INTEGRATED REPORTING QUALITY: INSTITUTIONAL ANTECEDENTS AND CONSEQUENCE ON FIRM PERFORMANCE

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INTEGRATED REPORTING QUALITY: INSTITUTIONAL ANTECEDENTS AND CONSEQUENCE ON FIRM PERFORMANCE

by

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AICPA	American Institute of Certified Public Accountants
CEO	Chief Executive Officer
CEOQ	Chief Executive Officer Qualification in Accounting
CPA	Certified Public Accountants
DJist	Dow Jones Sustainability Index
ESG	Environmental, Social, Governance
FR	Financial Reporting
FIRMPERM	Firm Performance
FSIZE	Firm Size
GLS	Generalized Least Square
H	Hypothesis
INDS	Independent Non-Executive Directors
INVP	Investor Protection
IRAWARD	Integrated Reporting Award
IR	Integrated Reporting
IRQ	Integrated Reporting Quality Scores
IIRC	International Integrated Reporting Council
IT	Institutional Theory
LEV	Leverage
OLS	Ordinary Least Square
PAOs	Professional Accounting Organizations
PRESSFREE	Press Freedom
PROFIT	Profitability

REGQ	Regulatory Quality
RWB	Reporters Without Borders
SR	Sustainability Reporting
SUSP	Sustainability Performance
WLS	Weighted Least Square

KUALITI PELAPORