European Union (DeFond, Hu, Hung, & Li, 2011; De Franco et al., 2011; Kim et al., 2016; Ross et al., 2020; Young & Zeng, 2015;), the evidence on the determinants of financial comparability in emerging markets remains scarce, despite the growing importance of emerging economies in the global economy.

This study attempts to fill the gaps by investigating whether and how legal and extra-legal factors may determine accounting comparability in Southeast Asian Nations (ASEAN). Dick and Zingales (2014) compiled evidence that legal and extra-legal factors can have implications for business managers and investors, such as mitigating the private benefit of controls by managers. It is plausible that different degrees of legal infrastructure, law enforcement, and compliance in emerging countries such as ASEAN may have different consequences on accounting comparability. Evidence from emerging countries can enrich and provide additional insights into the literature and fill the gap in the literature.

By examining 4776 firm-year observations in five ASEAN countries from 2014 to 2017, we find that accounting comparability is positively associated with stronger investor protection, stricter enforcement of auditing and reporting standards, stricter tax enforcement, and more public pressure; however, accounting comparability is adversely associated with greater competition. The results are robust to additional tests. In addition to legal system variables, extra-legal determinants play an important role in affecting the comparability of financial statements in a country. Considering the positive effects of greater accounting comparability, our results can also have policy implications for improving accounting comparability and provide cues for the government to strengthen not only legal and institutional infrastructure, such as investor protection, but also extra-legal environments, such as law compliance and enforcement. As emerging countries scramble to attract foreign investments and promote freer international trade, our empirical results

based on ASEAN countries reinforce the importance of legal and extra-legal reforms aimed at improving accounting comparability, which can contribute to foreign investors' decision-making.

The remainder of this paper is organized as follows. Section 2 reviews the literature and develops the hypotheses. Section 3 elaborates on the methodology followed by the results in Section 4. The final section discusses and concludes the paper.

### Literature Review and Hypotheses Development

Comparability can be defined as the extent to which similar (dissimilar) economic transactions are accounted for in a similar (differently) manner (FASB, 2010; De Franco et al., 2011). In other words, comparability measures the extent to which firms have similar accounting systems, and, hence, produce similar financial statements for a given set of economic events (De Franco et al., 2011). It also reflects the quality of the information that enables users to identify similarities and differences in the financial performance of two firms (Francis et al., 2014). Barth (2013) argued that comparability is not equal to consistency, nor to uniformity; consistency means that companies use the same accounting methods or principles for the same items over time, and uniformity means treating all items the same way. Consistency helps achieve comparability but does not ensure comparability. Uniformity can make different things look alike, which impairs, instead of enhancing, comparability. For example, consistency means using the same accounting method, such as the straight-line method, for the entire life of a building. Uniformity assumes an economic life of 30 years with residual value for all buildings, even though buildings have varying lifespans and residual values.

Despite its importance, comparability has received less attention in accounting literature than other qualitative characteristics, such as value relevance, persistence, and predictability. One of the reasons is that it is a relative or comparative concept, not an absolute or independent criterion like other accounting characteristics. Furthermore, the difficulty of empirically measuring accounting comparability and the lack of standard measurement of comparability also contributes to the lack of empirical studies on the topic (Schipper, 2003; Sohn, 2016). However, the development of the comparability metric by De Franco et al. (2011) has sparked interest in this topic. One central question remains: what determines firms' accounting comparability? At the national or cross-country level, the regulatory environment has been identified as a deciding factor. For instance, the adoption of international financial reporting standards (IRFS) can pressurize managers to provide an accurate and fair view of accounting information (Haque et al., 2012), thus enhancing accounting comparability. Yip and Young (2012) investigated whether mandatory IFRS adoption can improve information comparability in 17 European countries. They found that mandated IFRS implementation increases cross-country information comparability by having related items seem more alike, without having different things seem less distinctive. Barth et al. (2012) found that the adoption of IFRS, by non-US firms in over 20 countries, increased their comparability with US firms, applying the US generally accepted accounting principle (GAAP). They also found a decrease in the differences in earnings smoothing, accruals quality, and earnings timeliness between IFRS adoption and US firms. IFRS adoption likely alters the information environment, thus improving comparability (Brochet, 2013). After IFRS adoption, insider purchases of UK firms' shares exhibit lower abnormal returns than those before adoption.

In addition to accounting standards, a country's legal environment and investor protection influence accounting information quality (Ball et al., 2000, 2003; Brown et al., 2014, Soderstrom & Sun, 2007). Recent research suggests that strong investor protection and enforcement and a common-law legal system are key determinants of high-quality financial statement information.

Leuz et al. (2003) reported that strong investor protection at the country level reduces firms' earnings management activities, thus leading to higher accounting quality. According to Bhattacharya et al. (2003) and Bushman et al. (2004), there is greater financial transparency and less earnings management in countries with strong investor protection. For Francis et al. (2016), stronger country-level legal strength involves accrual earnings management and increases real earnings management. Kamarudin et al. (2018) showed that the quality of accounting information of cross-listed firms is associated with the strength of investor protection in the home country. More broadly, Ross et al. (2020) suggested that rule-based accounting standards, good quality of public audit, stronger enforcement of accounting standards, and greater reliance on equity market financing seem to be essential determinants of within-country comparability. Furthermore, extralegal systems, although not directly engendering statutory protection of shareholder rights, have been documented to influence earnings quality through the reduced level of earnings management and personal control benefits (Dick and Zingales, 2014; Haw et al., 2014). However, extant empirical literature does not clarify how accounting comparability is related to extra-legal factors.

This study investigates whether and how a firm's accounting information is associated with legal, extra-legal, and related institutional environmental factors in ASEAN countries. Our research questions are related to Ross et al. (2020), but their study focused solely on the legal environments in the US and European countries. It is unclear whether the findings can be applied to less developed countries, in which legal protection and enforcement may not be as powerful as in developed countries. Therefore, we focus on ASEAN countries to provide more evidence for relevant literature. Our investigation also extends to extra-legal and related institutional environment factors, which are also relevant in determining the comparability of firms. We developed the following hypotheses.

# Hypotheses on accounting comparability and legal factors

Existing research has documented that the legal protection of investors is a key determinant in explaining cross-country differences in earnings quality, financial markets, and the quality of accounting information (Cahan et al., 2008; Francis et al., 2016; Halabi et al., 2019; Haw et al., 2004; Houque et al., 2012; Jeanjen, 2012; Nabar and Boonlert-U-Thai, 2007; Kamarudin et al., 2020; Zhoung et al., 2017). Investor protection requires high audit standards and quality, thus enhancing the quality of accounting information (Sarhan et al., 2019). Investor protection also improves accounting information quality by requiring timely information disclosure (Zhang et al., 2017). Greater transparency and quality imply that accounting information in financial statements is more accurate based on underlying economic events and, thus, is more comparable among peer firms. Furthermore, firms in strong investor-protection countries have higher reporting and litigation costs (Haw et al., 2014). This severe punishment serves as an incentive for managers to comply with accounting standards, contributing to more comparability among firms. Thus, we hypothesize a positive relationship between investor protection and accounting comparability.

# H1a. Comparability is higher when investor protection is stronger.

Another legal factor is the enforcement of auditing and reporting standards, resulting in minor variations in accounting practices for similar economic transactions. Stricter auditing enforcement also facilitates compliance with reporting standards. Ross et al. (2020) showed that the enforcement of accounting standards led to more comparable accounting information in the US and European countries after IFRS adoption.

H1b. Comparability is higher when enforcement of auditing and reporting standards is stronger.

32

## Hypotheses on accounting comparability and extra-legal factors

Although extra-legal institutions are not directly associated with shareholder rights protection, they can reduce managers' engagement in private control benefits and earnings manipulation (Dick and Zingales, 2014; Haw et al., 2014). When accounting information in financial statements is less likely to be managed, accounting figures more faithfully represent true underlying economic events (Barth, 2013).<sup>2</sup> We use tax law enforcement as our extra-legal factor because the tax authority can directly constrain private control benefits through its disciplinary powers in tax enforcement (Dyck and Zingales, 2004). <sup>3</sup> In addition, the verification role performed by the tax authorities provides an assurance of investors' truthfulness when the enforcement of tax regulations is strong (Haw et al., 2014).

## H2a. Comparability is higher when tax law enforcement is stronger.

Another extra-legal factor pertains to competition. There are two possible opposing explanations for the relationship between competition and accounting comparability. In a competitive market, competition among firms will effectively reduce private control benefits because firms are more willing to disclose more information, making it difficult for insiders to manipulate information (Wasiuzzaman et al., 2015). In addition, it is costlier to manage accounting information because the consequent penalty can be severe for firms in a highly competitive market. This eventually leads to greater accounting comparability among firms. On the other hand, it can also be argued that higher competition in an industry may cause firms to

 $<sup>^2</sup>$  For example, consider an accounting rule specifying that all machines be depreciated on a straight-line basis using a 20-year economic useful life and assuming a 5% residual value. If the residual value of a particular machine is 10%, not 5%, then depreciating the building assuming a 5% residual value would not result in a faithful representation of the machine.

<sup>&</sup>lt;sup>3</sup> Dick and Zingales (2014) suggested that tax law enforcement deserves further study since tax enforcement is one of the most important features of extra-legal system.

disclose less information (Verecchia, 1983; Gertner et al., 1998) or biased information to mislead competitors (Data et al., 2013). The resulting information asymmetry deters comparability among peer firms. Therefore, we state our hypothesis in a neutral fashion.

# H2b. Comparability can be positively or adversely related to competition.

The third extra-legal factor is press or media coverage. On the one hand, media attention may pressurize managers to achieve short-term financial results, causing them to participate in earnings management (Chen et al., 2020). Consequently, greater media attention could result in lower accounting comparability. On the other hand, financial journalists consider monitoring companies as one of their most important objectives (Call et al., 2018), taking it upon themselves to expose corporate scandals or accounting malpractice (Dyck et al., 2010; Miller, 2006). It can also be argued that managers, under greater media attention and, thus, scrutiny, tend to avoid manipulation of earnings. Therefore, we state our hypothesis in a neutral fashion.

H2c. Comparability can be positively or adversely related to media coverage.

#### **Data and Methodology**

### 3.1. Measurement of accounting comparability

We followed DeFranco et al. (2011) to measure accounting comparability. For firm i, the following regression is estimated, using data from the preceding 16 quarters:

$$Earnings_i = \alpha_i + \beta_i Return_i + \varepsilon_i \tag{1}$$

*Earnings* refer to the quarterly net income before extraordinary items are deflated by the market value of equity at the beginning of the quarter, and *Return* is the raw stock return during the quarter. The predicted earnings are then calculated for each firm *i* using the estimated coefficients  $\hat{\alpha}_i$  and  $\hat{\beta}_i$ .

$$E\widehat{arning}_{ii} = \hat{\alpha}_i + \hat{\beta}_i Return_i \tag{2}$$

Another type of predicted earnings for each firm *i* is calculated using the estimated coefficients  $\hat{\alpha}_j$  and  $\hat{\beta}_j$  of firm *j* in the same industry, classified by the four-digit Global Industry Classification Standard (GSIC).

$$E\widehat{arning}_{ij} = \hat{\alpha}_j + \hat{\beta}_j Return_i \tag{3}$$

The comparability (*CP*) between firm *i* and *j* at time point *t*, denoted by  $CP_{ijt}$ , is defined as the negative of the average absolute difference of the above two earning predictions, using the preceding 16 quarterly data.

$$CP_{ijt} = -\frac{1}{16} \sum_{t=-15}^{t=0} \left| E \widehat{arning}_{iit} - E \widehat{arning}_{ijt} \right|$$
(4)

A negative sign is attached for convenience of interpretation: the larger (closer to zero) the CP is, the more comparable the accounting information of the two firms is.

To measure how firm *i*'s accounting information is comparable to its peers in the same industry at time point *t*, we used two alternative measures. First, after ranking  $CP_{ijt}$  for different (*i*, *j*) pairs belonging to the same industry, we calculated the average of the four largest  $CP_{ijt}$  as the first measurement, denoted by  $CP4_{it}$ . The second one, denoted by  $CPIND_{it}$ , is the median  $CP_{ijt}$  for different (*i*, *j*) pairs belonging to the same industry.

### 3.2. Legal and Extra-legal Measurements

Legal and extra-legal measurements were constructed as country-level variables. The two legal factors were based on information from the *Global Competitiveness Report* by the World Economic Forum<sup>4</sup> from 2014–2017. The investor protection index is a combination of the disclosure index (transparency of transactions), director liability index (liability for self-dealing), and shareholder suit index (shareholders' ability to sue officers and directors for misconduct). The investor protection index ranges from 1 to 10, with higher scores indicating stronger investor protection. Enforcement of auditing and reporting standards is measured by "the strength of auditing and reporting standards." The measure is based on responses to a survey question—"In your country, how strong are financial auditing and reporting standards?"—on a scale of 1 (extremely weak) to 7 (extremely strong). Higher values of this measurement indicate stronger enforcement of auditing and reporting standards.

For extra-legal factors, tax law enforcement is measured by "the degree of score of paying tax" drawn from *Doing Business*, published by the World Bank (for our investigation period 2014-2017, the relevant data are reported in *Doing Business Report* 2016-2019). It reflects the compliance of paying tax, which includes three indicator measurements: tax payment, times required to comply with three major taxes, and total tax and contribution.

Market competition data are drawn from *the Global Competitiveness Report* from 2014 to 2017, which measures the extent of market dominance by a survey question—"In your country, how do you characterize corporate activity?"—on a scale of 1 (dominated by a few business groups) to 7 (spread among many firms). Higher scores indicated higher levels of competition.

Media coverage is measured by the circulation of daily newspapers divided by population, following Dyck and Zingales (2004). Data were drawn from the findings of Dyck and Zingales in

<sup>&</sup>lt;sup>4</sup>For more details about the methodology employed and the assumptions made to compute this indicator, visit http://www.doingbusiness.org/methodologyysurveys/.

2004. However, due to data availability, we use a time-invariant media coverage variable in the empirical analysis.

#### **3.3. Model Specification**

The following regression is estimated to test the hypotheses.

 $CP4_{it} = \alpha_0 + \alpha_1 Audit_{it} + \alpha_2 Protect_{it} + \alpha_3 Tax_{it} + \alpha_4 Compete_{it} + \alpha_5 Media_i + Control_{it} + \varepsilon_{it} (5)$ 

*CP4* is a firm's accounting comparability, as defined earlier. *Audit* is the strength of the auditing and reporting standards index. *Protect* is the strength of the investor protection index. *Tax* is the degree of tax compliance. *Compete* is the index of the extent of market competition. *Media* denotes market coverage, computed as the circulation of daily newspapers divided by population. All these variables, except *media*, are time-variant.

We also include a set of control variables that are expected to influence a firm's accounting comparability.

(1) Firm size may matter. Larger firms tend to hire one of the Big Four auditors, and share the same auditor (Ross et al., 2020). The Big Four apply higher quality auditing with a more consistent audit process and interpretation and stricter accounting standards. Consequently, reported accounting earnings and accruals in financial statements are more consistent and comparable in larger firms than in smaller firms (Francis et al., 2014). Firm size (*Size*) is computed as the natural logarithm of total assets.

(2) Composition of assets is also important. Capital intensive firms have more physical assets with greater information disclosure (Clarckson et al., 2008). Such firms are also motivated to disclose more information because the entry barrier is high (Darrough & Stoughton, 1990; Leuzz (1999).

We included a variable for capital intensity (*CapIntensive*), calculated as net Property, Plant, and Equipment divided by total assets.

(3) Firm's profitability is controlled, since profitable firms have less incentive to modify their earnings, resulting in greater comparability. Profitability is proxied by return on assets using net income (*ROA*).

(4) We also control for a firm's potential litigation risk, since litigation penalties may curb firms from engaging in earnings management (Cohen and Zarowin, 2010). We defined a dummy (*Litigation*) for litigious industries with 4-digit SIC falling in 2833–2836 (biotech), 3570–3577, 7370–7374 (computer), 3600–3674 (electronics), or 5200–5961 (retailing), following Sohn (2016). (5) Growth opportunity is included because it reflects a firm's need to raise capital, thus, possibly motivating managers to enhance the quality of accounting information, to attract funding at a lower cost. Prior studies documented a positive association between earnings quality and a firm's growth opportunity (Cohen and Zarowin, 2008; Cohen and Zarowin, 2010; Gaio, 2010). Growth opportunity is proxied by book-to-market ratio (BM), calculated as the book value of equity divided by the market value of equity.

(6) Leverage is included because prior studies have documented that firms tend to increase the reported earnings to mitigate covenant violation (Cohen and Zarowin, 2008; Francis and Wang, 2008), causing difficulties in mapping similar economic events and lowering the comparability of financial statements. *Leverage* is defined as the ratio of liability to total asset.

(7) Prior studies suggested that loss-making firms are more likely to engage income-increasing earnings management to reduce reported losses (Roychowdurry, 2016), thus lowering the comparability of financial statements. A dummy (*Loss*) for loss-making firms is defined for firms with negative net income during the fiscal year.

38

(8) Legal tradition in a country also influences the quality of financial reporting. Market-oriented common-law countries have greater demand for quality financial reporting (Ball et al., 2003). We define a dummy variable (*Common-law*) for common law countries using the finding of La Porta et al. (1998).

(9) Dummy variables for country, industry, and year are also included.

# **Empirical Results**

# 4.1. Primary Results

We investigated publicly listed non-financial firms in five ASEAN countries: Indonesia, Malaysia, Singapore, the Philippines, and Thailand. We collected financial data from the OSIRIS database from 2011 to 2017, where the data needed for computing comparability from 2014 to 2017 are available in OSIRIS. Following Kouaib and Jarboui (2017), we substituted the missing values with zero. All variables are winsorized at the 1% and 99% levels to mitigate the influence of outliers. Eventually, 4780 firm-year observations remained. Table 1 summarizes the descriptive statistics for the full sample of the five countries.

Table 1: Descriptive statistics for firm-level variables

	No.	Mean	Median	Standard deviation
Accounting comparability (CP4)	4780	-6.485	-0.075	62.348
Accounting comparability (CPIND)	4780	-7.985	-0.132	68.348
Firm size (natural logarithm)	4780	4.709	4.972	1.496
Capital intensity	4780	0.266	0.059	0.809
ROA	4780	2.322	2.735	8.482
Growth	4780	0.161	0.001	2.744
Leverage	4780	0.396	0.397	0.225

Note: Sample are publicly listed non-financial firms in five ASEAN countries from 2014-2017.

Table 2 summarizes the country-level index descriptive statistics for each sample country. Compared to previous studies, our sample displays different firm characteristics. The sample firms have lower accounting comparability than those of Rose et al. (2019), suggesting that ASEAN countries lag behind Western countries in terms of accounting comparability.

T11 2 D .		C 4	1 1	• 1 1
Table 2: Descri	ptive statistics	for country	√-level	variables

	2017	2016	2015	2014
Indonesia				
Auditing and reporting standards	4.6	4.4	4.3	4.6
Investor protection	5.7	5.3	6.1	6.0
Tax law compliance	68.03	68.04	69.25	69.46
Fair competition	4.3	3.9	4.0	4.1
Media (Newspaper circulation)	0.2	0.2	0.2	0.2
Malaysia				
Auditing and reporting standards	5.5	5.3	5.5	5.7
Investor protection	8	7.8	7.4	8.7
Tax law compliance	76.06	76.07	79.02	84.31
Fair competition	4.7	4.7	4.9	5.0
Media (Newspaper circulation)	I,6	I,6	I,6	I,6
Singapore				
Auditing and reporting standards	6.6	6.3	6.2	6.2
Investor protection	5.7	8.3	8.0	9.3
Tax law compliance	91.58	91.57	91.58	91.56
Fair competition	5.3	5.5	5.4	5.3
Media (Newspaper circulation)	3.2	3.2	3.2	3.2
Philippines				
Auditing and reporting standards	5	5.1	5	5.1
Investor protection	4.2	3.8	4.2	4.3
Tax law compliance	71.8	69.27	65.74	66.23
Fair competition	3.2	3.2	3.7	4.0
Media (Newspaper circulation)	0.8	0.8	0.8	0.8
Thailand				
Auditing and reporting standards	5	4.9	5.1	5.1
Investor protection	6.7	6.3	6.6	7.7
Tax law compliance	77.72	76.73	68.68	77.7
Fair competition	4.9	3.7	3.8	4.1
Media (Newspaper circulation)	0.6	0.6	0.6	0.6

Note: Sample are publicly listed non-financial firms in five ASEAN countries from 2014-2017.

Table 3 presents the pooled OSL regression results for estimating Equation (5). Column (1) shows the results of including only legal and control variables. The coefficients for the enforcement of auditing and reporting standards and investor protection are 2,2031 and 0,634, respectively, at a significance level of 5% and 1%. In column (2), where the set of extra-legal variables is included, all three extra-legal variables are significant. Tax compliance and media coverage variables have a positive and significant effect at the 1% level. In contrast, competition has a negative impact (-0,7360), significant at a 1% level. In column (3), all legal and extra-legal variables are included, and all legal and extra-legal variables are significant with the same sign as in columns (1) and (2).

	(1)	(2)	(3)
Auditing and reporting standards	2.2031**		1.8019*
	(1.1053)		(1.0279)
Investor protection	.634***		.4328**
•	(.2272)		(.1803)
Tax law compliance		.1543***	.1475***
I		(.0441)	(.0421)
Fair competition		736***	6923**
1		(.282)	(.2736)
Media (Newspaper circulation)		67.251***	63.7788***
		(20.7642)	(20.9074)
Firm size	.3607	.3593	.3592
	(.2769)	(.2765)	(.2771)
Capital intensity	1.6232*	1.6336*	1.634*
1 5	(.8632)	(.8645)	(.8652)
ROA	259*	2586*	2587*
	(.1388)	(.1388)	(.1388)
Growth	1355	1356	1352
	(.1807)	(.1805)	(.1805)
Leverage	-5.4897	-5.5122	-5.5175
C	(11.3115)	(11.3141)	(11.3163)
Loss	-2.6297	-2.6214	-2.6172
	(1.7412)	(1.7409)	(1.7408)
Litigation	1.6816	1.6711	1.6717
6	(7.2914)	(7.2913)	(7.2933)
Common-law county	13.2498**	13.2478**	13.2477**
2	(6.0298)	(6.0295)	(6.0308)
Constant	-42.6594***	-49.3789***	-59.4955***
	(12.6526)	(14.8178)	(16.3722)
Observations	4780	4780	4780
R-squared	.0748	.0749	.0749

Table 3: Effect of legal and extra-legal system on accounting comparability

Note: Sample are publicly listed non-financial firms in five ASEAN countries from 2014-2017. The regressions are estimated by pooled ordinary least squares regressions with standard errors clustered by firm. All regressions include dummies for country, industry and year. Dependent variable is accounting comparability. The estimated coefficients are reported as well as the standard errors (in parentheses).\*\*\*p < .01, \*\*p < .05,

The results on legal factors are consistent with our hypotheses, that accounting comparability is higher when investor protection and auditing enforcement are stronger. Our results are consistent with those of Ross et al. (2019), who found positive effects of legal factors

on the comparability of financial statements for firms in the United States and European countries. Moreover, accounting comparability is higher when extra-legal factors, such as tax compliance and media attention, are greater. Our findings support previous studies suggesting that media coverage plays a role in enhancing the quality of accounting numbers (Chen et al., 2020; Haw et al., 2014; Dyck and Jingales; 2004). On the other hand, while the hypothesis on the effect of competition predicts alternative effects, the results show that competition leads to less comparable financial statements among peer firms. The results support the theory that fierce competition causes firms to abstain from disclosing (accurate) information, as argued by Data et al. (2013), Gertner et al. (1998), and Verecchia (1983). This explanation is consistent with Dyck and Zingales (2004) and Haw et al. (2004), who reported a negative effect of competition on the quality of financial reporting in the United States. It seems that ASEAN firms, in the face of competition pressure, may resort to information manipulation in a similar manner.

For control variables, firm growth and the common-law country dummy show positive and significant coefficients, while the coefficients of profitability and firm's loss dummy variable are negative and significant. The results are consistent with the prediction that a firm's growth and common-law origin can enhance the quality of accounting information, while loss-making firms tend to produce less comparable financial statements. However, the findings show that higher profitability is associated with less comparable financial statements.

## **Additional tests**

We conducted several additional tests as a robustness check. First, we used an alternative measure of accounting comparability variable, the industry median of accounting comparability (CPIND), instead of *CP4*. The results are reported in column (1) of Table 4, which remain unchanged. Second, we replaced the measurement of auditing and accounting standards

45

enforcement by the time-invariant indices developed by Brown et al. (2014). Column (2) reports the results in Table 4, where both legal and extra-legal variables are included. Although the variables for media coverage become insignificant, the measurement of auditing and accounting standards, investor protection, tax compliance, and competition show the same sign of direction as indicated in Table 3 at a significant level.

Starting in 2015, the ASEAN Economic Community (hereafter AEC) was launched, strengthening the effects of legal and extra-legal factors. For example, among the four pillars of the blueprint, Pillars 1 and 2 addressed issues regarding the free flow of investment, services, skilled labor, competition policy, taxation, and intellectual property rights. Implementing these pillars involves stringent and effective policies related to tax regulation and competition laws among ASEAN countries. As a result, it is expected that the effect of legal and extra-legal determinants on accounting comparability will be more pronounced in the post-AEC period. To test this, we divided the sample into two groups, one for the year 2016–2017 (post-AEC period) and the other for 2014–2015 (pre-AEC period). Regressions were performed separately for the two sub-samples. Table 5 shows the results. The legal and extra-legal variables in the post-AEC period, where the legal and extra-legal variables are insignificant, except tax compliance and media attention variable. The exception is investor protection, which becomes negative and significant in post-AEC but insignificant in pre-AEC.

	(1)	(2)
Auditing and reporting standards	3.1796***	
	(1.2195)	
Auditing and reporting standards by Brown et al. (2004)		18.4551*
		(11.2134)
Investor protection	.8617***	.2063**
	(.2799)	(.103)
Tax law compliance	.2342***	.1504***
	(.0791)	(.0432)
Fair competition	-1.0452**	7394***
•	(.4433)	(.283)
Media (Newspaper circulation)	79.8461***	-348.4474
	(21.3591)	(238.0465)
Firm size	.4219	.3578
	(.3246)	(.2768)
Capital intensity	1.7681*	1.632*
	(.9594)	(.8648)
ROA	3035*	2585*
	(.1565)	(.1388)
Growth	1142	1356
	(.1774)	(.1804)
Leverage	-4.8099	-5.5121
-	(12.1238)	(11.3153)
Loss	-2.7985	-2.6219
	(2.002)	(1.741)
Litigation	.4626	1.6734
C C	(8.3972)	(7.2924)
Common-law county	14.1194**	13.2486**
·	(6.5886)	(6.0302)
Constant	-84.1489***	-225.663*
	(22.0828)	(117.3837)
Observations	4780	4780
R-squared	.0865	.0749

Table 4: Effect of legal and extra-lega	l system on accounting	comparability usin	g alternative measures
	i system on accounting	comparability usin	

Note: Sample are publicly listed non-financial firms in five ASEAN countries from 2014-2017. The regressions are estimated by pooled ordinary least squares regressions with standard errors clustered by firm. All regressions include dummies for country, industry and year. Dependent variable in (1) is an alternative measure of accounting comparability based on industry median. The estimated coefficients are reported as well as the standard errors (in parentheses). \*\*\*p < .01, \*\*p < .05, \*p < .1

· · · · · · · · · · · · · · · · · · ·	(1)	(2)
	Post-AEC (2016-2017)	Pre-AEC (2014-2015)
Auditing and reporting standards	13.0245*	5.6961
	(6.9182)	(4.7198)
Investor protection	-7.22*	0611
	(3.8167)	(.2416)
Tax law compliance	1.0467**	.9787**
	(.4718)	(.4863)
Fair competition	-14.602**	3785
	(6.5056)	(.4091)
Media attention	46.5834*	39.4728**
	(25.1201)	(15.742)
Firm size	3196	1.1286**
	(.3529)	(.4756)
Capital intensity	2.2422**	1.2823
	(1.1098)	(.9832)
ROA	3965**	1351
	(.193)	(.1233)
Growth	0506	4971
	(.0974)	(.8126)
Leverage	-7.9883	-3.1764
-	(12.1728)	(11.0655)
Loss	-4.5169**	8353
	(2.2888)	(1.9039)
Litigation	.9561	2.1357
-	(7.0566)	(7.7406)
Common-law county	12.9121**	13.5116**
-	(5.9523)	(6.1757)
Constant	-53.9657***	-130.9498**
	(15.601)	(57.0787)
Observations	2390	2390
R-squared	13.2879**	5.1906

Table 5: Effect of legal and extra-legal system on accounting comparability for post-AEC period (2016-2017) and pre-AEC Period (2014-2015).

Note: Sample are publicly listed non-financial firms in five ASEAN countries from 2014-2017. The regressions are estimated by pooled ordinary least squares regressions with standard errors clustered by firm. All regressions include dummies for country, industry and year. Dependent variable is accounting comparability. The estimated coefficients are reported as well as the standard errors (in parentheses).

## **Discussion and conclusion**

The comparability of financial statements among firms provides valuable information to the companies' stakeholders. Many existing studies focus on the effect of IFRS adoption on accounting comparability. In this study, we attempted to identify other legal and extra-legal factors that may influence accounting comparability for companies in five ASEAN countries. Legal factors such as investor protection and the enforcement of auditing and reporting standards contribute to greater accounting comparability. Laws that aim to protect investors put pressure on companies to reveal sufficient financial information that is valuable for investors' decision-making. Enforcement of auditing and reporting standards requires firms to comply with the same set of standards, ensuring a consistent representation of accounting information.

Moreover, extra-legal factors also matter. In particular, compliance with tax laws via the tax authority's enforcement pressurizes firms to report earnings in a legally appropriate manner, leading to better accounting comparability. Companies receiving greater attention from the markets through media reports are more likely to draw comparisons with their peers; therefore, they are pressured to report economic events in a similar way.

Another relevant extra-legal factor is competition, which has been found to reduce accounting comparability. Pressure from competition may motivate companies to report less or biased information, for instance, to mislead competitors or investors. Investors or auditors may need to exercise greater scrutiny when assessing the financial statements of firms in highly competitive industries.

Our results are based on data from five ASEAN countries, which distinguish our results from the majority of prior research that focused on more developed markets such as the United States or Western European countries. Emerging markets usually lag behind developed countries

49

in terms of corporate governance and investor protection. Emerging countries may need to improve their business environments to attract foreign investments and promote freer international trade. Our results, based on ASEAN countries, reinforce the importance of legal and extra-legal reforms aimed at improving accounting comparability; that is, governments need to strengthen not only legal and institutional infrastructure, such as investor protection or auditing standards, but also extra-legal environments, such as law compliance and enforcement.

# Chapter 3

# Accounting Comparability and Earnings Management Strategies: Evidence from Southeast Asian Countries

## 1. Introduction

The comparability of financial statements among different companies plays a useful and important role for financial reporting users such as investors and creditors. One important research question pertains to the monitoring role of financial statement comparability-- how does accounting comparability affect managerial earnings management (EM) activity? EM is motivated by the need to reduce the cost of capital, meet shareholders' needs, raise managerial compensation, minimize total risk, or prevent the violation of debt covenants (Stolowy and Breton 2004). EM can take the form of accrual-based earnings management (AEM) or real earnings management (REM). AEM takes place at the end of an accounting period when managers can increase or decrease earnings by managing accruals, such as deciding the economic life of fixed assets or delaying asset or inventory write-downs (Zang 2012). REM occurs during the accounting period, when managers inflate or deflate earnings through real activity manipulation in a departure from standard operational practices, such as granting sales discounts, cutting discretionary expenses, or churning out larger production (Roychowdurry 2016).

Does greater accounting information comparability curb EM, AEM, or REM? In theory, accounting comparability is expected in reducing EM. Agency theory posits that information asymmetry can invite opportunistic behaviors such as EM. Accounting comparability can mitigate EM by providing a benchmark for accounting policy and choices among peer firms, which can reduce information asymmetry and opportunities for engaging in EM. Positive accounting theory,

which views firms as a nexus of contracts and stresses the importance of reducing various contracting costs arising from moral hazards and monitoring of contract enforcement, also predicts the role of accounting comparability in limiting EM due to lower costs of processing information.

However, there are two competing views regarding the effects of AEM and REM. The substitute hypothesis posits that managers shift from AEM towards REM as accounting comparability increases, because the former (latter) becomes easier (harder) for outsiders to detect (e.g., Oz and Yelkeci 2018; Sohn 2016). When accounting information is highly comparable among companies, stakeholders can more efficiently evaluate and monitor managers, making it costlier for managers to use accruals to achieve target goals. However, the complement hypothesis posits that managers use AEM and REM as complements, both of which decrease accounting comparability (e.g., Chen, Huang, and Fan 2012). Chen, Huang, and Fan (2012) explained that managers increase AEM and REM practices when reporting requirements and litigation costs are lower because the incentives of EM are larger than the cost-benefit considerations of EM in such circumstances. However, a recent study by Marten, Yapa, and Safari (2020) investigated firms from 19 "frontier countries" where markets are too small and generally less accessible to be considered an emerging market, finding that accounting comparability mitigates AEM but not REM. Moreover, the effect on AEM only appears in common law countries but not in civil law countries. Their finding can also be interpreted as the ability of accounting comparability to mitigate AEM being more pronounced in common law countries than in civil law countries, possibly because common law countries exhibit greater investor protection and exposure to lawsuit risk, causing them to address such threats by adopting a more conservative attitude toward EM (Piot and Janin 2007).

The mixed results regarding the effect on AEM and REM in previous studies may be

related to the legal environments of the different countries being investigated. This study aims to provide additional evidence from selected members of the Association of Southeast Asian Nations (ASEAN), which provides a unique investigation setting. ASEAN countries are distinctly different from the countries investigated in previous studies in terms of market development and legal environment. Investor protection and disclosure requirements in the ASEAN may lag behind those in the US but are in a better position compared with frontier markets. Within the ASEAN, financial accounting has a micro-user orientation that emphasizes capital providers' information needs (Saudagaran and Diga 1998). Additional evidence from the ASEAN can further enrich the literature. In addition, corporate decision making relies heavily on accounting data, especially earnings information. On the one hand, this can motivate managers to provide more comparable financial statements, thus reducing managerial EM. On the other hand, the essential role of earnings information can also motivate managers to engage in EM in order to meet or beat the earnings expectation. Furthermore, ASEAN countries are characterized by high tax rates and intricate tax regulations, which may provide incentives for managers to undertake EM. Empirical research is necessary to shed light on how accounting comparability affects EM in the ASEAN.

Empirical studies investigated 1195 listed non-financial companies in five ASEAN countries during 2014–2017. The results show that accounting information comparability is adversely associated with AEM and positively associated with REM, supporting the substitute hypothesis. This result remains the same in the robustness and sensitivity tests. Our results for ASEAN firms are consistent with the results for US firms (Sohn 2016; Zang 2012). One possible explanation is that during the investigation period of this study, listed companies in all five ASEAN countries were subject to the International Financial Reporting Standards (IFRS), which, like US generally accepted accounting principles (GAAP), requires extensive disclosure of

financial information. An alternative interpretation is that stricter scrutiny of IFRS or other corporate governance laws in the ASEAN during the investigation period may have induced the conclusions of this study. Zang (2012) documented that when AEM is constrained by a higher level of scrutiny of accounting practices post-SOX, US managers reduce AEM and use REM to a greater extent. Further research on a larger cross-country scale with a longer time span is necessary to probe how accounting comparability and EM are related to legal environment factors or changes.

This study contributes to the literature in several ways. First, we provide evidence on ASEAN firms in the existing literature which show somewhat mixed results, with two competing views regarding the effect of accounting comparability on AEM and REM. While some prior studies find results supporting complement hypothesis (i.g., Chen et al. 2012; Alberthnaty, Beyer, and Rapley 2014), others support substitute hypothesis (Anagnostopoulou and Tsekrekos 2016; Oz and Yelkeci 2018). Prior studies on this issue mostly focus on developed markets (Shon 2016; Chen and Gong 2019) or frontier markets (Martens, Yapa, and Safari 2020), with few studies focusing on ASEAN countries. One exception is Liem (2021), which examines Vietnamese firms but didn't include REM in the analysis, thus not distinguishing between the two competing hypotheses. This study reduces the literature imbalance by presenting evidence of using REM and AEM as supplements among ASEAN firms. Second, we provide evidence on ASEAN countries with features distinct from the more developed capital markets and frontier countries investigated in the existing literature. Well-structured institutional settings can constrain EM (Shen and Chih 2005). Compared with advanced economies, the lower levels of governance and disclosure in emerging markets (Odell and Ali 2016) provides a unique setting for EM practices and is an avenue that has been under-examined (Martens, Yapa, and Safari 2020). The level of financial

statement comparability and EM practices may be different in ASEAN compared to developed markets, because of the differences in the disclosure requirements, enforcement, and compliance. In the existing literature, it was not clear how firms in emerging markets such as ASEAN behave in using AEM and REM. This study fills the gap by showing that ASEAN firms with more comparable accounting information tended to engage in greater REM during the fiscal period and less AEM at the period-end. Finally, while most prior studies have only investigated firms in a single country, this study investigates multiple ASEAN countries. This allows us to provide more rigorous evidence by including country-level institutional factors in the empirical tests, which can somewhat address the omitted variable problems. For instance, legal origins are related to corporate governance (La Porta et al. 1998), which can influence managerial uses of EM.

### 2. Literature Review

#### 2.1. Financial Statement Comparability

The Financial Accounting Standards Board (2010) defines financial statement comparability as the extent to which similar (dissimilar) economic transactions are accounted for similarly (differently). For a given set of economic events, comparability measures the extent to which firms have similar accounting systems and, thereby, produce similar financial statements. Accounting amounts are comparable if the two firms report similar accounting amounts for the same economic outcomes (De Franco, Kothari, and Verdi 2011). Thus, comparability reflects the quality of information that enables users to identify similarities and differences in the financial performance of different firms. Despite its importance, comparability has received less attention in the accounting literature than other characteristics such as value relevance, persistence, and predictability. One reason for this is difficulty in measuring comparability and the lack of a standard measurement (Schipper 2003; Sohn 2016). De Franco, Kothari, and Verdi (2011) developed a measurement for accounting

information comparability (Sohn 2016). Since then, two lines of research have emerged on accounting comparability.

One line of research investigates the determinants of accounting comparability. For instance, the impact of IFRS adoption is well documented. Yip and Young (2012) find that mandated IFRS implementation increases cross-country accounting comparability in 17 European countries. Neel (2016) shows that mandatory IFRS adoption has positive capital market benefits for comparable firms.

The other line of research examines the consequences of accounting comparability, such as how accounting comparability improves the quality of information (De Franco, Kothari, and Verdi 2011; Sohn 2016), lowers expected crash and credit risks (Kim, Kraft, and Ryan 2013), and lowers the cost of capital (Imhof, Seavey, and Smith 2017). This current study falls in this line of research by investigating the effect of accounting comparability on managerial earnings management (EM).

#### 2.2. Earnings Management

EM is "a purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain as opposed to merely facilitating the neutral operation of the process (Schipper 1989). EM occurs when managers exercise judgment in financial reporting and in structuring transactions to alter financial reports, with the intention of either misleading stakeholders regarding the underlying business of the company or influencing contractual outcomes that depend on reported accounting numbers (Healy and Wahlen 1999). EM primarily takes the form of AEM or REM.

AEM occurs when managers take advantage of the accounting discretion allowed by GAAP to manipulate accruals through accounting and estimation methods (Healy and Wahlen 1999). For instance, a manager may change from a straight-line method to a double-declining balance method, or revise estimates of the useful life of assets as a means of changing depreciation expenses and earnings. The AEM has no direct consequence on cash flow, with real transactions being executed. By contrast, REM changes the timing and structuring of business transactions to alter earnings (Ewart and Wagenhofer 2005), which may deviate from the optimal plan of action (Cohen and Zarowin 2010; Roychowdurry 2006). For example, managers can grant larger sales discounts or apply more lenient credit terms to boost a firm's sales in the current year at the expense of lower cash flow per sales. As such, REM can directly affect cash flow. In general, compared to AEM, REM may be difficult for external stakeholders or auditors to detect.

EM literature documents that AEM can be mitigated by internal or external monitoring. Board-related characteristics were found to be related to EM. For example, Badolato, Donelton, and Ege (2014) suggested that an audit committee with greater financial expertise and high relative status enhances perceived ability, authority, and respect, thus providing a disincentive for AEM. Legal and regulatory environments are also important. IFRS may reduce AEM (Doukakis 2014; Marra, Mazzola, and Prencipe 2011). Marra, Mazzola, and Prencipe (2011) reported that the effect of board independence in containing AEM is stronger after the adoption of IFRS. Comparatively, the response of REM to monitoring devices is less clear. On the one hand, REM can be mitigated by managerial ownership, internal governance, audit committees, and audit quality (Choi, Choi, and Sohn 2018). On the other hand, REM has also been found to increase with a country's legal regulation and law enforcement (Francis, Hasan, and Li 2016).

## 2.3. Hypotheses Development

In this study, we explore the possibility that financial statement comparability can be used as a monitoring device to reduce EM, particularly AEM and/or REM. The literature shows that accounting comparability provides positive benefits to business decisions. For instance, in M&As, the target's financial statement comparability helps acquirers make more value-enhancing decisions (Chen et al. 2018). In bond issuances, financial statement comparability lowers the cost of processing information (Kim, Kraft, and Ryan 2013). However, existing studies examining accounting information comparability and EM choices are limited and have mixed results.

From the perspective of agency theory, two agents and principals may lead to information asymmetry between shareholders and managers can induce self-serving behaviors such as AEM. Furthermore, positive accounting theory, which aims to explain and predict why managers choose particular accounting methods over others, posits that managers select accounting procedures to maximize their wealth. Greater accounting comparability can reduce information asymmetry. Using comparable financial statements, market participants can access better information with less costly processing of information (Chen and Gong 2019; Kim, Kraft, and Ryan 2013). Therefore, it can serve as a monitoring mechanism to mitigate AEM by providing a benchmark for peer firms' accounting policies and choices, leading to less managerial discretion and opportunities for engaging in AEM.

For example, managers whose remuneration contract is based on reported earnings may choose an accounting policy to smooth out payments or increase earnings. The compensation committee, anticipating such opportunistic behaviors, can use comparable financial statements from peer firms as a benchmark in compensation schemes. Greater accounting comparability helps the compensation committee assess commonalities in the business environment and increases the effectiveness of the compensation scheme, which can reduce managerial AEM. Studies have documented the use of peer firms' stock prices or earnings as performance benchmarks in determining CEOs' pay (Nam, 2020).

In short, when firms are more comparable, they become benchmarks for one another, leading to less information asymmetry, lower costs of information acquisition, and greater peer

58

monitoring. Some previous studies also support the mitigating effect of accountability on AEM (Marten, Yapa, and Safari 2020; Sohn 2016; Zang 2012), with the exception of Chen, Huang, and Fan (2012). In this study, we tested whether accounting information comparability can limit managers' incentives and opportunities to engage in AEM.

#### *Hypothesis 1: Greater accounting comparability reduces AEM*

As external monitoring increases, how will managers respond regarding REM, assuming that Hypothesis 1 is correct? Two competing views are advanced. The complement hypothesis posits that managers use AEM and REM jointly and simultaneously in strategic earnings reporting decisions (Anagnostopoulou and Tsekrekos 2016; Chen, Huang, and Fan 2012). The substitution hypothesis suggests that managers tend to shift from AEM towards REM. Cohen, Dey, and Lys (2008) documented such a switch among companies after the Sarbanes-Oxley Act 2002 (SOX) in response to greater auditing monitoring. The explanation is that the legal liability costs associated with AEM have increased substantially post-SOX because of heightened financial reporting regulations and additional certification requirements, whereas the same costs associated with REM have not changed. Similarly, Ipino and Parbonetti (2017) find that firms substitute REM for AEM after IFRS adoption. In limited studies on accountability, Zang (2012) and Sohn (2016) reported a switch from less AEM to more REM owing to cost considerations. However, Marten, Yapa, and Safari (2020) find no such effect on REM in frontier markets.

Following the above line of reasoning, we hypothesized that as accounting information comparability increases, ASEAN firms would switch from AEM to REM. During the investigation, the sample firms were subject to IFRS, which is relatively compatible with US GAAP. As such, when the opportunity to engage in AEM is curbed by higher accounting comparability, managers may pursue REM to achieve earnings targets because REM is less subject to detection by auditors and regulators.

Hypothesis 2: Greater accounting comparability increases REM.

## 3. Data and Methodology

We use data from publicly listed firms in five ASEAN countries: Indonesia, Malaysia, Singapore, the Philippines, and Thailand. We exclude the banking and financial industries because they are subject to different disclosure requirements and regulations that might cause problems when applying the discretionary accrual model (Chen, Huang, and Fan 2012). We obtain 2014–2017 financial data from Osiris. We start from 2014 because we needed 16 consecutive quarterly data to calculate accounting comparability, which became available only in 2011 in the Osiris database. Furthermore, all five countries adopted IFRS in 2014, thus avoiding the confounding effect of IFRS adoption on earnings management. Following Kouaib and Jarboui (2017), we replace the missing values with zero. The final sample consisted of 231 firms in Indonesia, 532 in Malaysia, 96 in Singapore, 21 in the Philippines, and 315 in Thailand.

## 3.1. Measurement of Accounting Comparability

We referred to De Franco, Kothari, and Verdi (2011) for the measurement of accounting information comparability. For firm *i*, the following regression is estimated using the data for the preceding 16 quarters.

$$Earnings_i = \alpha_i + \beta_i Return_i + \varepsilon_i$$
(1)

*Earnings* refers to the quarterly net income before extraordinary items deflated by the market value of equity at the beginning of the quarter, and *Return* is the raw stock return during the quarter. The predicted earnings are then calculated for each firm *i* using the estimated coefficients  $\hat{\alpha}_i$  and  $\hat{\beta}_i$ .

4. 
$$\widehat{Earning_{ii}} = \hat{\alpha}_i + \hat{\beta}_i Return_i$$
 (2)

Another type of predicted earnings for each firm *i* is also calculated using the estimated coefficients  $\hat{\alpha}_j$  and  $\hat{\beta}_j$  of firm *j* in the same industry classified by four-digit Global Industry Classification Standard (GSIC).

5. 
$$Earning_{ij} = \hat{\alpha}_j + \hat{\beta}_j Return_i$$
 (3)

Comparability (*CP*) between firm *i* and *j* at time point *t*, denoted by  $CP_{ijt}$ , is defined as the negative of the average absolute difference of the above two earnings predictions, using the preceding 16 quarterly data.

$$CP_{ijt} = -\frac{1}{16} \sum_{t=-15}^{t=0} \left| \widehat{Earning_{iit}} - \widehat{Earning_{ijt}} \right|$$
(4)

A negative sign is attached for convenience of interpretation—the larger (closer to zero) the CP is, the more comparable is the accounting information of the two firms.

To measure how firm *i*'s accounting information is comparable with its peers in the same industry at time point *t*, we used two alternative measures. First, after ranking  $CP_{ijt}$  for different (*i*, *j*) pairs belonging to the same industry, we calculated the average of the four largest  $CP_{ijt}$  as the first measurement, denoted by  $CP4_{it}$ . The second one, denoted by  $CPIND_{it}$ , is the median  $CP_{ijt}$  for different (*i*, *j*) pairs belonging to the same industry.

#### 5.1. Measurement of Earnings Management

A firm's AEM intensity can be proxied by discretionary accruals (DACs), which are measured by abnormal accruals—the extent to which total accruals deviate from normal accruals or nondiscretionary accruals. We estimated the following regression (Dechow and Dichev 2002; Halabi, Alshehabi, and Zakaria 2019):

$$TC_t = \beta_0 + \beta_1 CFO_{t-1} + \beta_2 CFO_t + \beta_3 CFO_{t+1} + \beta_4 \Delta REV_t + \beta_5 PPE_t + \varepsilon$$
(5)

 $TC_t$  is a firm's total accruals, computed as  $TC_t = \Delta CA_t - \Delta CL_t - \Delta Cash_t + \Delta STD_t$ , where  $\Delta CA_t$ is the change in current assets over year t,  $\Delta CL_t$  is the change in current liability over year t,  $\Delta Cash_t$  is the change in cash over year *t*, and  $\Delta STD_t$  is the change in short-term debt over year *t*. *CFO* indicates cash flows from operations,  $\Delta REV_t$  is the change in revenue overyear *t*, and  $PPE_t$  refers to plant, property, and equipment. The residuals from equation (5) are the abnormal accruals of a firm. We used the absolute value of the residual as the measure of AEM. The unsigned abnormal accruals can capture the net effect of all earnings strategies (income increasing or decreasing), thus avoiding the dilemma that might arise from enforcing different accounting rules across countries (Haw et al. 2004). Most influential studies on earnings management have used absolute AEM measure (Asbaugh, LaFond, and Mayhew 2003; Doukakis 2014).

To estimate a firm's REM activity, we used the model developed by Dechow, Kothari, and Watts (1998), which has been widely adopted in the literature (Chen, Huang, and Fan 2012; Cohen and Zarowin 2010; Roychowdurry 2006; Zang 2012). REM activity entails abnormal cash flows and abnormal discretionary expenses<sup>2</sup>, such as R&D, advertising expenses, and selling, general, and administrative (SG&A) expenses. Following Roychowdhury (2006), we measured REM using abnormal cash flows or abnormal discretionary expenses. First, we estimated the following two regressions using data for firms in the same industry classified by four-digit GSIC.

$$\frac{CFO_t}{Asset_{t-1}} = \alpha_1 \frac{1}{Asset_{t-1}} + \alpha_2 \frac{Rev_t}{Asset_{t-1}} + \alpha_3 \frac{\Delta Rev_t}{Asset_{t-1}} + \varepsilon$$
(7)

$$\frac{DisExp_t}{Asset_{t-1}} = \alpha_1 \frac{1}{Asset_{t-1}} + \alpha_2 \frac{Rev_{t-1}}{Asset_{t-1}} + \varepsilon$$
(8)

 $CFO_t$  indicates cash flows from operations in year *t*;  $Rev_t$  is the change in revenues over year *t*; and  $DisExp_t$  refers to discretionary expenditures, the sum of R&D, advertising, and SG&A expenses, all of which are deflated by total assets at the end of the previous year. The residuals from equation (7) measure firm *i*'s abnormal cash flow. Following Zang (2012) and Cohen and Zarowin (2010), we multiplied the residual is multiplied by negative 1 to ensure that a higher value indicates greater AEM activity. Similarly, the negative of residuals from equation (8) is used as the measure of abnormal discretionary expense, with a higher value indicating greater REM activity. In addition, we calculated a comprehensive measurement of REM by summing up the two estimates of abnormal cash flow and abnormal discretionary expenses (Cohen and Zarowin 2010; Francis, Hasan, and Li 2016; Sohn 2016; Zang 2012). We used absolute values because managers may engage in REM by using both income increasing and income decreasing EM.

## 5.2. Model Specification

The following regressions are estimated to test our hypotheses.

$$REM_{it} = \alpha_0 + \alpha_1 CP4_{it} + \alpha X + \varepsilon_{it}$$
<sup>(1)</sup>

$$AEM_{it} = \alpha_0 + \alpha_1 CP4_{it} + \alpha_2 UnexpectedReal + \alpha X + \varepsilon_{it}$$
(2)

Equation (1) tests the effect of comparability on REM, with the residuals capturing all the other factors unexplained by comparability and the control variables that may affect REM activity during the fiscal period. We include this residual, denoted as *UnexpectedReal* in Equation (2), which tests how comparability affects the AEM. Given that AEM is employed at the end of the fiscal period, it may be affected by other factors affecting REM not accounted for by the explanatory variables during this period. The regressions also include industry and fixed-year effects to control for heterogeneity across industries and times.

The regressions also include a set of control variables (X). The book-to-market ratio of common equity (BM) proxies for growth opportunities may influence EM (Cohen, Dey, and Lys 2008). The natural logarithm of the market value of equity proxies for a firm's size (Size), which may be relevant; larger firms tend to engage in more AEM (Watts and Zimmerman 1978) and switch from AEM to REM (Oz and Yelkenci 2018). Return on assets (ROA) is controlled for because empirical proxies for EM might be correlated with profitability (Cohen and Zarowin 2010; Kothari, Leone, and Wasley 2005; Sohn 2016). Leverage (*LEV*), computed as total liability divided by total assets, is also included because highly leveraged firms are more likely to boost earnings

to avoid covenant violations (Cohen and Zarowin 2010). A dummy *LOSS* is defined for firms reporting negative net income during the fiscal year and may engage in EM (Roychowdurry 2016). Cash flow from operations deflated by total assets (*CFOA*) and its absolute value (*ACFOA*) are included, given that the AEM is reported to be negatively associated with operating cash flow (Cohen and Zarowin 2010). Finally, we control for a firm's litigation risk. EM is punishable by litigation (Cohen and Zarowin 2010). Because REM is less likely to be detected, a greater litigation risk should increase REM but not AEM. Litigation (*LIT*) is defined as a dummy for litigious industries such as biotechnology, computers, electronics, and retailing (Cohen and Zarowin 2010).

#### 6. Empirical Results

### 6.1. Descriptive Statistics

Table 1 summarizes the descriptive statistics for the five sample countries. All variables are winsorized at the 1% and 99% levels to eliminate outliers. Panel B presents the mean of the firms from each country. Indonesia shows the lowest mean accounting comparability (CP4=-32.37, CPIND=-39.79), whereas Malaysia has the highest comparability average (CP4 =1.72, CPIND=0.24). For the EM variable, the Philippines has the lowest mean AEM and REM, whereas Indonesia and Singapore have the highest mean AEM and REM, respectively.

	All sample (=4780)	Indonesia	Malaysia	Singapore	Philippines	Thailand
	Mean	Mean	Mean	Mean	Mean	Mean
CP4	-6.485	-32.37	172	458	-1.964	303
CPIND	-7.985	-39.791	248	663	-2.028	358
AEM	.072	.084	.062	.074	.049	.085
REM	.173	.048	.01	.244	.009	.014
BM	1.272	1.365	1.463	1.143	1.645	.897
SIZE	11.324	11.715	10.915	11.474	12.745	11.589
ROA	2.357	1.569	2.322	1.201	3.316	3.255
LEV	.41	.49	.366	.415	.464	.421
CFOA	.042	.059	.038	039	.063	.06
ACFOA	.089	.099	.079	.074	.068	.102

Table 1. Descriptive statistics for sample firms

Note: The figures are the average for firm-year observations from 5 ASEAN countries during 2014-2017. *CP4* and *CPIND* are two alternative measures for accounting comparability. *AEM* is the measure for accrual earnings management, while *REM* for real earnings management. *BM* is book-to-market ratio of common equity. *SIZE* denotes the natural logarithm of market value of equity. *ROA* is a ratio of net income of total assets. *LEV* refers to leverage, computed as total liability divided by total asset. *CFOA* is cash flow from operation divided by total asset. *ACFOA* is the absolute value of cash flow from operation divided by total asset.

#### 6.2. Accounting Information Comparability and Earnings Management

Table 2 reports the results for estimation equations (1) and (2). We use pooled ordinary least squares (OLS) regressions with robust standard errors clustered by firm and year (Petersen 2009). Column 1 gives the results for equation (1) where the dependent variable is REM. The coefficient of comparability (CP4) is positive (=0.0001) and significant at the 1% level, suggesting that higher comparability increases REM activity. Column 2, which reports results for equation (2) with AEM as the dependent variable, shows a negative and significant coefficient (=-0.0001) for comparability (CP4), suggesting that more comparable firms reduce AEM. Taken together, these results suggest that greater comparability may prompt managers to reduce AEM and resort to REM to a greater extent. The results support our hypotheses and are consistent with previous studies (Sohn 2016; Zang 2012).

In column 2, *UnexpectedReal* shows a significant positive coefficient (0.8403). Other factors affecting REM during the period, which are not accounted for by comparability and the control variables, also affected AEM at the end of the period. Regarding the other control variables, column 1 shows a positive and significant coefficient for leverage, litigation, and absolute cash flow. Thus, REM in ASEAN countries is associated with higher leverage, an environment that encourages litigation, and higher absolute cash flow (Chen, Huang, and Fan 2012; Sohn 2016). The coefficients for equity book-to-market ratio, size, and cash flow from operations are negative and significant, suggesting an association between REM and lower equity book-to-market ratios, smaller firms, and smaller cash flows from operations (Oz and Yelkeci 2018; Sohn 2016). In column 2, the coefficients are negative and significant for ROA, equity book-to-market ratio, leverage, and litigation, implying an association between these firms' characteristics and AEM, consistent with related studies (Chen, Huang, and Fan 2012; Oz and Yelkeci 2018; Sohn 2016). Other variables are not statistically significant.

	(1)	(2)
	Dependent variable: REM	Dependent variable: AEM
CP4	.0001**	0001***
	(0.00003)	(0.0003)
BM	.0002	0024**
	(.0025)	(.0011)
SIZE	.0049***	0023**
	(.0008)	(.001)
ROA	0003	0003
	(.0005)	(.0003)
LEV	.0475***	0103
	(.0156)	(.0113)
LIT	.0453***	0384***
	(.0138)	(.01)
LOSS	.0164*	0048
	(.01)	(.0054)
CFOA	1029***	
	(.0377)	
ACFOA	.2097***	0006
	(.0458)	(.0378)
UnexpectedReal		.8403***
*		(.1892)
Constant	0745***	.0927***
	(.0118)	(.0162)
No. observations	4780	4780
R-squared	.3208	.1071

 Table 2: Pooled ordinary least squares regressions of earnings management on accounting comparability

Note: For each of the regressors, reported are the coefficient and, in the parenthesis, standard error, which are clustered by firm and year. LOSS is a dummy for firms reporting a negative net income during the fiscal year. LIT is a dummy for firms in litigious industries. UnexpectedReal is the residuals estimated from column 1. Other variables are the same as defined in Table 1. The regressions also include industry and year fixed effects.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 6.3. Accounting for Potential Endogeneity of Accounting Comparability

In the preceding analyses, accounting comparability is assumed to be an exogenous variable. However, accounting comparability and EM can be endogenously determined. To address this, we conduct two tests. First, following Sohn (2016) and Chen and Gong (2019), we rerun the regressions in Table 2 using the lag value of the accounting comparability variables. The results, reported in the supplement document, are similar to those in Table 2.

In addition, we employ two-stage least-squares estimation. The first-stage regression uses capital intensity as the instrumental variable (IV). Sohn (2016) shows that capital intensity is highly correlated with accounting comparability and has no influence on EM. Capital intensity may influence accounting comparability because firms with high capital intensity invest enormously in capital assets to obtain profits, which should improve environmental efficiency and compel increased disclosure (Clarckson et al. 2008). In addition, when capital intensity is high, firms are willing to disclose more information because the entry barrier is high (Darrough and Stoughton 1990). In the 2-SLS estimation, capital intensity (CapInt) is defined as net plant, property, and equipment divided by total assets (Sohn 2016). In the first-stage regression, accounting comparability is regressed on capital intensity (*CapInt*) and a set of control variables such as ROA, book-to-market value of equity (MB), leverage (Leverage), litigation (Lit), loss dummy, operating cash flow (CFOA), firm size (SIZE), and investor protection (InvProtect). In Table 3, the first column shows the results of the first regression, where *CapInt* is positive and significant.<sup>5</sup> The second column reports the second-stage estimation results, with REM as the dependent variable. The coefficient is positive (=0.0045) and significant at the 1% level. Compared

<sup>&</sup>lt;sup>5</sup> In the weak identification test, the F-statistics are higher than the critical values suggested by Stock and Yogo 450 (2004), rejecting the weak IV concern.

to the pooled OLS results in Table 2, the IV estimation results show a larger coefficient. In column 2, using AEM as the dependent variable, the comparability coefficient was negative and significant (-0.0054) at the 1% level.

	(1)	(2)
Second Stage regression	Dependent variable: REM	Dependent variable: AEM
CP4	.0045***	0054***
	(.0005)	(.0012)
BM	0079***	.0071***
	(.0028)	(.0023)
Size	.0052***	0041***
	(.0008)	(.0014)
ROA	0003	0002
	(.0005)	(.0003)
LEV	.091***	0754***
	(.0164)	(.024)
LIT	.0903***	1046***
	(.0153)	(.0233)
LOSS	0041	.0147***
	(.0098)	(.0044)
CFOA	0778**	×
	(.0365)	
ACFOA	.134***	.0285
	(.0453)	(.033)
UnexpectedReal		1.1284***
-		(.2515)
Constant	0705***	.1095***
	(.0126)	(.0196)
No. observations	4780	4780
R-squared	.3406	.1058
First Stage regression	Dependent variable: CP4	Dependent variable: CP4
IV: Capital intensity	2.4526*	2.4526*
	(1.2637)	(1.2637)
F Statistic	38.35	38.35
Stock & Yogo critical value	1993	1993
(10% maximal IV size)		

Table 3. 2SLS regressions of earnings management on accounting comparability

Note: In the 2SLS regressions, accounting comparability variable CP4 is the endogenous variable, with an instrumental variable using the firm's capital intensity, calculated as net plant, property, equipment divided by total asset. Other variables are the same as defined in Table 1 and 2. For each of the regressors, reported are the coefficient and, in the parenthesis, standard error, which are clustered by firm and year. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 6.4. Additional Analyses

#### 6.4.1. Income-increasing and -decreasing subsamples

The financial accounting literature documents that managers may engage in a variety of EM, which can increase income (income maximization) or decrease income (income minimization). Prior studies document that managers have greater incentives to engage in income-increasing EM to avoid reporting losses (Chen, Huang, and Fan 2012; Roychowdurry 2006). Meanwhile, when firms face extremely bad earnings news, they tend to income-decrease EM to under-report earnings, a behavior known as taking a "big bath" (Kirschenheiter and Melumand 2002). Big baths are used as EM techniques to shift current earnings to future periods. In an economic downturn, managers may take a big bath by bundling as much bad earnings into the current period as possible, aiming to make their targets easier to achieve in the next period (Hope and Wang 2018). If a manager predicts that the minimum earnings targets cannot be achieved in the current year, they can move earnings from the present to the future by choosing accounting choices that decrease current period earnings (income decreasing), such as writing off assets, delaying revenue recognition, or paying expenses. This argument is also in line with the political cost hypothesis, which suggests that firms may choose income-decreasing EM to reduce political costs.

In other words, the managerial strategies of AEM and REM may differ depending on the incentives for over- or under-reporting earnings. Although previous studies have generally shown that AEM/REM strategies do not change between income-decreasing and income-increasing EM firms (Chen, Huang, and Fan 2012; Ipino and Parbonetti 2017), we test whether our findings reported so far indicated a dependence on incentives to overreport or under-report earnings. We divide our sample into two groups: income-increasing and -decreasing. First, we divide our full sample into deciles based on the signed AEM, where groups falling in the first to fifth deciles had negative mean and median values, whereas groups in the sixth to tenth deciles had positive mean

and median values. The first five groups are defined as the income-decreasing group and the latter as the income-increasing group. We repeat the main tests for each sub-sample group. The results are presented in Table 4. Columns 1 and 2 report the results for the income-increasing subsample, where the dependent variable is REM in column 1 and AEM in column 2. The coefficient for comparability is 0.0001 in the REM model and -0.0002 in the AEM model, with both being significant. Columns 3 and 4 report the results for the income-decreasing sub-sample. The coefficient of comparability for the REM model is 0.0001, and that for the AEM model is -0.0001; both are significant. The finding that greater comparability could prompt firms to reduce AEM and resort to REM applies, to a great extent, regardless of managerial incentives to over- or underreport earnings.

#### 6.4.2. Large- vs small-firms subsamples

Firm size can affect the ability and tendency to manage earnings (Cohen and Zarowin 2010; Doukakis 2014). The political cost hypothesis posits that large firms are more subject to political scrutiny than small firms and, thus, are more likely to undertake EM, which lowers their earnings. From the financial reporting perspective, large firms are also more likely to perform EM to maintain their reputation and achieve expected earnings. The agency theory suggests that large (small) firms are associated with lower (greater) information asymmetry; thus, managers may switch from AEM to REM in response to greater accounting comparability to a lesser extent and increase REM to a greater (lesser) extent (Sohn 2016).

We rerun the primary tests on large and small firms to determine whether the coefficient of accounting comparability would have a lower (larger) intensity for small (large) firms. We divide firms into quartiles and classified firms in the fourth quartile as the large-firm subsample and firms in the first quartile as the small-firm subsample. The results for the large firm subsample are reported in Table 4. In column 5, the coefficient of the comparability variable shows a positive and significant value (0.0003) in the REM regression, but a negative and significant value (-0.003) in the AEM regression (in column 6). For the small-firm subsample, the coefficients of comparability are of a smaller but not significant magnitude: 0.0001 in the REM regression (column 7) and -0.0002 in the AEM regression (column 8). The results suggest that in the face of greater comparability, managers in small firms, because of their firms' informational asymmetry, would reduce AEM to a lesser extent and thus increase REM to a lesser extent than those in large firms.

		ncreasing		Decreasing	Large-size subsample		Small-size	
		ample		ample				imple
Dependent	(1) RE	(2) AM	(3) RE	(4) AE	(5) RE	(6) AE	(7) RE	(8) AE
variable:	М	E	M	M	M	M	М	M
CP4	.0001*	0002** *	0.0001*	$^{-0.0001*}_{*}$	.0003*	0003** *	.0001	0002** *
	(0.00003	(0.00005	(0.0001)	(0.0001)	(.0002)	(.0001)	(0)	(.0001)
BM	0056	.0052*	-0.0028	-0.0046* **	0054	.0027	.0027	0079**
	(.0039)	(.0028)	(0.0042)	(0.0017)	(.0049)	(.0026)	(.0051)	(.0032)
Size	.0029*	0054** *	-0.0044	-0.0022	.0048***	001	.0045***	0061
	(.0015)	(.0013)	(0.0041)	(0.0014)	(.0016)	(.0013)	(.0017)	(.0044)
ROA	0005	.0014**	0.0002	-0.0018*	0003	0002	0011	.0012
	(.0011)	(.0006)	(0.0008)	(0.0004)	(.001)	(.0004)	(.0013)	(.0012)
LEV	.074***	1339** *	0.0229	-0.0082	.0168	.0029	.0826***	116
	(.0261)	(.0279)	(0.0251)	(0.0114)	(.0289)	(.0141)	(.0319)	(.0801)
LIT	.0208	0413** *	0.0456**	-0.0229* *	.0818***	0463**	.0775**	1371*
	(.0199)	(.0111)	(0.0189)	(0.0097)	(.0306)	(.0195)	(.0331)	(.0737)
LOSS	.0118	0152*	0.0026	0.0026	.0093	.014	.0048	.0047
CEO A	(.0151)	(.0092)	(0.0145)	(0.0055)	(.0213)	(.0092)	(.0174)	(.0107)
CFOA	0909		-0.1255* *		2106* *		0333	
	(.0558)		(0.0536)		(.0852)		(.0744)	
ACFOA	.156**	0518	0.2487** *	0.0611**	.2896***	.1186*	.2867***	4196
I.I. marked ID a	(.07)	(.0536) 1.8193**	(0.0669)	(0.0279) 0.6270***	(.11)	(.0681)	(.0993)	(.2552)
UnexpectedRe al		*				.4235**		1.8453*
Constant	0418*	(.3549) .1445***	0.0462	(0.1230) 0.0975***	0453* *	(.1928) .0452***	0991** *	(.9582) .1991**
NL	(.0224)	(.0197)	(0.0539)	(0.0211)	(.0214)	(.0162)	(.0314)	(.0962)
No. observations	2019	2019	2761	2761	1195	1195	1195	1195
R-squared	.3727	.1298	0.2532	0.1644	.3597	.1693	.4153	.1221

Table 4. Pooled ordinary least squares regressions of earnings management on accounting comparability estimated on subsample.

Note: For each of the regressors, reported are the coefficient and, in the parenthesis, standard error, which are clustered by firm and year. All variables are the same as defined in Table 1 and 2. The regressions also include industry and year fixed effects.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

# 6.4.3. Other robustness checks

We also conduct an array of checks to demonstrate the robustness of our primary results. Instead of using the accounting comparability measure *CP4*, we use the alternative measure *CPIND* as computed in Section 3.1. The results remain unaltered.

Our primary models did not include country factors, which may have caused omitted variable problems. To address this issue, two relevant country-level institutional factors are added to the regressions. One variable is the world uncertainty index developed by Hites Ahir (IMF), Nicholas Bloom (Stanford University), and Davide Furceri (International Monetary Fund)<sup>6</sup>. The other variable is a binary variable indicating firms from civil law countries, which are reported to have weaker investor protection than common law countries (La Porta et al. 1998). The previously unreported results are similar.

Some previous studies used a signed AEM (whereas we use absolute values). As a robustness check, we rerun the primary tests by using the signed AEM. However, these results did not change. In addition, we adopt an alternative measurement for AEM based on the performancematched Jones model (Kothari, Leone, and Wasley 2005). Similar results are also observed. Finally, we use two alternative REM measurements and rerun the primary regressions. Computation details for the alternative measurements of AEM and REM available in the supplement document. However, the conclusions did not change.

<sup>&</sup>lt;sup>6</sup> https://www.policyuncertainty.com/wui\_quarterly.html.

## 7. Conclusion

This study examines the effect of accounting comparability on the use of AEM and REM in five ASEAN countries. Analyzing 1,195 listed non-financial companies from 2014 to 2017, we find that more comparable accounting information between firms tends to induce managers to engage in more REM and less AEM, indicating a trade-off between these two EM choices. Our evidence on ASEAN countries supports the substitute hypothesis, which is consistent with previous studies on US firms (Sohn 2016; Zang 2012). Our results differ from those of Chen, Huang, and Fan (2012), who found an increase in both AEM and REM as accounting comparability increases for Taiwanese firms, and Marten, Yapa, and Safari (2020), who reported a decrease in AEM (only in common-law countries) but no change in REM for firms in so-called frontier countries.

Chen, Huang, and Fan (2012) suggested that the differences in the results may be attributed to the reporting and litigation environment, which could affect the cost-benefit considerations of using EM. One possible explanation is that during the investigation period, all five ASEAN countries were subject to IFRS, which, like US GAAP, also requires extensive disclosures. In such circumstances, cost-benefit considerations may dominate the incentives of undertaking EM, prompting firms to reduce AEM and rely on REM, since the former is more likely to be caught with costly consequences under the regulatory environments in ASEAN. Our additional analyses revealed that even firms with more incentives to engage in EM (income-increasing or small firms) displayed a trade-off between AEM and REM in response to higher accounting comparability.

An alternative interpretation of the results is possible. Zang (2012) documented that when AEM is constrained by a higher level of scrutiny of accounting practices post-SOX, US managers reduce AEM and use REM to a greater extent. In other words, stricter scrutiny of IFRS or other

corporate governance laws in the ASEAN during the investigation period may lead to the conclusions of this study. Since the five countries fully or partially adopted IFRS from 2010–2012, the sample firms are under greater scrutiny due to stricter regulatory and disclosure requirements during the investigation period 2014–2017. Exploring this interpretation requires further investigation of data during the pre-IFRS periods. However, we are not able to perform such analyses in this study due to the unavailability of data needed to compute accounting comparability measures. Although we include country-level corporate governance-related variables in some of the regressions in this study, it may not completely rule out the possibility that our results may also be explained by stricter scrutiny of the regulatory environment. Further research on a larger cross-country scale with a longer time span should be conducted to shed more light on this issue.

Our study has several implications. The results of firms shifting from AEM to REM in proportion to accounting comparability should provide insightful lessons for accounting standard setters and regulators. As they introduce disclosure requirements to improve accounting comparability, it is also necessary to consider all possible unexpected consequences induced by the proposed disclosure rules. Policymakers also need to propose effective monitoring mechanisms to mitigate such opportunistic behaviors. Second, although stricter reporting standards and disclosure requirements can mitigate AEM, investors may need to pay more attention to and scrutinize firms' REM activities, which have an impact on firms' cash flow and stock valuation. Since REM may be harder to detect by outsiders, institutional investors are expected to play a monitoring role, since they have the advantage of having access to company managers, company information, financial resources, and sophistication. Finally, the results for ASEAN firms are consistent with those for US firms, but different from those for frontier markets. This suggests that firms in emerging markets can display behaviors similar to those in more developed markets when subject to a relatively compatible regulatory environment such as IFRS. A more convergent regulatory framework may prompt firms in different countries to adapt their behaviors in a more predictable manner.

# [Supplementary Table]

R-squared

Don on don't women les	(1)	(2)	
Dependent variable:	REM	AEM	
Lag of CP4	.0001***	0002***	
0,	(0.0003)	(0.0005)	
BM	0003	0005	
	(.0028)	(.0012)	
Size	.0045***	0056***	
	(.001)	(.0014)	
ROA	0007	.0005	
	(.0007)	(.0004)	
LEV	.0426**	0406***	
	(.0186)	(.0152)	
LIT	.0467***	0746***	
	(.017)	(.0153)	
LOSS	.0124	0172***	
	(.0118)	(.0057)	
CFOA	0658		
	(.0477)		
ACFOA	.226***	1961***	
	(.0588)	(.0581)	
UnexpectedReal		1.5424***	
1		(.3003)	
Constant	0778***	.1513***	
	(.0146)	(.0254)	
No. of observations	3585	3585	
	2000		

Table S1: The regressions of earnings management on firms' lagged value of accounting comparability

This table reports results of pooled regressions of earnings management on firms' lagged value of accounting comparability (*cP4*), with standard errors clustered by firm and year, and indicated in the parenthesis. *AEM* is the measure for accrual earnings management, while *REM* for real earnings management. Other variables are defined as in Table 2. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

.1137

.3159

# [Supplementary Table]

**Table S2:** The regressions of earnings management on accounting comparability accounting for different national institutional background (Legal system and economic uncertainty) to relieve the endogeneity problem.

	(1)	(2)
	REM	AEM
CP4	.0001**	0001***
	(0.00006)	(0.0001)
BM	0008	0013
	(.0026)	(.0011)
SIZE	.0051***	0031***
	(.0008)	(.0012)
ROA	0003	0003
	(.0005)	(.0003)
LEV	.0527***	0188
	(.0154)	(.0131)
LIT	.042***	0383***
	(.0132)	(.0103)
LOSS	.0169*	0077
	(.01)	(.0056)
CFOA	0919**	
	(.0373)	
ACFOA	.2056***	0195
	(.0455)	(.0408)
Investor Protection	.0234***	0188***
	(.0042)	(.0051)
World Uncertainty	4908***	.3464***
	(.087)	(.1203)
Legal System	.015	.0006
	(.0091)	(.0069)
Unexpected_REM		.933***
-		(.2116)
_cons	3052***	.2862***
	(.0439)	(.0664)
Observations	4780	4780
R-squared	.3306	.1103

\*\*\* p<.01, \*\* p<.05, \* p<.1

# Chapter 4

# The Effect of IFRS Adoption on Equity Acquisition Premiums: Evidence from Selected ASEAN Countries

# 1. Introduction

Finance and strategic management literature have investigated various potential determinants for explaining takeover premiums, including analyst coverage (Li et al., 2019), payment method (Da Silva Rosa et al., 2000; Draper and Paudyal, 1999; Huang and Walkling, 1987), takeover competition and hostility (Bates and Lemmon, 2003; Chapple et al., 2007), target firm characteristics such as ownership structure (Stulz, 1988), firm leverage and free cash flow (Israel, 1991; Jensen, 1986). From the acquirer's strategic considerations, premiums can occur when bidders want to access a new geographic market, strengthen their core businesses, and grow acceleration. For instance, Madura et al., (2012) provide evidence that some industry and economic factors can increase the growth prospects in an industry, which boosts expected synergies or demand for the target firm, and therefore increases the merger premiums. While many prior studies extensively examine takeover premiums from the finance and strategic management perspective, less attention has been given to explaining why premiums occur from a financial accounting perspective. The current study extends this body of work by examining whether the adoption of International financial reporting standards (IFRS) directly impacts the takeover's premium in selected ASEAN countries.

We predict that following the adoption of IFRS in ASEAN countries, the takeovers premium will increase because the acquisition process, such as preliminary due diligence, negotiations, and post-acquisition management planning, is subject to information asymmetry. Acquirers need more information to reduce the gap and assess the target firms. Since the IFRS regulation requires more disclosure to the capital market (Houqe, 2018), it can help buyers obtain more information during the post-IFRS period. In addition, in line with the positive accounting theory (PAT) and agency theory, which suggest that comparability of a financial statement may play a role as a monitoring mechanism in reducing the information asymmetry, IFRS adoption can create more comparable financial information (Barth, Landsman, Lang, and Williams, 2012, Meshram and Arora, 2021; Neel, 2017; Sohn, 2016; Wang 2014, Yip and Young, 2012). The comparable information can assess alternative opportunities to make a better investment decision, help the buyer determine a favorable target firm, and enhance the takeovers premium.

To test our contentions, first, we use a sample of target firms from selected ASEAN countries (Indonesia, Malaysia, and the Philippines) before and after IFRS adoption. We choose ten years pre- and post-IFRS period as the FactSet database allow us to do so and result in 840 acquisitions deal for 20 years. In line with our prediction, we find a positive association between IFRS adoption and acquisition premium, suggesting that the convergence with global accounting standards help to create higher premium on acquisition transaction in ASEAN countries. Based on the main result, we further investigate the role of the acquirer financial advisor, target size firms, acquirers from different industries, and acquirers from other countries on the relationship between IFRS adoption and takeover premium. We find that the role of the acquirer financial advisor on the premium is more robust in the pre-IFRS adoption period than in post-IFRS. This study also evidence that the positive effect of IFRS on the premium is more substantial among target larger firms, acquirers from different industries, and acquirers from other countries. Several sensitivity analyses also confirm our prediction

Our work differs from prior studies in several ways. Most of the previous studies evidence determinant of takeovers premium in the developed market (Bessler and Schneck, 2016; Bugeja and Leong, 2016; Jory and Wang, 2016; Ronald et al., 2007; Bugeja and Walter, 1995; Su and Well, 2018) and lack of studies focusing on ASEAN countries to examine the current issue. Unlike Sun et al., (2019), we directly look at the effect of IFRS on premium acquisition to provide a more straightforward explanation of how financial accounting literature is associated with acquisition decisions, neglected by prior studies. The current study also examines the effect of different conditions on IFRS adoption- acquisition premium relationship, which has never been considered in previous empirical work. We complement prior literature on the benefit of adopting IFRS on takeover premium when the acquirer has a financial advisor, acquirer come from different industries and countries with the target firm, and when the target firm is quite large. We believe these analyses make our work different from any other IFRS or takeover premium study.

ASEAN will become an exciting environment to assess the study's objective for several reasons. First, from July to December 2019, 162 M&A deals were announced that amounted to approximately USD 22.4bn. Quarterly, the number of sales in Q3 increased by around 19% from Q2 when the global economic uncertainty was evident. From Q3 to Q4, both volume and value grew strongly with growth of 10% and 27%, respectively, and total weight in Q4 amounted to USD 12.5bn, suggesting that ASEAN is an important market for M&A transactions. Second, ASEAN is a region that is attractive to foreign investors. One of the reasons is Southeast Asia is a crucial exporter to major economic blocs. It was the 4th largest trading partner of the U.S. in 2015, up from 5th place in 2009. It is also the EU's 3rd largest trading partner3 (after the U.S. and China) and Japan's 2nd most significant source of imports4, just behind China. Considering how vital the ASEAN market is, still limited studies are examining M&A premium in the ASEAN region. Third,

even though most countries in ASEAN converge with the IFRS, the compliance with the global standards is varies among ASEAN countries (Cascino and Gassen, 2015) which may impact the quality of the information in the local region. Since the takeover deal involves cross-border deals and buyers from a different industry, they rely more on infromation quality to assess the target firm, and it may impact the premium from M&A transactions. Accordingly, examining how IFRS adoption affects takeovers premium in ASEAN countries is an interesting empirical question.

This study documents some contributions. *First*, we extend the prior studies on IFRS adoption by examining the benefit of adopting high-quality financial accounting standards on acquisition activity. Our study evidence one of the essential benefits of IFRS adoption from M&A transactions, which was overlooked in prior empirical work. We find that the adoption of global accounting standards leads to higher premium from acquisition transaction. *Second*, we claim that our study will be one of the few studies which can provide fundamental reference to show that accounting information quality plays an essential role in determining acquisition premium as investment outcomes, especially in emerging market. Distinguish from Francis, Huang, and Kurana (2016) and Sun et al., (2016) who focus on subsequent cross-border M&A activity or Sun et al., (2019) or Bugeja and Loyeug (2016) who address the moderating role of IFRS adoption, we provide direct examination on how IFRS adoption effect the premium from emerging market. We also presenting more rigorous finding by including country's legal factor and evidence from more than single country which makes our study contribute to the literature on legal system.

*Third*, we complete prior literature on the benefit of having an advisor by showing that the existence of the acquirer's financial advisor has a vital role in supporting takeovers premium, especially in the pre-IFRS adoption. *Fourth*, most of the M&A studies focus on the developed market, and less attention has been given to the emerging market, such as ASEAN countries. We

fill the gap in the ASEAN M&A studies by documenting possible determinants of acquisition premium among ASEAN members. We believe our paper is important for ASEAN study considering ASEAN is the potential market for investor and possible for M&A transaction. Showing that IFRS adoption can create acquisition premium, current study provides more insight to investor or users of financial statement that ASEAN countries which adopt IFRS are facilitate more reliable information for business transaction. *Five*, our study also benefits regulators and standards setters to pay more attention to the implementation of the IFRS. As many emerging market countries face difficulties in adopting IFRS such as lack of experience from the preparer of the financial statement or language barrier, the compliance of IFRS adoption may vary among ASEAN countries. It can reduce the benefit from its implementation, causing the potential effect of the IFRS on takeovers premium may also be less pronounced after the adoption. To tackle this issue, accounting standards setters in each country can monitor and assist in implementing accounting standards connected with a business combination, such as IFRS 3, so that the maximum benefit from IFRS adoption can be achieved.

The remainder of this study is organised as follows. Section 2 describes prior research and hypotheses development, while section 3 presents the research design. Section 4 will explain the sample selection employed in currents study and section 5 presents the results. Discussion is provided in section 6 and section 7 concludes the study.

# 2. Prior research and Hypothesis Development

ASEAN countries provide a unique set of IFRS convergence history. Currently, the ten members of ASEAN mostly converge with IFRS, except Vietnam. Unlike European Union countries that adopt IFRS in the same year (2005), ASEAN countries experience different

85

convergence periods and strategies to adopt the IFRS. For example, Malaysia and Indonesia started to converge with IFRS in 2012, Singapore in 2003 and Thailand in 2013. Every country also chooses a different strategy for adoption. Some countries choose the big bang approach, while others believe in the convergence approach. The fact that ASEAN provides the various setting to converge with the IFRS, adopting the global accounting standards offers benefits and drawbacks to its adoption country. As a result, a number of studies link the adoption of IFRS with various consequences.

Extensive studies examined the impact of IFRS on reporting quality and financial statement comparability, such as Ahmed, Neel, and Wang (2013), Barth, Landsman, and. Lang (2008), Lang and Stice-Lawrence (2015), and Liao et al., (2012). For example, Ahmed (2013) examines whether mandatory IFRS adoption improves the accounting quality in 20 countries. He uses three metrics of accounting quality: income smoothing, reporting aggressiveness, and earnings management to meet or beat a target. Consistent with prior international accounting studies, he shows that mandatory IFRS adoption results in more significant income smoothing, greater earnings management, and overstatement of earnings (or delayed recognition of losses), reducing accounting quality. Their study supports prior empirical findings in the same vein, such as Barth, Landsman, and Lang (2008), Christensen, Lee, and Walker (2008), and Chen, Tang, Jiang, and Lin (2010). Another group of studies links the implementation of international financial reporting standards and the economic consequences of the adoption. For example, reduction in the cost of capital (e.g., Houge, M. N., Monem, R. M., & Zijl, T. V, 2016; Li 2010; Daske, Hail, Leuz, and Verdi 2008, 2013; Florou and Kosi 2015), IPO underpricing (Hong, Hung, and Lobo 2014), market liquidity (Daske et al. 2008, 2013) and earnings usefulness (Landsman, Maydew, and Thornock 2012).

Contrary to the above-mentioned studies, some empirical works (Liao, Sellhorn, and Skaife, 2012; Mongruts and Winkelrids, 2019; van Tendeloo and Vanstraelen, 2005) show an opposite finding. For Instance, Liao, Sellhorn, and Skaife (2012) document that the cross-country comparability of IFRS earnings and book values among French and German firms occurs in the year after IFRS adoption but become less comparable in the years that follow. They posit that differences in accounting estimates, recognition of special items, and other equity reserves between French and German firms cause a decrease in comparability over time. van Tendeloo and Vanstraelen (2005) observe more earnings smoothing activities in IFRS-compliant firms in Germany. They find a lower correlation between operating cash flow and accruals and higher discretionary accruals in IFRS firms. Two arguments support the conclusion that IFRS has no significant impact on the RQ of firms. First, apart from the quality of accounting standards, accounting quality is a function of the interpretation and enforcement of IFRS, litigation risk, and overall institutional settings. Second, IFRS being principle-based standards, lacks explicit guidelines for certain transactions, allowing greater managerial discretion (Ahmed, Neel, & Wang, 2013; Daske, Hail, Leuz, & Verdi, 2008; Soderstrom & Sun, 2007).

Although extensive studies document how IFRS adoption has a positive or negative impact on the various outcome, surprisingly little studies explain how IFRS adoption directly affects the acquisition activity, especially acquisition premium. Francis, Huang, and Kurana (2016) provide the closest survey. However, their study examines the role of similar accounting standards (not the adoption of IFRS) on subsequent cross-border M&A activity by employing a unique research design with country pair level and focusing on the volume of cross-border M&A activity for each country pair. They suggest that similar accounting standards cause lower information costs and enable the acquirers to better value and assess the target firms. Thus, the volume of M&A activity is predicted to be more significant between pairs of countries with similar generally accepted accounting principles (GAAP). Using the period from the cross border, M&A announced over 1998 through 2004; their work indicates that a minor difference in GAAP between a country pair leads to more M&A activity in targets of a foreign country. Thus, similarity in accounting standards is positively related to the volume of cross-border M&As. The results are robust after controlling for the effects of country-level characteristics, including economic development, capital market development, and geographic and cultural proximity.

Sun et al., (2019) document similar empirical work in China by investigating the role of IFRS adoption on Chinese firms' merger and acquisition activity. They examine how accounting standards (AS) convergence influences Chinese firms' overseas mergers and acquisitions (M & M&As). Sun et al., (2019) use cross border M&A events of Chinese enterprises, in line with Francis, Huang, and Kurana (2016), from January 2002 to December 2016 as the initial sample. Their findings show that the probability of success and the value of transactions increased significantly in countries that implemented International Financial Reporting Standards (IFRS) before 2007. Their results suggest that accounting standards (AS) convergence can improve the comparability of accounting information between China and other countries that have adopted the IFRS

Bugeja and Loyeung (2016) provide other findings examining whether IFRS adoption in Australia in 2005 changed the association between takeover premiums and the difference between a target firm's pre-acquisition market and book values (pre-acquisition step-up). Their study uses IFRS adoption as a moderating variable on the relationship between the target firm's preacquisition market and book values. Their results show a negative association between takeover premiums and the pre-acquisition step-up of the target firm. This association was reduced after Australia adopted IFRS and no longer required goodwill amortization.

Although we can document various studies explaining the impact of IFRS adoption on acquisition activity, we **hardly find** prior work that directly investigates the role of IFRS convergence in acquisition premium. We attempt to provide possible explanation how IFRS convergence may affect directly acquisition premium.

The association between global accounting standards and takeover premiums can have two opposite arguments. First, we suggest that the convergence with the IFRS may positively impact the takeover premium. We explain this possibility using various channels. To begin with, we are considering the cost of acquiring information. When entering the acquisition process, this cost may become a barrier for the foreign investor to assess an international investment. Higher information costs result in less information obtained for foreign investors and less foreign investment. For example, Merton (1987) shows that rational investors prefer better-informed assets, meaning that investors will choose better-informed investment for their business decision. In addition, Gordon and Bovenberg (1996) show that information disadvantages of foreign investors can result in less foreign investment. Since the takeover may involve domestic and cross border acquisition, high information costs become a severe obstacle to the acquirer, especially foreign acquirer. However, this issue is expectedly less problematic when the target country convergence with the global accounting standards. Especially when due diligence, negotiations, or post-acquisition management planning take place. As prior international accounting studies shows that the IFRS adoption can reduce the information cost by requiring more disclosure to the capital market (Houge, 2018) and increasing the accounting comparability (De Franco et al. 2011; Choi et al. 2014), the adoption helps acquirer obtain more information and higher quality information during the postIFRS period. The acquirer will better analyze and monitor the target firm with the credible information obtained in the post-IFRS, thus giving the acquirer a high premium. Jory et al. (2016) find supporting evidence of our prediction that availability of credible information can reduce the asymmetry of information and make the acquiring firm more likely to pay a fair market to the target firm.

In addition, a comparable financial statement is an essential property that needs to exist when assessing the target firm for the acquisition purpose. It is because acquirers rely on similar company analysis in selecting and valuing targets (Bruner 2004; Chen et al., 2018; Rosenbaum and Pearl 2009) better to understand the underlying economic events of the target and better evaluate the target relative to other firms. When preliminary due diligence takes place, limited access to information concerning the target can be obtained, and acquirers rely only on public information such as financial reporting when making initial valuation decisions. In addition, the acquirer cannot assess every aspect of the target due to cost and time constraints (Bruner 2004). As the first step of in-depth due diligence is a review of the target's financial statements with those of the target's competitors to identify risk areas that need to be examined (Bruner 2004), this stage is essential. Post-IFRS convergence offers the solution for those possible problems as it can improve the comparability of financial statements between firms (Barth, Landsman, Lang, and Williams, 2012, Meshram and Arora, 2021; Neel, 2017; Sohn, 2016; Wang 2014, Yip and Young, 2012). For example, Wang (2011) evidence cross country information transfer to capture comparability after IFRS and finds that after the adoption period, larger information transfer occurs. The more comparable financial statement can be used to assess various alternatives opportunities to make a better investment decision and help the buyer to determine a favourable target firm and

enhance the takeovers premium. Chen et al. (2018) provide evidence on how to target accounting comparability helps acquirers make better acquisition decisions.

Further, as information asymmetries occur between the acquiring and acquiree firms, the information gap may cause the acquirer to face more significant risks. One possible reason is that the preliminary due diligence relies heavily on publicly available information. Also, financial statements are the primary source of information (Lajoux and Elson 2011; Bruner 2004; Frankel 2005), causing the information asymmetries is appeared to happen at this stage and making a less accurate evaluation of cost and benefit, business analysis, and initial valuation. Thus, after the acquisition, higher risk (lower financial performance, loss, lower firm value, overpaying, missevaluating the target firm) may occur. In addition, when entering the in-depth due diligence process with only limited private information available, the information asymmetries can also make the acquirer decide bias offered purchase price. In some cases, when the target firm initiate the acquisition (Cain et al., 2012), the more private information provided by the target for the potential acquirer is optimistically biased, causing the purchase price to be less accurate. Since it is believed that this problem can be minimized by conducting a robust due diligence process (Wangerin, 2019), not all acquisition transactions experience the robust due diligence process, leaving the risk issue still existing when negotiating the transaction price.

Following this reason, the post-IFRS period provides a favourable setting for the acquirer to reduce the risk of acquiring the target firm. After IFRS convergence, standard-setter required listed firms to publish more accounting information and higher transparency to the public. Bushman and Smith (2001) suggest that accounting information affect economic performance through three channels: (1) Better project identification by managers and investors, (2) Discipline on project selection and expropriation by managers, and (3) Reduction *in information asymmetries*  *among investors*. In short, after the IFRS convergence, more publicly accounting information is available and lower *information asymmetries* can be claim, the risk will be less pronounced in this period as the quality and the quantity of publicly accounting information increase, causing the acquirer to evaluate the target firm more appropriately and leading to the higher acquisition premium.

Another important argument that worth to mention is regarding the possibility of high competition between M&A buyer after IFRS convergence. The convergence with the IFRS provide more transparent accounting information, more quality and quantity of information available in the capital market, and also can reduce the cost of equity capital. These favorable information environments tend to attract more buyer and more competition among the acquirer in a deal transaction. The buyer willing to pay more premium as the more competition occur.

*Second*, however, the opposite argument can also justify the negative association between IFRS adoption and takeover premium. As the acquiring firm faces greater risk because of asymmetry information and leads to lower quality of accounting information, the IFRS adoption may not always increase the quality of accounting information. A lower takeover premium is possible to occur. Following IFRS adaption, prior empirical work also evidences fewer earnings comparability (Liao, Sellhorn, and Skaife, 2012), more earnings smoothing (van Tendeloo and Vanstraelen (2005), greater manager discretion (Ahmed, Neel, & Wang, 2013; Daske, Hail, Leuz, & Verdi, 2008; Soderstrom & Sun, 2007), and higher natural earnings management (Oz and Yelkeci, 2018). For example, the implementation of IFRS may not always lead to increased comparability since the level of compliance is different between countries (Cascino, 2015). The lower quality of IFRS implementation results in the less comparable financial statement (Ball et al., 2003; Holthausen and Watts, 2000). Also, if the target provides private bias information to the

potential acquirer to maximize the offer price in the latter stage of in-depth due diligence and the bias worsens in the post-IFRS adoption due to possible lower accounting information quality, the acquirer may not accurately set the offer price for a publicly held target. Thus, the premium offers also can be degraded. In addition, information content in the market is not always provide true information about the market since the information bias may occur due to the lower quality of accounting information after IFRS adoption. The bias information may cause acquirer not properly to assess the target firm and result in lower offer price. Thus, the acquisition premium can also be decreased.

Despite the negative association that justified the IFRS adoption and the takeover premium, we believe the positive association between IFRS adoption and takeover premium will be more possible to occur. The post-IFRS period is characterized by less asymmetry information, a low cost of obtaining information, and a more comparable financial statement. These properties create a favorable environment for the acquirer, especially foreign buyers, to evaluate the firm target performance better, reducing potential error in selecting a target, thus improving the takeover premium. Formally stated, our first hypothesis is as follow:

Hypothesis: The IFRS adoption has positive effect on takeover premium.

#### 3. Research Design

## 3.1. Sample Selection and Data Source

We obtain the original sample from the FactSet database, available from the Kyushu University library. Examining the impact of the IFRS convergence period, we required the deal announcement from ten years before and ten years after adopting IFRS to obtain as many samples as possible from ASEAN countries. Since each of the ASEAN countries has a different year for the first-time adoption with the global accounting standards, we adjust the first-time adoption for every country as described in table 1. To gather a large sample from the deal transaction, we include major stake, deal stake, and acquisition/merger deal type, with complete deal status. We choose all the target firms from ASEAN countries. In contrast, the acquiring firm can be a domestic or foreign country. The initial sample from the FactSet database is 753 deal transactions in the pre-IFRS period and 597 deals for the post-IFRS period, which will be 1350 deal transactions from 3 ASEAN countries. We exclude all transaction with missing value and leaves us with the final sample of 840 deal transactions with 417 announcements in the pre-IFRS and 423 announcement post- IFRS as presented in Table 2 panel A. In general, Table 2 shows basic information for sample distribution.

Target Country	Pre-IFRS	IFRS convergence	Post-IFRS				
		started					
Indonesia	2002-2011	2012	2013-2021				
Malaysia	2002-2011	2012	2013-2021				
Thailand	2003-2012	2013	2014-2021				

**Table1. Timeline IFRS Convergence** 

Table 2 Panel B reports the full sample distribution by deal type (majority stake, minority stake, and M&A). It is clear that most acquisition transaction, more than 50%, comes from minority stake while the minor deal type is from M&A. Malaysia experience the highest number deal transaction. Still, in contrast, Indonesia is recorded as a country with the lowest number of acquisition announcement. Panel C shows the sample distribution by deal type for the post-IFRS period. Similar to panel B, minority stake also contributes more than 50% for a whole acquisition transaction during the post-IFRS, and these characteristics are also found for the pre-IFRS period. Overall, we can conclude that most of our sample comes from minority stake deal types and Malaysia document as a country with the most frequent deal acquisition transaction.

# Table 2: Sample DistributionPanel A: Distribution of sample by country

I and II. Disti	ibution of sample by country		
Country	Post-IFRS	Pre-IFRS	Full Sample
Indonesia	42	31	73
Malaysia	254	249	503
Thailand	121	143	264
Total	417	423	840

# Panel B: Distribution of sample by Deal Type Full sample

Country	Majority Stake	Minority Stake	M&A	Full Sample
5	Majority Stake			
Indonesia	31	35	7	73
Malaysia	142	257	104	503
Thailand	67	163	34	264
Total	240	455	145	840

# Panel C: Distribution of sample by deal type POST-IFRS Period

Country	Majority Stake	Minority Stake	M&A	Total
Indonesia	21	15	6	42
Malaysia	82	138	34	254
Thailand	29	83	9	121
Total	132	236	49	417

# Panel D: Distribution of sample by deal type PRE-IFRS Period

Country	Majority Stake	Minority Stake	M&A	Total
Indonesia	10	20	1	31
Malaysia	60	119	70	249
Thailand	38	80	25	143
Total	108	219	96	423

#### **3.2. Research Model and Variable Definition**

Current study uses adjusted model from Bugeja and Loyeung (2016) to estimate our hypothesis:

# $\begin{aligned} Premium_{i} &= \alpha_{1} + IFRS_{i} + Minority_{1} + Multiple_{i} + Friendly_{i} + CashPay_{i} \\ &+ SameCountry_{1} + Size_{i} + NI_{i} + LEV_{i} + \epsilon_{i} \end{aligned} \tag{1}$

The dependent variable is  $Premium_i$ , the takeover premium measure, defined as the percentage difference between the price per share offered by the acquirer and the target's closing stock price before the announcement date. We use a two-month premium as our primary premium measurement (Ayers et al., 2002, Bugeja and Loyeung, 2016; Nathan, 1998; Su and Wells, 2018). We believe it will not be affected by speculation of the acquisition. We also employ other premium measurements using thirty days premium and two weeks premium to capture other premium measurement possibilities and test whether our examination is robust to different measurement premiums. The indicator variable is IFRS, which is set to one for takeovers announced during financial years in which the firm prepares financial statements using IFRS and zero otherwise.

Based on prior studies, we include several control variables from deal characteristics that we identify can influence the takeover premium. We have *Minority* as a dummy variable for minority deal type. Since most of our deal transaction from minority stake and has possibility to influence our model, we control for this possibility. We set to 1 for takeovers characterized by minority deal type and 0 for a majority stake, and M&A deal type. *Multiple* is included because the premium is expected to be higher with competing bidders (Flanagan and O'Shaughnessy, 2003; Henry, 2005). We also use a dummy variable for multiple. *Multiple* is an indicator variable set to 1 if there are multiple bidders for the target firm. We also consider the impact of *the Friendly* dummy variable on the premium because prior studies evidenced that takeover hostile cause higher premium

(Bugeja and Walter, 1995; Franks and Mayer, 1996; Holl and Kyriazis, 1996). We define *Friendly* as an indicator variable set to 1 if the attitude categorizes as "*friendly*" and set zero if the attitude classifies as "hostile or neutral" from the FactSet database. The friendly attitude defines the target's board of directors viewing the acquirer's proposal as satisfactory and recommending that their shareholders accept the offer. CashPay is a method of payment offered by the acquirer. Prior M&A studies (Asquith, Bruner, and Mullins, 1990; Bugeja and Da Silva Rosa, 2010; Huang and Walkling, 1987; Kaufman, 1988; Lim, Makhija, and Shenker, 2016) document that when a cash payment is offered as a method of payment, it makes the premium higher. It is because M&A consider a risky economic activity, both for acquiring and acquirer a firm. The risk can be reduced by paying cash as a payment method as it provides more liquidity to the target firm (Bruslere, 2013). When the risk is reduced, it is more likely to increase the premium. We controlled the method of payment using an indicator variable set to 1 if the payment form is "cash" and set zero if the payment is cash & stock, stock, preferred stock, convertible preferred stock, warrants/options, debt, notes, or other. *SameCountry* is an indicator variable set to 1 if the acquirer comes from the same country as the target firm, 0 otherwise. We include the same country as the control variable because when acquirers come from the same country as the target firm, prior study document that the operating performance of domestic target firms has improved significantly (Kapil and Barack, 2020) and achieved higher profitability due to increased economies of scale, encourage the acquiring firm to pay more price for the target firm and to improve the acquisition premium.

We also include several firm characteristics. *Size* is the target firm's size, defined as the target's total asset log. This traditional control variable is included in our model because a larger target size tends to have a more complex business operation and more information asymmetry,

thus decreasing the acquisition premium. A larger target size also allows the premium to be spread over a large investment (Bruslerie, 2013), thus lowering the premium. Niden (1988) and Moeller and Ramaswamy and Waegelein (2003) also provide support for an inverse relationship between target size and acquisition outcome (premium and performance). However, Switzer (1996) and Linn and Switzer (2001) provide evidence that target size positively impacts performance. In addition, Healy et al. (1992) and Heron and Lie (2002) evidence no significant relationship between target size and investment outcome, using post-merger performance. As the liquidity of target's firm may also may influence the premium (Lang et al., 1989; Servaes, 1991; Su and Wells 2018) because potentially greater gains to be realised on acquisition for firms that are not utilising their assets efficiently, we include liquidity as measured by using net income deflated by the book value of equity. Leverage (LEV) includes debt leverage limiting personal benefit and lowered premium. However, the opposite argument suggests that higher leverage can be used as a powerenhancing means for controlling groups and help to achieve more personal benefit. Thus, higher leverage may force the bidder to pay a higher premium (Bruslerie, 2013). We also include country and year dummy to control the country and year fixed effect.

# 4. Result

#### **4.1. Descriptive Statistics**

Table 3 report descriptive statistics of deal characteristics and target firm characteristics. With respect to deal characteristics, the Minority has a mean of 0,542, suggesting that most of our sample comes from minority stake deal type. This result is in line with table 2 panel B, which document that approximately 455 deal announcement or around 52% sample is minority acquisition. We prove that multiple acquisitions from more than one bidder have meant only 0,183, suggesting a small amount of our sample having more than one buyer, supporting Bugeja and

Loyeung (2016). Concerning friendly, SameCountry, and CashPay deal characteristics, the table shows the mean value with more than 50% of our sample is a friendly takeover, domestic acquiring firm, and pay exclusively with cash. This result supports prior studies that bidder firms prefer to pay exclusively with money as a payment method (Rossi and Volpin, 2004; Narayan and Thenmozhi, 2014), and acquisition transactions are recommended by the target board (Bugeja and Loyeung, 2016). However, this finding is contradicted with Bugeja and Loyeung (2016), who document a lower mean of CashPay for Australia acquisition. Acquirer advisor and IFRS period have mean values 0,456 and 0,496, respectively. Our finding contradicts Sun et al., (2019) in the Chinese M&A study, which document mean value for advisor only 0,185. Two months premium, thirty days premium, and two weeks premium have mean values 0,233, 0,194, and 0,117 respectively, with a median 0,132 for two-month premium, 0,119 for thirty days premium, and 0,078 for two weeks premium. These findings suggest that target shareholders receive an extensive (material) premium. Our findings give a support for Bugeja and Loyeung (2016) and Su and Wells (2018), who also document similar result. With respect to firm characteristics, we document that target size and leverage has quite large gap, suggesting that target sample is varies among countries.

Table 4 report correlation between variables. This table shows positive correlation between Premium and IFRS adoption, even though the correlation is not significant at conventional level. The table also shows that minority has significant correlation with premium. Other control variables are not significant.

# 4.2. Primary test and Findings

Table 5 presents the base line model, explaining the effect of IFRS adoption on premium. In this table, we use standard errors clustered by industry.<sup>7</sup> The models also include year and country

<sup>&</sup>lt;sup>7</sup> Bugeja and Loyeung (2016) using double cluster by year and industry.

indicator variables to control for year and country fixed effects. All variables are winsorize at 1% and 99%.

Table 3: Sta	atistics D	Descriptive
--------------	------------	-------------

	Ν	min	max	Mean	Median	Std. Dev.
Minority	840	0	1	.542	1	.499
Multiple	840	0	1	.183	0	.387
Friendly	840	0	1	.674	1	.469
SameCountry	840	0	1	.732	1	.443
CashPay	840	0	1	.89	1	.312
Acqadvisor	840	0	1	.456	0	.498
Acqadvisor_TOP	840	0	1	.225	0	.418
IFRS Period	840	0	1	.496	0	.5
Two Months Premium	840	798	2.208	.233	.132	.445
Thirty Days Premium	840	843	1.733	.194	.119	.398
Two Weeks Premium	840	89	1.481	.117	.078	.338
Size	840	087	4.105	2.146	2.085	.741
NI	840	-4.664	3.702	.053	.069	.703
ABSTV_(MM)	840	.002	2398.402	141.504	22.563	377.988
LEV	840	074	110.098	1.997	.522	11.675

Table 4: Pairwise Correlations

Variables	Premium	IFRS	Minority	Multiple	Friendly	CashPay	Same	Size	NIBV	LEV
		Period		_			Country			
Premium	1.000									
IFRS Period	0.008	1.000								
Minority	-0.091*	0.048	1.000							
Multiple	0.034	0.003	-0.003	1.000						
Friendly	0.025	0.137*	0.038	-0.077	1.000					
CashPay	-0.056	0.119*	0.158*	0.060	-0.011	1.000				
SameCountry	-0.063	0.084	0.026	-0.075	-0.083	-0.020	1.000			
Size	-0.028	-0.099*	-0.028	0.026	-0.022	-0.117*	-0.062	1.000		
NI	-0.033	-0.032	-0.021	0.011	0.016	0.005	0.016	0.035	1.000	
LEV	0.051	0.065	-0.110*	-0.016	0.037	-0.024	-0.095*	0.050	0.037	1.000

\*\*\**p*<0.01, \*\**p*<0.05, \**p*<0.1

Table 5 uses a whole sample and various measurements of premium to examine how IFRS adoption is associated with the premium. This table reports that when the premium is based on a two-month premium, it is statistically significant at a 10% level with a positive coefficient of 0,195, suggesting that the post-IFRS period positively impacts premium acquisition. This finding is consistent with our prediction that following the IFRS convergence, the cost of acquiring information, risk, and asymmetry information becomes smaller while financial information is more comparable. These favourable investment environments make the firm more likely to accurately assess the target firm during due diligence and offer a high price, creating more acquisition premium. Thus, our finding supports prior studies which document that the convergence with global accounting standards have a positive impact on investment outcome (Bugeja and Loyeung, 2016; Su and Wells (2018; Francis at al., 2014; Li et al., 2019)

We also find similar significant result when we change the premium with alternative premium measurement using 30 days premium and 2 weeks premium. Overall, current study supports the prediction that IFRS adoption effect the acquirer premium and thus, support the proposed hypothesis.

With respect to control variables, we only find negative significant result for minority. Even though the result is not significant, we document expected positive sign for size, multiple, and friendly. However, we find opposite expected sign for CashPay and SameCountry.

	(1)	(2)	(3)
	Two Months Premium	Thirty Days Premium	Two weeks Premium
IFRSPeriod	.1953*	.1477*	.1331*
	(.0997)	(.0794)	(.0731)
Minority	0603*	0603**	0548**
	(.0313)	(.0291)	(.0238)
Multiple	.0304	.0233	.0097
-	(.0401)	(.0333)	(.03)
Friendly	.0244	.0354	.0307
	(.0296)	(.0266)	(.0234)
CashPay	0761	0588	0554
-	(.0658)	(.0551)	(.0435)
SameCountry	0609	0517	0632**
-	(.0473)	(.0421)	(.0302)
Size	0194	0005	.0391*
	(.0252)	(.0221)	(.0207)
NIBV	0224	0266	0258
	(.0274)	(.0252)	(.0232)
LEV	.0012	.001	0022
	(.0031)	(.0027)	(.002)
cons	.3903**	.2715**	.1487
	(.1547)	(.1334)	(.1148)
Observations	840	840	840
R-squared	.0517	.0598	.0703
country Dummy	YES	YES	YES
Year dummy	YES	YES	YES

Table 5: The effect of IFRS on Premium (Full sample)

This table report the effect of IFRS adoption on acquisition premium. In every regression, we report the coefficient with standard error in the parenthesis and clustered by industry. All variables define in appendix 1. The regressions also include country and year fixed effects. *Standard errors are in parentheses* \*\*\* p < .01, \*\* p < .05, \*p < .1

# 4.3. The effect of acquirer advisor on the relationship between IFRS adoption and acquisition premium

In addition to IFRS adoption, the finance literature has extensively documented the role of a financial advisor in creating a takeover premium and shows a positive association with the takeover's premium. Following the IFRS adoption, we further concerned to examine the role of acquirer financial advisor on the relationship between IFRS adoption and acquisition premium. This study argue that the ASEAN region's market environment, characterized by lower transparency, higher information asymmetry, and lower quality of financial information, can creates difficulties for the acquirer to process data for determining investment decisions in the pre-IFRS adoption period. Thus, causing the acquirer to rely heavily on a financial advisor to have a good target firm and offer high premium. On the other hand, after the IFRS period, lots of information available in capital market since IFRS regulation required more disclosure. Thus, we predict that the effect of advisor will be more substantial in the pre-IFRS compared to the post-IFRS period. Consequently, we expect that the role of the acquirer financial advisor on IFRS adoption-premium relationship will be stronger in the pre-IFRS adoption period than in the post-IFRS.

To address this issue, we divide our sample into two categories: pre-IFRS and post-IFRS groups. We repeat the test examining the effect of advisors separately in each group sample, and table 6 provides the result of our prediction. Column (1) shows the significant result at 10% level, with a coefficient of 0,0674, while column (2) shows a lower coefficient (0,0224) and insignificant result. Implying that the advisor effect is stronger in the pre-IFRS than in the post-IFRS period. Following this finding, we claim that advisor has a more essential role in determining acquirer premium in the pre-IFRS period than post period.

	PRE IFRS	POST IFRS
	(1)	(2)
	TwoMonths	TwoMonths
	Premium	Premium
Acqadvisor	.0674*	.0224
	(.0388)	(.0525)
Minority	0507	032
	(.038)	(.0428)
Multiple	0418	.1191*
	(.0417)	(.0662)
Friendly	.0093	.0624
	(.0421)	(.0518)
CashPay	.0328	2956**
	(.0558)	(.1491)
SameCountry	.0427	185**
	(.0505)	(.0794)
Size	0525*	.025
	(.0286)	(.0473)
NIBV	0362	01
	(.03)	(.0392)
LEV	0023	.0018
	(.0035)	(.0039)
_cons	.3541***	.6416***
	(.1187)	(.245)
Observations	423	417
R-squared	.0669	.1147
Country Dummy	YES	YES
Year dummy	YES	YES
Std err clustered by Industry	YES	YES

# Tabel 6: The effect of Acquirer Advisor on Premium (PRE AND POST -IFRS)

This table report the effect of acquirer advisor (*Acqadvisor*) in the relationship between IFRS adoption and acquisition premium using sub-sample from pre- and post-IFRS adoption. In every regression, we report the coefficient with standard error in the parenthesis and clustered by industry. All variables define in appendix 1. The regressions also include country and year fixed effects. *Standard errors are in parentheses* \*\*\*p<.01, \*\*p<.05, \*p<.

#### 4.4. Sensitivity Test

As the FactSet data base allow us to have alternative measurement for control variable FRIENDLY and CASHPAY variable, we change the measurement using alternative measure and repeat the main model. Untabulated result remains unchanged when we change the control variables measurement, suggesting that our model is not sensitive to different measurement

## 4.5. Additional test

To test whether our main findings are robust to several change conditions, we perform several robustness tests.

#### 4.5.1. Additional test using the target size

We test whether the effect of IFRS is more robust in large firms or in small firms. Two conflicting arguments possibly occur to address this issue. **First argument** suggests that large firms are considered more complicated and complex than small firms, causing the acquirers to need more information when they need to make takeovers decisions. The proponents of the IFRS claim that IFRS can provide more disclosure and thus potentially reduces the information asymmetry between insiders and investors and among investors, which assist the acquirer in making better acquisition decision and higher premium offered. Therefore, using this logic, we predict that the effect of IFRS on the premium is stronger (positive) for larger firms. **However, another opposite argument might also occur**. Large target firm is subject to media attention, giving the public easier to obtain more information from the larger firms than from small firm. Consequently, there will be no material differences in terms of information quantity that public can obtain in period before and after IFRS adoption. Relying on this logic, therefore, the effect of IFRS adoption on acquisition premium will be weaker (negative) for large firm.

To address this concern, we divide our sample based on target size. Larger firms fall between the 6th to 10th decile of target size, while the remaining are considered a small firm category. Next, we re-test the primary model, and Table 7 presents the result. Table 7 column (1) documents significant results while column (2) shows the opposite result, suggesting that the effect of IFRS on the premium is more pronounced in larger firms is supported.

#### 4.5.2. Additional test using different vs the same industry

Different industries between target and acquire may cause higher risk that acquirers are potential can have. Since the risk can be reduced by having more quality financial information, more transparent information, and more comparable accounting information, the acquirer from a different industry with the target firm will rely more on the IFRS period to gain more premium.

We divide our sample into two categories based on the industry where the acquirer and target firms come from to assess this prediction. The first group will be assigned for the acquirers from a different industry with the target and the second group is for acquirers from the same industry as the target. Table 7, column 3 and column 4 provide the finding. We show that different industries between acquirer and target have a significant result at 10% level in column (3) while the same sector has no significant impact at column (4). The finding supports our prediction that the effect of IFRS on the premium is stronger in a different industry.

industry	(1)	(2)	(3)	(4)
	Two	Two Months	Two Months	Two Months
	Months	Premium	Premium	Premium
	Premium	(SMALL)	(Different	(The same
	(LARGE)		Industry)	industry)
IFRS Period	.2034**	0144	.2088*	0038
	(.0949)	(.2751)	(.1109)	(.2367)
Minority	1109***	0267	0804**	.1205
-	(.0414)	(.0443)	(.0348)	(.0805)
Multiple	.036	.0353	.0396	1762**
	(.0452)	(.0675)	(.044)	(.079)
Friendly	.0282	.0238	.0144	.0932
	(.0396)	(.0523)	(.0343)	(.0851)
CashPay	0836	0784	1117	.0658
•	(.0867)	(.0998)	(.076)	(.1229)
SameCountry	0534	0757	0679	.0535
-	(.052)	(.0723)	(.0486)	(.1405)
Size	0256	.0095	0157	0562
	(.0355)	(.0744)	(.0264)	(.0707)
NIBV	0094	0344	0173	0835
	(.0387)	(.0402)	(.0292)	(.0681)
LEV	.0016	.0007	.0002	.0048**
	(.0027)	(.0073)	(.0038)	(.0021)
_cons	.4175**	.3979	.4121**	.3226
_	(.2076)	(.3202)	(.1819)	(.2821)
Observations	420	420	722	118
R-squared	.1132	.0659	.0622	.314
Country Dummy	YES	YES	YES	YES
Year dummy	YES	YES	YES	YES
Std err clustered by Industry	YES	YES	YES	YES

Table 7: Robustness Test using (1) large vs small sub-sample and (2) different vs the same Industry

This table report the effect of IFRS adoption and acquisition premium using sub-sample from (1) large vs small target firm and (2) different vs the same industry. In every regression, we report the coefficient with standard error in the parenthesis and clustered by industry. All variables define in appendix 1. The regressions also include country and year fixed effects. *Standard errors are in parentheses* \*\*\* p < .01, \*\* p < .05, \*p < .

### 4.5.3. Robustness test using different vs the same buyer country

We predict that buyers from a different country will need more information than buyers from the same country as foreign buyers are less familiar with the target's firm operation and reputation. In addition, Chevaier and Redor (2010) show that the information asymmetry developed with distance, causing acquiring firms from different countries may experience a higher information gap than domestic acquirers, thus lowering the premium. We predict that the effect of IFRS on the premium will be more substantial for the buyer who comes from a different country with the target as foreign buyers need more information and the post-IFRS adoption help them to do so.

We divide our sample based on the same country category to test this prediction. The first category is for a buyer from a different country as a target, while the second category is for a buyer from the same country as the target firm. Table 8 Panel A shows that even though the coefficient from a different country is larger (0,6338) than the same country (0,137), we cannot find a significant result of the robustness test. Therefore, we conduct another test based on sub-sample from domestic acquirer without advisor as first group (Group 1). The second group will be foreign acquirer with advisor, foreign acquirer without advisor, and domestic acquirer with advisor (Group 2). Then we do the same test using equation (1) in each group. We expect the positive significant result evidenced for the latter group to support our prediction. Table 8 panel B reports the result. The second group shows positive and significant result, even if I change the measurement for acquisition using 30 days premium and 2 weeks premium <sup>8</sup>, suggesting that association between IFRS adoption and acquisition premium will be stronger for foreign acquirer.

<sup>&</sup>lt;sup>8</sup> Since the second group include domestic acquirer with advisor, we also conduct another test by controlling the domestic acquirer with advisor to convince that the result does not drive by this variable. We add control variable using dummy 1 for the domestic acquirer with advisor, and zero otherwise. The result remains the same even when we change the acquisition premium. We also examine model by using interaction between IFRS adoption and the same country. The result also do not change.

	(1)	(2)
	TwoMonths Premium	TwoMonths Premium
	(Diffenet Country)	(Same Country)
IFRSPeriod	.6338	.137
	(.3991)	(.0955)
DummmyMinority	1447*	0291
	(.0739)	(.0343)
Multiple	.043	.0403
-	(.0706)	(.0493)
Friendly_Attitude	0181	.0508
	(.0695)	(.0344)
Others Control variables included	YES	YES
_cons	.7797***	.0259
	(.2733)	(.1475)
Observations	225	615
R-squared	.1956	.0737
Country Dummy	YES	YES
Year dummy	YES	YES
Std err clustered by Industry	YES	YES

### Table 8: Panel A: Robustness test using different vs the same country

Standard errors are in parentheses \*\*\* p<.01, \*\* p<.05, \* p<.1

# Panel A: Robustness test using different vs the same country

	(1)	(2)	(3)	(4)	(5)	(6)
	2 Months	2 Months	30 days	30 days	2 weeks	2 weeks
	Premium	Premium	Premium	Premium	Premium	Premium
	Group 1	Group 2	Group 1	Group 2	Group 1	Group 2
IFRS Period	.1491	.3414**	.1416	.2381**	.1235	.1673*
	(.1395)	(.1463)	(.1152)	(.116)	(.1114)	(.0871)
DummmyMinority	0491	0625	0524	0597	061	0507*
	(.0524)	(.0397)	(.0485)	(.0363)	(.043)	(.0299)
Multiple	.046	.0302	.0606	.0082	.0257	0033
-	(.0606)	(.0524)	(.0614)	(.0396)	(.049)	(.0386)
Friendly	.0586	.0363	.072	.0405	.0497	.0418
2	(.0531)	(.0415)	(.0484)	(.0368)	(.0429)	(.0304)
CashPay	1087	066	0894	0457	0651	0293
	(.0918)	(.0815)	(.0861)	(.0657)	(.0682)	(.0543)
Size	.0093	0539	.021	0254	.0398	.0281
	(.0419)	(.0388)	(.0364)	(.033)	(.0333)	(.0237)
NIBV	0131	028	0161	0318	0148	0318
	(.0561)	(.028)	(.0528)	(.0252)	(.0478)	(.0245)
LEV	0041**	.0008	0033**	.0007	0024*	0031
	(.0016)	(.0035)	(.0014)	(.0031)	(.0012)	(.0022)
_cons	0157	.5256***	1145	.407***	1939*	.2488*
	(.1498)	(.1798)	(.1226)	(.156)	(.1131)	(.1379)
Observations	347	493	347	493	347	493
R-squared	.0688	.0844	.0806	.089	.0852	.1058
Country Dummy	YES	YES	YES	YES	YES	YES
Year dummy	YES	YES	YES	YES	YES	YES
Std err clustered by Industry	YES	YES	YES	YES	YES	YES

Standard errors are in parentheses \*\*\* p<.01, \*\* p<.05, \* p<.1

#### 5.4.5. Robustness test using Non-Minority Stake sample

As more than 50% of our sample are comes from minority stake transaction, and to reduce the possibility that our results are influenced by the minority transaction, we re-test our main model by excluding the minority stake deal type. We present the result in table 9 and convince that the minority stake sample do not influence our findings.

#### 5.4.6. Robustness test using winsorized 5% - 95%

In our main test, we use 1%-99% winsorize data. To determine the sensitivity to the results to outliers, exclusions were increased to the 5% and 95% percentile levels <sup>9</sup>. Untabulated finding report consistent with the results in the primary tests, suggesting that the results are generally supportive of the hypothesis.

#### 5.4.7. Accounting for other control variable

In the baseline model, equation (1), we do not consider another control variable that may influence the takeover premium. to address this issue, we conduct several robustness tests by adding various control variable in the model. *First*, Prior study suggest that transaction value has an impact on premium because the higher transaction price, the more premium can be offered from one single acquisition transaction. In addition, we also include acquirer ownership type as control variable. Due to data availability, only acquirer ownership type which can only be added in the model which represent characteristics from the acquirer. We include five types of dummy acquirer ownership: (1) dummy if ownership is public (dummy\_Public), (2) dummy if ownership is Privat (dummy\_Private), (3) dummy if ownership is government (dummy\_government), (4) dummy if ownership is subsidiary (dummy\_subsidiary), and (5) dummy if acquirer ownership is double or

<sup>9</sup> Su and Wells (2018) also perform this robustness test

more (dummy\_double). We add these additional control variables in equation (1) and did similar regression. The result can be seen in Table 10 and remain unchanged.

Third, we add country-level control variables. The purpose of the country-level control variables is to capture important elements of a country's institutions that affect cross-border M&A activity (Francis et al., 2015). We include tax compliance index, corporate governance index, and World uncertainty index. Table 11 present the finding and the result remain unchanged as in Table 5.

	(1)	(2)	(3)	(4)
	Two Months	Two Weeks	One Month	Thirty Days
	Premium	Premium	Premium	Premium
IFRSPeriod	.2679**	.2444*	.1755	.2237*
	(.1294)	(.1314)	(.1142)	(.1141)
Multiple	.0667	.0539	.0515	.0755
_	(.0657)	(.0503)	(.0487)	(.0576)
Friendly_Attitude	0029	0238	0097	.0062
	(.052)	(.0419)	(.043)	(.0477)
CashPay CashConsideration	0891	0851	0643	0704
	(.084)	(.0596)	(.0628)	(.0717)
Samecountry	1163*	1192**	1176**	0979
	(.068)	(.0505)	(.0532)	(.0632)
Size	.0175	.087***	.0467	.0254
	(.0365)	(.0286)	(.0283)	(.0322)
NIBV	0166	0531	0235	0324
	(.0483)	(.0436)	(.0404)	(.0451)
LEV	.0005	0038**	0005	0001
	(.0037)	(.0019)	(.0028)	(.0032)
cons	.4328*	.3013*	.3113*	.3346
_	(.2386)	(.1682)	(.1816)	(.206)
Observations	385	385	385	385
R-squared	.0722	.1491	.0849	.0801
Country Dummy	YES	YES	YES	YES
Year dummy	YES	YES	YES	YES

Table 9: Robustness Test Using Non-Minority Stake sample

This table report the effect of IFRS adoption and acquisition premium by excluding non-minoryty stake sample. In every regression, we report the coefficient with standard error in the parenthesis and clustered by industry. All variables define in appendix 1. The regressions also include country and year fixed effects. *Standard errors are in parentheses* \*\*\* p < .01, \*\* p < .05, \*p < .05

and type of acquirer.	(1)	(2)	(3)	(4)	(5)
	2 Months				
	Premium	Premium	Premium	Premium	Premium
IFRSPeriod	.1911*	.1733*	.1629	.2174**	.1761*
	(.0994)	(.0992)	(.0988)	(.1044)	(.0994)
Minority	0158	0184	0184	0176	0162
-	(.0352)	(.0349)	(.0352)	(.0345)	(.0347)
Multiple	.0272	.0174	.0283	.0184	.0556
-	(.0398)	(.0416)	(.0398)	(.0401)	(.0476)
Friendly	.0105	.0097	.009	.01	.0099
-	(.03)	(.0302)	(.0299)	(.0301)	(.0303)
CashPay	0674	0604	0575	0726	0592
-	(.0664)	(.0663)	(.0659)	(.0668)	(.0664)
SameCountry	0468	0479	0406	0376	0473
·	(.0464)	(.047)	(.0442)	(.0459)	(.047)
Size	0743***	0772***	078***	0771***	0746***
	(.0286)	(.0287)	(.0284)	(.0285)	(.0286)
NIBV	0241	0235	0242	0249	0238
	(.0266)	(.0266)	(.0263)	(.026)	(.0266)
LEV	.0012	.0012	.0012	.0011	.0012
	(.0031)	(.0031)	(.0031)	(.0031)	(.0031)
LogTV	.0685***	.0663***	.0642***	.0652***	.0678***
2	(.0189)	(.0186)	(.0187)	(.0185)	(.0187)
dummy public	0237	× ,			× ,
	(.0406)				
dummy government		.0586			
<i>y_e</i>		(.0862)			
dummy privat		× ,	0354		
2			(.0445)		
dummy subsidary				.0532	
5 <u> </u>				(.0342)	
dummy doubleowner				( )	0331
5_					(.0507)
_cons	.3833**	.3964**	.4153**	.3486**	.3793**
_	(.1565)	(.1631)	(.1661)	(.1566)	(.1562)
Observations	840	840	840	840	840
R-squared	.0657	.0657	.0663	.0677	.0654
Country Dummy	YES	YES	YES	YES	YES
Year dummy	YES	YES	YES	YES	YES

Table 10: Robustness analysis by adding control variable log of transaction value and type of acquirer.

This table report the effect of IFRS adoption on acquisition premium. Adding 2 control variables: (1) log of transaction value and (2) type of acquirer. Every regression, we report the coefficient with standard error in the parenthesis and clustered by industry. All variables define in appendix 1. The regressions also include country and year fixed effects. *Standard errors are in parentheses* \*\*\*p < .01, \*\*p < .05, \*p < .1

	(1)	(2)
	2 Months premium	2 Months Premium
IFRSPeriod	.1891*	.2384*
	(.1119)	(.1278)
Minority	0504	0474
	(.0316)	(.0313)
Multiple	.0303	.0367
	(.0406)	(.0409)
Friendly	.0299	.0267
	(.0299)	(.0292)
CashPay	076	0748
	(.0631)	(.0625)
SameCountry	0581	0615
-	(.0464)	(.0472)
Size	0237	0252
	(.0246)	(.025)
NIBV	0191	0183
	(.0284)	(.0275)
LEV	.0008	.0003
	(.0032)	(.0034)
World Uncertainty	0.0000*	0.0000
_ ,	(0.0000)	(0.0000)
Tax complience	.1029	.0679
_ 1	(.0681)	(.0919)
Voice and accountability	· · · · · · · · · · · · · · · · · · ·	.0564
		(.2029)
Political stability		.0268
		(.194)
Control corruption		.6626*
_ 1		(.3404)
Rule of law		1264
		(.405)
Regulator yquality		3107
<i>6</i> ····· <i>_J</i> ····· <i>J</i>		(.4685)
cons	9424	5566
-	(.5893)	(.8959)
Observations	840	840
R-squared	.0613	.0738
Country Dummy	YES	YES
Year dummy	YES	YES

Table 11: Robustness analysis by adding country institutional setting as control variable, including: tax compliance, CG index, and World uncertainty index

This table report the effect of IFRS adoption on acquisition premium by adding country institutional setting: tax compliance, CG index, and World uncertainty index. Every regression, we report the coefficient with standard error in the parenthesis and clustered by industry. All variables define in appendix 1. The regressions also include country and year fixed effects. *Standard errors are in parentheses* \*\*\* p < .01, \*\* p < .05, \* p < .1

### 6. Conclusion

The current study examines the association between IFRS adoption and acquisition premium in three selected ASEAN Countries for 20-year periods. Using 840 deal announcements from Indonesia, Malaysia, and Thailand, we show that the convergence with the global accounting standards has a significant impact on acquisition premium. We also evidence that the effects of IFRS adoption are more pronounced when the acquirer hires financial advisor, with larger target size, when the buyer comes from different industries, and the bidder comes from another country. Our result is also robust to several sensitivity tests.

We provide evidence that the quality of accounting information acts as a supporting means to achieve high outcomes from investment decisions. We show that adoption of IFRS can help the acquirer firm better analyze the target firm in evaluating the potential deal and process accurate assessment due-diligence stage, leading to high acquisition premium. As ASEAN countries experience investment opportunities rapidly, the benefit of adopting the global accounting standards needs to be recognized by investors, managers, and regulators.

Our result is consistent with prior studies documenting the benefit of IFRS adoption on investment outcome (Bugeja and Loyeung, 2016; Su and Wells (2018; Francis et al., 2014; Li et al., 2019). Overall, the current study helps to explain that accounting standards facilitate the target firm to achieve high premium and facilitate the acquirer to better evaluate target firm for M&A activity, which has grown in ASEAN countries. While our analysis suggests the advantages of having good quality information in the context of M&A activity, especially on the takeover premium, our evidence does not shed light on whether the convergence with the IFRS on takeover premium will be more evidenced in more institutional ownership due to limited source of data. We also can not include acquirer control variables such as abnormal return because we cannot access

to this data from the data based. We leave the opportunity to examine such relationship for future research.

### **Chapter 5: Conclusion**

The essential of accounting information quality for business decision making purpose motivate current study to provide more explanation regarding what determine the accounting information quality, what consequences of having high quality of accounting information, and whether the high quality of accounting information help to achieve better investment decision. To address this concern, this dissertation focusses on three important sources which contribute to the quality of accounting information: accounting comparability, earnings management, and the adoption of international financial reporting standards (IFRS). Thus, this dissertation attempts to answer three essential questions: *does country's institution determine accounting comparability around ASEAN countries? does external corporate governance, represented by accounting comparability, influence AEM/REM behavior? does the adoption of IFRS bring favorable consequences on business decision making?* Current paper investigates these empirical questions in ASEAN countries since the ASEAN offer interesting condition to address the issues.

Chapter 2 will examine whether country's institutional factors, legal and extra-legal system, can explain the differences in within-country accounting comparability across emerging economy, in ASEAN countries. Prior research documented the importance of country's institutional factor as an essential determinant of high quality of financial statement by showing earnings quality is higher in country with strong investor protection and legal enforcement regime. Dick and Zingales (2014) compiled evidence that legal and extra-legal factors can have implications for business managers and investors, such as mitigating managers' benefit of controls. It is plausible that different degrees of legal infrastructure, law enforcement, and compliance in emerging countries such as ASEAN may have different consequences on accounting comparability. By examining 4776 firm-year observations in five ASEAN countries from 2014 to 2017, I find that accounting

comparability is positively associated with stronger investor protection, stricter enforcement of auditing and reporting standards, stricter tax enforcement, and more public pressure; however, accounting comparability is adversely associated with greater competition. The results are robust to additional tests. In addition to legal system variables, extra-legal determinants play an important role in affecting a country's comparability of financial statements

When Chapter 2 witness that country's legal systems have important role on enhancing the quality of accounting information, it is unclear what determine the quality of accounting information. To address this issue, chapter 3 attempts to investigate whether one essential external monitoring from corporate governance mechanism, accounting comparability, can influence the accounting quality from the earnings management perspective. Especially, chapter 3 investigate whether the greater accounting comparability curb AEM and/or REM in five ASEAN countries. By investigating 1,195 listed companies, excluding financial firms, from 2014 to 2017 in five ASEAN countries, accounting information comparability showed a negative association with AEM and a positive association with REM. Thus, firms with more comparable accounting information tended to engage in greater REM during the fiscal period and conduct less AEM. This result remained when using alternative proxies for REM. Robustness and sensitivity tests also supported this finding. Our results on ASEAN firms supported the substitute hypothesis, consistent with the results for US firms (Sohn 2016; Zang 2012). One explanation is that during the investigation period of this study, 2014-2017, all five ASEAN countries had adopted the International Financial Reporting Standards (IFRS), which, like US GAAP, requires extensive disclosure.

The conflicting findings whether the adoption of IFRS, as one essential factor influencing the quality of accounting information, can bring favorable consequences on business decision making lead us to the Chapter 4. It is because the differences in country characteristics, level of compliance, and level of difficulty of IFRS implementation cause different effect on different adoption country. Thus, chapter 4 attempts to examine the role of IFRS adoption on acquisition premium. I used a sample of target firms from selected ASEAN countries (Indonesia, Malaysia, and the Philippines) before and after IFRS adoption, which resulted in 840 acquisitions deals over 20 years. In line with our prediction, we find a positive association between IFRS adoption and acquisition premium, suggesting IFRS convergence help acquirer make better investment decision in ASEAN countries. We also find that the role of the acquirer financial advisor on the premium is more robust in the pre-IFRS adoption period than in post-IFRS. Further, additional analysis shows that the positive effect of IFRS on the premium is more substantial among target larger firms, acquirers from different industries, and acquirers from other countries. Several sensitivity analyses also confirm our prediction.

This dissertation make contribution in several ways. Chapter 2 contribute by providing cues for the government to strengthen legal and institutional infrastructure, such as investor protection, and extra-legal environments, such as law compliance and enforcement, to have better accounting information quality. From Chapter 3, this study contributes in reducing the literature imbalance by presenting evidence of using REM and AEM as supplements among ASEAN firms. in addition, in the existing literature, it was not clear how firms in emerging markets such as ASEAN behave in using AEM and REM. This study fills the gap by showing that ASEAN firms with more comparable accounting information tended to engage in greater REM during the fiscal period and less AEM at the period-end. Well-structured institutional settings can constrain EM (Shen and Chih 2005). Compared with advanced economies, the lower levels of governance and disclosure in emerging markets (Odell and Ali 2016) provides a unique setting for EM practices and is an avenue that has been under-examined (Martens, Yapa, and Safari 2020). In the existing literature, it was not clear how firms in emerging markets such as ASEAN behave in using AEM and REM. This study fills the gap by showing that ASEAN firms with more comparable accounting information tended to engage in greater REM during the fiscal period and less AEM at the periodend. Chapter 3 also give contribution to provide more rigorous evidence by including countrylevel institutional factors in the empirical tests, different from prior study which only use single country, which can somewhat address the omitted variable problems. Finally, Chapter 4 contribute to the M&A and accounting information quality literature by showing that accounting information has a role in facilitating a more accurate assessment of investment decisions for M&As transactions.

Current study is subject to several limitations. First, this study cannot control firm level corporate governance. Another important thing is this paper also cannot compare whether the switch-off between earnings management due to higher accounting comparability is different between pre- and post-IFRS adoption in ASEAN region. In addition, this paper cannot incorporate acquirer characteristics when examining the effect of IFRS on premium.

Considering above-mentioned limitations, current study document suggestions for future research. Future study can incorporate firm-level corporate governance index or corporate governance variables in the model such as audit quality and characteristics of audit committee as corporate governance mechanism play a role in curbing earnings management and can affect the premium acquisition. Also, future research can include acquirer characteristics when examining the takeover premium such as acquirer abnormal return and acquirer financial characteristics.

. It is because, there is also possibility that acquirer characteristics can affect the premium. Since this study cannot examine the EM strategy trade-off between pre- and post-IFRS period, next study can examine this issue and document whether between those periods evidenced similar behavior or different trade-off strategy behavior. Finally, broader sample from countries such as Asia Pacific or other regions can be considered to examine all empirical questions in this study and analysis what the result will be for other regions and countries.

# APPENDIX 2

Variable	Definition
Dependend Variabel:	
CP4 CPIND	A firm-year measure of accounting comparability following De Franco et al., (2011) Model. It is average value of the four highest rank from combination firms for firm I and other firm in the same 4-digit GSIC industry in a given year. Estimated as define in section 4.2 An industry-year measure of accounting comparability estimated by using De Franco et al., (2011) model. It is the industry median from combination firm form firm 1 and other firm in the same 4- digit GSIC in a given year. Calculated as define in section 4.2
Independen Variabel	
Firm-level variabels	
Accrual Earnings Management (AEM) Size	Absolute value of residual discretionary accrual estimated based on Dechow and Dichev (2002) model. Detail for the measurement is describe in section 4.3 Log value of total assets
Capital Intensity (Capintens)	Net PPE (Property, plant, and equipment) divided by total assets
<b>Country-level</b> <b>variables for main test</b> Strength of auditing and reporting standards index ( <i>Standards</i> )	Measured by strength of auditing and reporting standards index scaled from 1 to 7, with higher scores for stronger financial auditing and reporting standards (The Global Competitiveness Report 2014–2017 by World Economic Forum).
Strength of investor protection index ( <i>InvProtect</i> )	Measured by the strength of investor protection index scaled from 0 to 10, with higher scores for higher degree of investor protection (The Global Competitiveness Report 2014–2017 by World Economic Forum).
Tax law enforcement ( <i>Tax</i> )	Degree of tax compliance, measured by the degree of score of paying tax. It is an index reflecting the compliance of paying tax which include three indicator measurements: tax payment, times required to comply with three major taxes, and total tax and contribution. Score of paying tax index are taken from Doing Business, world bank report from 2016-2019.
Competition	An index indicating whether unfair competition is prevented, measured by the extend of the market dominance, a respond to survey question score of how effective competition law. Higher index of the extend of the market dominance indicate higher competition law
Newspaper	the circulation of daily newspapers divided by population from Dyck and Zingales (2004).

Country-level variables for additional test	
labor pressure: cooperation in labour- employer relations	An index indicating how labour-employee relation. It is questioning: "In your country how would you characterize labor- employer relations? [1 = generally confrontational; 7 = generally cooperative]". Higher index indicate labor-employer relation is cooperative.
Moral norms: business costs of crime and violence	Business costs of crime and violence measure to what extent the incidence of crime and violence impose costs on businesses $[1 = to a \text{ great extent}; 7 = not at all]$ . The higher cost of crime and violence, represented by a lower index, may lower the comparability of financial statements
Moral Norms: ethical behavior of firms	An index measures corporate ethics of companies with question:" In your country, how would you rate the corporate ethics of companies (ethical behaviour in interactions with public officials, politicians, and other firms)? (1 = extremely poor among the worst in the world; 7 = excellent among the best in the world)] ". The higher index of ethical behavior of firms, may stronger the comparability of financial statements.
Control Variables:	
Return On Assets (ROA)	Return on investment, measured by Income before extraordinary item divided by lagged total Assets
Operating cycle (opcycle)	Measured by natural logarithm of the sum of days receivables (365/(sales/receivable)) and days inventory (365/(sales/inventory)).
Litigation ( <i>Lit</i> )	Litigious industry dummy, set to 1 if a firm's 4-digit SIC falls in 2833–2836 (biotech), 3570–3577, 7370–7374 (computer), 3600–3674 (electronics), or 5200–5961 (retailing) following Sohn (2016) and Francis et al. (1994)
Regulation (Reg)	Regulated industry dummy, set to 1 if a firm's 2-digit SIC falls in 40–49 or 60–63
Governance	Government effectiveness captures perceptions of the quality of
effectiveness (Gov)	public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. It is estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance
Legal systems (Legal)	Legal tradition of the country in which the firm is domiciled. Equals 1 if the legal tradition is common law and 0 if the legal tradition is civil law, from La Porta et al. [1998].

# APPENDIX 3

Variable	Definition
Dependend Variabel:	
Accrual earnings management	Absolute value of residual discretionary accrual estimated
(AEM)	based on Dechow and Dichev (2002) model. Detail for the
	measurement is describe in section 4.2
Real earnings Management	Absolute value of agregate real earnings management
(REM)	(REM), which calculated as the sum of AbCFO and AbDExp, both multiplied by $-1$ .
Real2	signed total REM, calculated by the sum of $(-1)$ *AbnCFO and $(-1)$ *AbnDEXp.
Real3	is signed total REM, calculated by summing three proxies of REM: (-1) *AbnCFO, abnormal production cost
	(AbnProd),
Abnormal cash flow (AbnCFO)	individual REM proxy based on abnormal cash flow, calculated by using equation (7).
Abnormal production cost	individual proxy of REM, calculated by using equation
(AbnProd)	(11).
abnormal discretionary expense	REM proxy based on abnormal discretionary expense,
(AbnDEXp)	calculated by using equation (8).
Independen Variabel	
Comparability	A firm-year measure of accounting comparability, estimated by using De Franco et al., (2011) Model. It is average value of the four highest rank from combination firms for firm I and other firm in the same 4-digit GSIC industry in a given year. Estimated as define in section 3.
Comparability _Industry	An industry-year measure of accounting comparability estimated by using De Franco et al., (2011) model. It is the industry median from combination firm form firm 1 anh other firm in the same 4-digit GSIC in a given year. Calculated as define in section 3.
<b>Control Variables:</b>	
Book Market (BM)	Book to market Ratio. It is the book value of equity divided by market value of equity
Size	Firm size computed by natural log of market capitalization.
ROA	Return on investment, measured by Income before extraordinary item divided by lagged total Assets
Leverage (LEV)	Leverage, calculated by total liability divided by total assets.
Loss	dummy variable, set to 1 if a firm reports a negative net income during the fiscal year

Litigation (LIT)	is litigious industry dummy, set to 1 if a firm's 4-digit SIC falls in 2833–2836 (biotech), 3570–3577, 7370–7374 (computer), 3600–3674 (electronics), or 5200–5961 (retailing) following Sohn (2016) and Francis et al. (1994).
Cash Flow (CFOA)	cash flow from operation divided by total asset.
Absolute Cash Flow (ACFOA)	absolute value of cash flow from operation divided by total asset.
Capital intensity (Capinten)	Capital intensity, measure by net PPE (plant, property, equipment) divided by total asset.
Investor protection (InvProtect)	Investor protection index from Global Competitiveness Report 2014-2017.

# APPENDIX 4

Variable	Definition
Premium	The percentage difference between the price per share offered by the acquirer and the target's closing stock price prior to the announcement date.
	two-month premium was used for primary premium measurement (Ayers et al., 2002, Bugeja and Loyeung, 2016; Nathan, 1998; Su and Wells, 2018)
	Thirty days premium and two weeks premium were used for robustness test premium measurements.
Minority	It is a dummy variable which set to one for takeovers characterized by minority deal type and zero for a majority stake, and M&A deal type.
Multiple	It is an indicator variable set to 1 if there are multiple bidders for the target firm and zero if there is only one buyer for the target firm.
Friendly	It is an indicator variable set to 1 if the attitude categorizes as " <i>friendly</i> " and set zero if the attitude classifies as " <i>hostile or neutral</i> ". The friendly attitude defines the target's board of directors viewing the acquirer's proposal as satisfactory and recommending that their shareholders accept the offer.
Cashpay	An indicator variable set to 1 if the payment form is "cash" and set zero if the payment is cash & stock, stock, preferred stock, convertible preferred stock, warrants/options, debt, notes, or other
SameCountry	An indicator variable set to 1 if the acquirer comes from the same country as the target firm, 0 if the acquirer and target firm are from different country.
Size	The target's log of total asset.
Net income (NI)	The target's net income deflated by the book value of equity
Leverage (LEV)	Total debt to total asset of the target firm

### REFERENCES

- Abernathy, J.L., Beyer, B., and Rapley, Eric. 2014. Earnings Management Constraints and Classification Shifting. *Journal of Business Finance & Accounting* 41(5) & (6), 600–626.
- Ahmed, A.S., Neel, M., and Wang, D. 2013. Does mandatory adoption of IFRS improve accounting quality? Preliminary evidence. *Contemporary Accounting Research* 30 (4), 1344–1372.
- Anagnostopoulou, S.C., and Tsekrekos, A.E. 2016. The effect of financial leverage on real and accrual-based earnings management. *Accounting and Business Research* 47(2), 191-236.
- Asquith, P., Bruner, R. F., and Mullins, D. W. 1990. Merger returns and the form of financing. Working paper, Harvard University (June).
- Ayers B, Lefanowicz C, and Robinson J. 2002. Do firms purchase the pooling method? *Review of Accounting Studies* 7: 5–32.
- Badolato, P., D. C. Donelson, and M. Ege. 2014. Audit committee financial expertise and earnings management: The role of status. *Journal of Accounting and Economics* 58 (2014) 208–230.
- Ball, R., S.P. Kothari, and A. Robin. 2000. The effect of international institutional factors on properties of accounting earnings. *Journal of Accounting and Economics*, 29: 1-51.
- Ball, R., Robin, A., and Wu, J.S. 2003. Incentives versus standards: properties of accounting income in four EAST Asian Countries. *Journal of Accounting and Economics* 36 (1-3), 235– 270.
- Barth, M. E., Landsman, W. R., and Lang, M. H. 2008. International accounting standards and accounting quality. *Journal of Accounting Research*, 46(3), 467–498.

- Barth, M. E., W. R. Landsman, M. Lang, and C. Williams. 2012. Are IFRS-based and US GAAP-based accounting amounts comparable? *Journal of Accounting and Economics* 54 (1): 68–93.
- Barth, M. E. 2013. Commentary: Global comparability in Financial Reporting: What, Why, How, and When? *China Journal of Accounting Studies* 1 (1), 2–12. 2013.
- Bates, T., and Lemmon, M. 2003. Breaking up is hard to do? An analysis of termination fee provisions and merger outcomes. *Journal of Financial Economics* 69: 469–504.
- Bessler, W., and Schneck, C. 2016. Excess Takeover Premiums and Bidder Contests in Merger & Acquisitions: New Methods for Determining Abnormal Offer Prices. In Wilhelm, A., Kestler, H. (eds) *Analysis of Large and Complex Data*. Studies in Classification, Data Analysis, and Knowledge Organization. Springer, Cham. https://doi.org/10.1007/978-3-319-25226-1\_28.
- Bhattacharya, U., Daouk, H., and Welker, M. 2000. The world price of earnings opacity. *The Accounting Review*, 78(3), 641–678.
- Breuer, W., Müller, T., Rosenbach, D., and Salzmann, A. 2018. Corporate social responsibility, investor protection, and cost of equity: A cross-country comparison. *Journal of Banking and Finance*, 96, 34-55, 2018.
- Brochet, F., A. D. Jagolinzer, and E. J. Riedl. 2013. Mandatory IFRS adoption and financial statement comparability. *Contemporary Accounting Research*, 30 (4), 1373-1400, 2013.
- Bugeja, M., and Walter, T. 1995 An empirical analysis of some determinants of the target shareholder premium in takeovers. *Accounting and Finance* 35: 33–60.
- Bugeja, M., and Da Silva Rosa R. 2010. Capital gains taxation and shareholder wealth in takeovers. Accounting and Finance 50: 241–262.

Bushman, R., J. Piotroski, and A. Smith. 2011. Capital allocation and timely accounting recognition of economic losses. *Journal of Business Finance & Accounting* 38 (1–2): 1–33.

Bruner, R. F. 2004. Applied Mergers & Acquisitions. New York: John Wiley & Sons.

- Brown, P., John P., and Ann T. 2014. Measuring Country Differences in Enforcement of Accounting Standards: An Audit and Enforcement Proxy. *Journal of Business Finance* & Accounting 41 (1), & (2), pgs. 1-52.
- Bruslerie, Hubert de La. 2013. Crossing takeover premiums and mix of payment: An empirical test of contractual setting in M&A transactions. *Journal of Banking & Finance* 37 (2013) 2106–2123.
- Cain, C. L., A. J. Macias, and J. M. Sanchez. 2012. Do targets benefit from auctions? The role of private information. Working paper, Purdue University, Texas Christian University, and the University of Arkansas.
- Caban-Garcia, M.T. and He, H. 2012. Comparability of earnings in Scandinavian countries: the impact of mandatory IFRS adoption and Stock Exchange consolidations. *Journal of International Accounting Research* Vol. 12 No. 1, pp. 55-76.
- Call, Andrew C., Emett, Scott A., Maksymov, Eldar M., and Sharp, Nathan Y., Meet the Press:
   Survey Evidence on Financial Journalists as Information Intermediaries (November 2021).
   Available at http://dx.doi.org/10.2139/ssrn.3279453
- Callao, S., Jarne, J.I. and Laínez, J.A. 2007. Adoption of IFRS in Spain: effect on the comparability and relevance of financial reporting. *Journal of International Accounting, Auditing and Taxation* Vol. 16 No. 2, pp. 148-178.
- Cahan, S.F., Liu, G., and Sun, J. 2008. Investor protection, income smoothing, and earnings informativeness. *Journal of International Accounting Research* 7 (1), 1–24.

- Cascino, C., and Gassen, J. 2015. What drives the comparability effect of mandatory IFRS adoption? *Review of Accounting Studies* 20 (1), 242–282.
- Chen, C.L., Huang S.L., and Fan, H.S. 2012. Complementary association between real activities and accruals-based manipulation in earnings reporting. *Journal of Economic Policy Reform* 15 (2), 93–108.
- Chapple L, Christensen B., and Clarkson P. 2007. Termination fees in a 'bright line' jurisdiction. Accounting and Finance 47: 643–665.
- Chen, H., Q. Tang, Y. Jiang, and Z. Lin. 2010. The role of international financial reporting standards in accounting quality: Evidence from the European Union. *Journal of International Financial Management and Accounting* 21 (3): 220–78.
- Chen, Ciao-Wei, Collins, Daniel W., Kravet, Todd, and Mergenthaler, Richard D. 2018. Financial Statement Comparability and the Efficiency of Acquisition Decisions. *Contemporary Accounting Research*, –. doi:10.1111/1911-3846.12380.
- Chen, A., and Gong, J.J. 2019. Accounting comparability, financial reporting quality, and the pricing of accruals. *Advances in Accounting* 100415.
- Chen, Y., Cheng, C. S. A., Li, S., and Zhao, J. 2021. The monitoring role of the media: Evidence from earnings management. *Journal of Business Finance & Accounting* Vol. 48, issue 3-4, March/April, pgs. 533-563.
- Cheng, M. and Subramanyam, K. 2008. Analyst following and credit ratings. *Contemporary Accounting Research* Vol. 25 No. 4, pp. 1007-44.
- Chevalier, A., and Redor, E. 2010. The determinants of payment method choice in cross- border acquisitions. *Bankers Markets Investors* 106 (June), 4–14.

- Christensen, H., E. Lee, and M. Walker. 2008. Incentives or standards: What determines accounting quality changes around IFRS adoption? Working paper, University of Minnesota.
- Christopher S. Armstrong, Wayne R. Guay, and Joseph P. 2010. Weber The role of information and financial reporting in corporate governance and debt contracting. *Journal of Accounting and Economics* 50, pgs.179–234.
- Choi, A., Choi, J, and Sohn, B. 2018. The Joint Effect of Audit Quality and Legal Regime on the Use of Real Earnings Management: International Evidence. *Contemporary Accounting Research* 35 (4). pp. 2225-2257.
- Choi, J, Choi, S, Myers, LA and Ziebart, D. 2019. Financial statement comparability and the informativeness of stock prices about future earnings. *Contemporary Accounting Research* Vol. 36, no. 1, pp. 389–417, 2019.
- Clarkson, P. M., Li, Y., Richardson, G. D., and Vasvari, F. P. 2008. Revisiting the relation between environmental performance and environmental disclosure: an empirical analysis. *Accounting*, *Organizations and Society*, 33 (4/5), 303-327.
- Cohen, D., Dey, A., and Lys, T.Z. 2008. Real and Accrual-Based Earnings Management in The Pre- and Post-Sarbanas-Oxlay Periods. *The Accounting Review* 83 (3), 757-787.
- Cohen, D., and Zarowin, P. 2010. Accrual-based and real earnings management activities around seasoned equity offerings. *Journal of Accounting and Economics* 50 (1), 2–19.
- Christensen, H., E. Lee, and M. Walker. 2008. Incentives or standards: What determines accounting quality changes around IFRS adoption? Working paper, University of Minnesota.
- Daske, H., L. Hail, C. Leuz, and R. Verdi. 2013. Adopting a label: Heterogeneity in the economic consequences around IAS/IFRS adoptions. *Journal of Accounting Research* 51 (3): 495–547.

- Daske, H., Hail, L., Leuz, C., and Verdi, R. 2008. Mandatory IFRS adoption around the world: Early evidence on the economic consequences. *Journal of Accounting Research* 46(5), 1085–1142.
- Da Silva Rosa R, and Izan H, Steinback A, Adam Steinbeck, and Terry Walter. 2000. The method of payment decision in Australian takeovers: An investigation of causes and consequences. *Australian Journal of Management* 25: 67–94.
- Darraouhg, M.N. and Stoughton, N. M. 1990. Financial Disclosure Policy In an Entry Game. Journal Of Accounting and Economics, 12, 219-24.
- Datta, S., Iskandar-Datta, M. and Singh, V. 2013. Product market power, industry structure, and corporate earnings management. *Journal of Banking & Finance*, Vol. 37 No. 8, pp. 3273-3285.
- Dechow, P.M., and Dichev, I.D. 2002. The Quality of Accruals and Earnings: The Role of Accrual Estimation Errors. *The Accounting Review* 77, 35–59.
- Dechow, P.M., Kothari, S.P. and Watts, R.L. 1998. The relation between earnings and cash flows. *Journal of Accounting and Economics* 25 (2), 133–168.
- DeFond, M., Hu, X., Hung, M., and Li, S. 2011. The impact of mandatory IFRS adoption on foreign mutual fund ownership: The role of comparability. *Journal of Accounting and Economics* 51(3), 240–258.
- De Franco, G., Kothari, S., and Verdi, R. 2011. The benefits of financial statement comparability. Journal of Accounting Research 49 (4), 895–931.
- Doukakis, L.C. 2014. The effect of mandatory IFRS adoption on real and accrual-based earnings management activities. *Journal of Accounting and Public Policy* 33, 551-572.

- Draper P and Paudyal K. 1999. Corporate takeovers: Mode of payment, returns and trading activity. Journal of Business Finance & Accounting 26: 521–558.
- Dyck, A., and Zingales, L. 2004. Private Benefits of Control: An International Comparison. *The Journal of Finance, 59*(2), 537-600, 2004.
- Dyck, A., Morse, A., and Zingales, L. 2010. Who blows the whistle on corporate fraud? *The Journal of Finance*, 65(6), 2213–2253.
- Economic Freedom of the World: 2014-2017 Annual Report, edited by J. Gwartney, and R. Lawson. Data available at http://www.freetheworld.com/release.html
- Elia Ferracutti and Stephen R.Stubben. 2019. The role of financial reporting in resolving uncertainty about corporate investment opportunities. *Journal of Accounting and Economics*, Volume 68, Issues 2–3, 101248
- Ewert, R., and Wagenhofer, A. 2005. Economic effects of tightening accounting standards to restrict earnings management. *Accounting Review* 80(4), 1101-1124.
- FASB (Financial Accounting Standards Board of the Financial Accounting Foundation) 2010, 'Statements of Financial Accounting Concepts No. 8: Conceptual Framework for Financial Reporting', FASB, viewed 15 March 2020, <https://www.fasb.org/jsp/FASB/Document\_C/DocumentPage?cid=1176157498129&ac ceptedD isclaimer=true>.
- Felski, E. 2017. How does local adoption of IFRS for those countries that modified IFRS by design, impair comparability with countries that have not adapted IFRS? *Journal of International Accounting Research* Vol. 16 No. 3, pp. 59-90.
- Flanagan D., and O'Shaughnessy K. 2003. Core-related acquisitions, multiple bidders and tender offer premiums. *Journal of Business Research* 56: 573–585.

- Florou, A., and U. Kosi. 2015. Does mandatory IFRS adoption facilitate debt financing? *Review* of Accounting Studies 20 (4): 1407–56.
- Fields, T., Lys, T., & Vincent, L. (2001). Empirical research on accounting choice. Journal of Accounting and Economics, 31(1–3), 255–307.
- Fitriany, Sidharta Utama, Aria Farahmita And Viska Anggraita. 2017. Economic Consequences of IFRS Adoptions around the ASEAN Countries, Int. Journal of Economics and Management 11 (S2) : 529 551 (2017)
- Francis, J., and Wang, D. 2008. The joint effect of investor protection and big 4 audits on earnings quality around the world. *Contemporary Accounting Research*, 25(1), 1–39.
- Francis, J. R., Huang, S. X., and Khurana, I. K. 2015. The Role of Similar Accounting Standards in Cross-Border Mergers and Acquisitions. *Contemporary Accounting Research*, 33(3), 1298–1330. doi:10.1111/1911-3846.12176.
- Francis, Bill., Hasan, Iftekhar., and Li, Lianxiang. 2016. A cross-country study of legal-system strength and real earnings management. *Journal of Accounting and Public Policy*, 35, pg. 447-512, 2016.
- Francis, J.R., Pinnuck, M.L., and Watanabe, O. 2014. Auditor style and financial statement comparability. *The Accounting Review* 89, 605–633.

Frankel, M. 2005. Mergers and acquisitions basics. Hoboken, NJ: John Wiley & Sons.

- Franks J., and Mayer C. 1996. Hostile takeovers and the correction of managerial failure. *Journal of Financial Economics* 40: 163–181.
- Gaio, C. 2010. The relative importance of firm and country characteristics for earnings quality around the world. *European Accounting Review* vol. 19, no. 4, pp. 693–738.

Gelinas, J.U., et al. (2012). Accounting Information Systems. South Western: Cengage Learning

- Gertner, R., Gibbons, R. and Scharfstein, D. 1988. Simultaneous signaling to the capital and product markets. RAND Journal of Economics, Vol. 19 No. 2, pp. 173-190.
- Gordon, R., and A. Bovenberg. 1996. Why is capital so immobile internationally? Possible explana- tions and implications for capital income taxation. *American Economic Review* 86 (5): 1057–75.
- George Iatridis. 2010. International Financial Reporting Standards and the quality of financial statement information, International Review of Financial Analysis, 19 (2010) 193–204
- Halabi, H., Alshehabi, A., and Zakaria, I., 2019. Informal institutions and managers' earnings management choices: Evidence from IFRS-adopting countries. *Journal of Contemporary Accounting and Economic* 15, 100162.
- Haw, I.-M., B. Hu, L.-S. Hwang, and W. Wu. 2004. Ultimate ownership, Income Management, and Legal and Extra-legal Institutions. *Journal of Accounting Research* 42: 423-462.
- Henry, D. 2005. Directors' recommendations in takeovers: An agency and governance analysis. Journal of Business Finance & Accounting 32: 129–159.
- Healy, P. M., And Wahlen, J. M. 1999. A Review of the Earnings Management Literature and Its Implications for Standard Setting. *Accounting Horizons* 13, 365–8.
- Heeick Choi, and Sang Hyun Suh. 2019. The effect of financial reporting quality on CEO compensation structure: Evidence from accounting comparability. *Journal of Accounting and Public Policy* Vol.38, pg.1-23, article number 106681.
- Heron, R. and Lie, E. 2002. Operating performance and the method of payment in takeovers. *Journal of Financial and Quantitative Analysis,* Vol. 37 No. 1, pp. 137-154.
- Holl P and Kyriazis D. 1996. The determinants of outcome in UK takeover bids. *International Journal of the Economics of Business* 3: 165–184.

- Hong, H., M. Hung, and G. Lobo. 2014. The impact of mandatory IFRS adoption on IPOs in global capital markets. *The Accounting Review* 89 (4): 1365–97.
- Hope, O. and Wanga, J. 2018. Management deception, big-bath accounting, and information asymmetry: Evidence from linguistic analysis. *Accounting, Organization and Society* (70), 33-51.
- Houqe, M. N., Monem, R. M., and Zijl, T. V. 2016. The economic consequences of IFRS adoption:
  Evidence from New Zealand. *Journal of International Accounting, Auditing and Taxation*, 27, 40–48.
- Houqe, N. 2018. A review of the current debate on the determinants and consequences of mandatory IFRS adoption. *International Journal of Accounting and Information Management*, Vol. 26 No. 3, pp. 413-442
- Holthausen, N.R., and Watts, R. 2000. The relevance of the value relevance literature for financial accounting standard setting. *Journal of Accounting and Economics* 31 (1–3), 3–75.
- Huang, Y., and Walkling, R. 1987. Target abnormal returns associated with acquisitions announcements: Payment, acquisitions form, and managerial resistance. *Journal of Financial Economics* 19: 329–349.
- Hung, M., & Subramanyam, K. (2007). Financial statement effects of adopting international accounting standards: The case of Germany. Review of Accounting Studies, 12(4), 21–48.
- Imhof, M. J., S. E. Seavey, and D. B. Smith. 2017. Comparability and cost of equity capital. *Accounting Horizons* 31 (2), 125-138.
- Ipino, E. and Parbonetti, A. 2017. Mandatory IFRS adoption: the trade-off between accrual-based and real earnings management. *Accounting and Business Research* 47 (1), 91-121.

- Israel, R. 1991 Capital structure and the market for corporate control: The defensive role of debt financing. *Journal of Finance* 46: 1391–1409.
- Jeanjean, Thomas. 2012. The Effect of IFRS Adoption, Investor Protection and Earnings Quality: Some Reflections. *The International Journal of Accounting*, 47 (2012) 356–362.
- Jeff Madura, Thanh Ngo, and Ariel M. Viale. 2012. Why do merger premiums vary across industries and over time? *The Quarterly Review of Economics and Finance* 52 (2012) 49–62.
- Jensen, M. 1986. Agency costs of free cash flow, corporate finance and takeovers. *American Economic Review* 76: 323–329.
- Jinbu Zhai and Yutao Wang. 2016. Accounting information quality, governance efficiency and capital investment choice. *China Journal of Accounting Research*, Volume 9, Issue 4, December 2016, Pages 251-266.
- Jory, S. M., Ngo, T. N., and Wang, D. 2016. Credit ratings and the premiums paid in mergers and acquisitions. Journal of Empirical Finance, 39, 93–104.
- Landsman, W.R., E.L. Maydew, and J.R. Thornock. 2012. The information content of annual earnings announcements and mandatory adoption of IFRS. *Journal of Accounting and Economics* 53 (1–2): 34–54.
- Lang, M., J. Raedy and W. Wilson (2005), "Earnings management and cross listing: Are reconciled earnings comparable to US earnings?", Working paper, University of North Carolina.
- Kamarudin, K.A, Ariff, A.M., and Jaafar, A. 2020. Investor protection, cross-listing and accounting quality. *Journal of Contemporary Accounting and Economics* 16, 100179.

- Kapil, Sheeba, and Barick, Gaurav. 2020. Post-acquisition Performance Analysis of Indian Target
  Firms: The Role of Deal Characteristics. *The Indian Economic Journal*, Volume: 66 issue:
  3-4, page(s): 250-269. doi:10.1177/0019466220938042
- Kaufman, D. 1988. Factors affecting the magnitude of premiums paid to target firm shareholders in corporate acquisitions. *The Financial Review* 23: 465–482.
- Kim, J.-B., Li, L., Lu, L. Y., and Yu, Y. 2016. Financial statement comparability and expected crash risk. *Journal of Accounting and Economics* 61(2), 294–312.
- Kim, S., P. Kraft, and S. G. Ryan. 2013. Financial statement comparability and credit risk. *Review of Accounting Studies* 18 (3): 783-823.
- Kirschenheiter, M. and Melumad, N.D. 2002. Can 'big bath' and earnings smoothing co-exist as equilibrium Financial reporting strategies. *Journal of Accounting Research* 40 (3), 761–796.
- Kothari, S.P., Leone, A.J., and Wasley, C. 2005. Performance matched discretionary accrual measures. *Journal of Accounting and Economics* 39, 163–197.
- Kouaib, A., and Jarboui, A. 2019. The mediating effect of REM on the relationship between CEO overconfidence and subsequent firm performance moderated by IFRS adoption: A moderated-mediation analysis. *Research in International Business and Finance* 42, 338-352.
- Lajoux, A., and C. Elson. 2011. The art of M&A due diligence, 2nd edition. New York: McGraw-Hill.
- Lang, M., Lins, K. and Miller, D. 2003. ADRs, analysts, and accuracy: does cross listing in the United States improve a firm's information environment and increase market value? *Journal* of Accounting Research Vol. 41 No. 2, pp. 317-45.
- Lang, L.H.P., R.M. Stulz, and R.A. Walkling. 1989. Managerial performance, Tobin's Q and the gains from successful tender offers, *Journal of Financial Economics* 24(1), 137-154.

- La Porta, R., F. Lopez-De-Silanes, A. Shleifer, and R. W. Vishny. 1998. Law and Finance. *Journal* of *Political Economy* 106 : 1113–55.
- Leuz, C., Nanda, D., and Wysocki, P.D. 2003. Earnings management and investor protection: an international comparison. *Journal of Financial Economics* 69 (3), 505–527.
- Leuz, C., and R. Verrecchia. 2000. The economic consequences of increased disclosure. *Journal* of Accounting Research (38): 91-124.
- Leuz, C. 1999. The development of voluntary cash flow statements in Germany and the influence of international reporting standards," *Working paper series; Finance and Accounting 40*.
  Available at http://wiwi. Uni- frankfurt. de/wp/586pdf.
- Levitt, A. 1998. The importance of high quality accounting standards. *Accounting Horizons*, 12(1), 79.
- Liao, Q., Sellhorn, T., and Skaife, H. 2012. The cross-country comparability of IFRS earnings and book values: Evidence from France and Germany. *Journal of International Accounting Research* 11(1), 155–184.
- Liem, N.T. 2021. Accounting comparability and accruals-based earnings management: Evidence on listed firms in an emerging market. *Cogent Business & Management*, 8:1, 1923356
- Li, Siqi. 2010. Does mandatory adoption of International Financial Reporting Standards in the European Union reduce the cost of equity capital? *The Accounting Review* 85 (2): 607–36.
- Li, Y., Lu, M., and Ling Lo, Y. 2018. The impact of analyst coverage on partial acquisitions:
   Evidence from M&A premium and firm performance in China. *International Review of Economics & Finance*. 63 (2019) 37–60. doi:10.1016/j.iref.2018.08.0.

- Lim, Jongha, Makhija, Anil K., and Shenkar, Oded. 2016. The asymmetric relationship between national cultural distance and target premiums in cross-border M&A. *Journal of Corporate Finance, S0929119916300888–.* doi:10.1016/j.jcorpfin.2016.07.007.
- Linn, S., and Switzer, J. 2001. Are cash acquisitions associated with better post combination operating performance than stock acquisitions? *Journal of Banking and Finance*, Vol. 25 No. 6, pp. 113-1138.
- Nabar, S., and Boonlert-U-Thai, K.K. 2007. Earnings management, investor protection, and national culture," *Journal of International Accounting Research*. 6 (2), 35–54.
- Marra, A., Mazzola, P., and Prencipe, A. 2011. Board monitoring and earnings management pre-IFRS and post IFRS. *International Journal of Accounting* 46(2), 205-230.
- Marcia Millon Cornett, Jamie John McNutt, and Hassan Tehranian. 2009. Corporate governance and earnings management at large U.S. bank holding companies. *Journal of Corporate Finance* Vol 15, pg. 412-430.
- Martin B., and Terry W. 1995. An Empirical Analysis Of Some Determinants Of The Target
  Shareholder Premium In Takeovers. *Accounting and Finance 35(2), 33–60.* Doi:10.1111/J.1467-629x.1995.Tb00285.X
- Md. Babar, and Ahsan Habib. 2021. Product market competition in accounting, finance, and corporate governance: A review of the literature. *International Review of Financial Analysis* Vol.73, article number 101607.
- Malek E.D, Costas Lambrinoudakis, and Mohammad Alhadab. 2020. Corporate governance and earnings management in concentrated markets. *Journal of Business Research* vol 108, pg. 291-306.

- Martens, W., Yapa, P., and Safari, M. 2020. The Impact of Financial Statement Comparability on Earnings Management: Evidence from Frontier Markets. *International Journal of Financial Studies* 8 (73), pp 1-25.
- Masulis RW, Wang C, and Xie F. 2007. Corporate governance and acquirer returns. *Journal of Finance* 62:1851–1889
- Merton, R. 1987. A simple model of capital market equilibrium with incomplete information. Journal of Finance 42 (3): 483–510.
- Moeller, S. and Schlingemann, F. 2005. Global diversification and bidder gains: a comparison between cross-border and domestic acquisitions. *Journal of Banking and Finance* Vol. 29 No. 3, pp. 533.
- Nathan K. 1988. Do firms pay to pool? Some empirical evidence. *Journal of Accounting and Public Policy* 7: 185–200.
- Niden, C. 1988. The role of taxes in corporate acquisitions. *Journal of Accounting Research*, 36, 279–298.
- Nam, J. 2020. Financial reporting comparability and accounting-based relative performance evaluation in the design of CEO cash compensation contracts. *The Accounting Review* 95 (3): 343–70
- Neel, M. 2017. Accounting comparability and economic outcomes of mandatory IFRS adoption. *Contemporary Accounting Research*, Vol. 34 No. 1, pp. 658-690.
- Nathan K. 1988. Do firms pay to pool? Some empirical evidence. *Journal of Accounting and Public Policy* 7: 185–200.
- Miller, G. S. 2006. The press as a watchdog for accounting fraud. *Journal of Accounting Research* 44(5), 1001–1033.

- Narayan, P.C. and Thenmozhi, M. 2014. Do cross-border acquisitions involving emerging market firms create value. *Management Decision*, Vol. 52 Iss 8 pp. 1451 – 1473. DOI: http://dx.doi.org/10.1108/MD-04-2014-0227
- Odell, Jamieson, and Usman Ali. 2016. ESG investing in emerging and frontier markets. *Journal of Applied Corporate Finance* 28: 96–101.
- Oz, O.I. and Yelkenci, T. 2018. Examination of real and accrual earnings management: A crosscountry analysis of legal origin under IFRS. *International Review of Financial Analysis* 58, 24-37.
- Petersen, M. 2009. Estimating standard errors in finance panel data sets: Comparing approaches. *Review of Financial Studies* 22, 435–480.
- Piot, C, and Janin R. 2007. External auditors, audit committees and earnings management in France. *European Accounting Review* 16: 429–54.
- Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., and Vishny, Robert W. 1998. Law and finance. Journal of Political Economy, 106(6), 1113–1155.
- Quoc Dat Trinh, Christian Haddad, and Kim Thuan Tran. 2022. Financial reporting quality and dividend policy: New evidence from an international level, *International Review of Financial Analysis* Vol.80, 102026
- Ramaswamy, K. and Waegelein, J. 2003. Firm financial performance following mergers. *Review* of *Quantitative Finance and Accounting* Vol. 20 No. 2, pp. 115-126.
- Rezaee, Z., Smith, L.M. and Szendi, J.Z., 2010. Convergence in accounting standards: Insights from academicians and practitioners. *Advances in accounting*, 26(1), pp.142-154.
- Roulstone, D. 2003. Analyst following and market liquidity. *Contemporary Accounting Research* Vol. 20 No. 3, pp. 552-78, 2003.

- Roosenboom, P., Van der Goot, T., and Mertens, G. 2003. Earnings management and initial public offerings: Evidence from The Netherlands. *The International Journal of Accounting*, 38(3), 243–266.
- Rosenbaum, J., and J. Pearl. 2009. Investment banking: Valuation, leveraged buyouts and mergers and acquisitions. Hoboken, NJ: John Wiley & Sons
- Rossi, S. and Volpin, P. 2004. Cross-country determinants of mergers and acquisitions. *Journal of Financial Economics* Vol. 74 No. 2, pp. 277-304.
- Ross, Jonathan., Shi, Linna., and Xie, Hong. 2020. The determinants of accounting comparability around the world. *Asian Review of Accounting*, Vol. 28 No. 1, 2020 pp. 69-88.
- Roychowdhury, S. 2006. Earnings management through real activities manipulation. *Journal of Accounting and Economics* 42 (3), 335–370.
- Sarhan, A. A., Ntim, C. G., and Al-Najjar, B. 2019. Antecedents of auditor choice and fees in MENA Countries: The effect of firm- and country-level governance. *Journal of International Accounting Auditing and Taxation* 35, 85–107.
- Saudagaran, S.M. and Joselito G. D. 1998. Accounting Harmonization in ASEAN: Benefit, Model, and Policy Issue. *Journal Of International Accounting, Auditing, and Taxtation*, 7 (1): 21-45
- Saudagaran, S. M., & Diga, J. G., 2000. The institutional environment of financial reporting regulation in ASEAN. *The International Journal of Accounting*, 35(1), pp.1-26

Schipper, K. 1989. Commentary on Earnings Management. Accounting Horizons 3(4), 91-102.

Servaes, H., 1991, Tobin's Q and the gains from takeovers, The Journal of Finance 46(1), 409-419

- Shen, Chung-Hua, and Hsiang-Lin Chih. 2005. Investor protection, prospect theory, and earnings management: An international comparison of the banking industry. *Journal of Banking & Finance* 29: 2675–97
- Schipper, K. 2003. Principles-based accounting standards. *Accounting Horizons* 17 (1): 61-72, 2003.
- Soderstrom, N. S., and Sun, K. J. 2007. IFRS adoption and accounting quality: A review. *The European Accounting Review* 16(4), 675–702, 2007.
- Sohn, B. C. 2016. The effect of accounting comparability on the accrual-based and real earnings management. *Journal of Accounting and Public Policy* 35 (5): 513-539.
- Stock, J. H., and Yogo, M., 2004. Testing for weak instruments in linear IV regression. *National Bureau of Economic Research* Paper No. t0284.
- Stolowy, H. and Breton, G. 2004. Accounts Manipulation: A Literature Review and Proposed Conceptual Framework. *Review of Accounting and Finance*, Vol. 3 No. 1, pp. 5-92.
- Stulz, R. 1988. Managerial control of voting rights: Financing policies and the market forcorporate control. *Journal of Financial Economics* 20: 25–54.
- Sun, S., Zhao, H., He, X., and Zhang, Y. 2019. The impact of accounting standards convergence on Chinese firms' overseas mergers and acquisitions. *China Journal of Accounting Research*. Volume 12, Issue 3, September 2019, Pages 231-250. doi:10.1016/j.cjar.2019.05.001
- Su, Wun Hong, Wells, Peter, and Chapple, Ellie(Larelle). 2018. Acquisition premiums and the recognition of identifiable intangible assets in business combinations pre and post IFRS adoption. *Accounting Research Journal*, Vol. 31 No. 2, pp. 135-156.,doi: https://doi.org/10.1108/ARJ-10-2015-0124

- Switzer, J. 1996. Evidence on real gains in corporate acquisitions. *Journal of Economics and Business* Vol. 48 No. 5, pp. 443-460.
- Tendeloo, B., & Vanstraelen, A. (2005). Earnings management under German GAAP versus IFRS. European Accounting Review, 14(1), 155–180
- Tarca, A. (2004). International convergence of accounting practices: Choosing between IAS andU.S. GAAP. Journal of International Financial Management and Accounting, 15, 60–91.
- The Global Competitiveness Report 2014–2017 by World Economic Forum, available at https://www.weforum.org/reports
- van Tendeloo, B., and Vanstraelen, A. 2005. Earnings management under German GAAP versus IFRS. *European Accounting Review* 14(1), 155–180.
- Verrecchia, R.E. 1983. Discretionary disclosure. *Journal of Accounting and Economics*, Vol. 5 No. 1, pp. 179-194.
- Wangerin, D. D. 2012. M&A due diligence and its consequences for post-acquisition financial state- ments. Working paper, Michigan State University
- Wang, C. 2014. Accounting standards harmonization and financial statement comparability: Evidence from transnational information transfer. *Journal of Accounting Research*, 52(4), 955–992.
- Watts, R., and Zimmerman, J.1978. Towards a positive theory of the determination of accounting standards. *Accounting Review* 53, 112–134.
- Wasiuzzaman, Shaista. 2017. Industry Characteristics and Earnings Management: a Study of Malaysian Industries. *International of Emerging Markets* Vol. 13 No. 5, pp. 837-854.
- Yip, R.W. and Young, D. 2012. Does mandatory IFRS adoption improve information comparability? The Accounting Review, 87 (5), 767-1789.

- Young, S., & Zeng, Y. 2015. Accounting comparability and the accuracy of peer-based valuation models. *The Accounting Review* 90(6), 2571–2601.
- Yu-Lin Hsu, and Ya-Chih Yang. 2022. Corporate governance and financial reporting quality during the COVID-19 pandemic. *Finance Research Letters*, March, article number 102778.
- Zhang, Hongliang., Wangb., Mengying., and Jiang, Jie. 2017. Investor protection and stock crash risk. *Pacific-Basin Finance Journal* 43, 256–266.
- Zhong, Ligang, Chourou, Lamia., and Ni, Yang. 2017. On the association between strategic institutional ownership and earnings quality: Does investor protection strength matter? *Journal of Accounting and Public Policy*,36, 429-450.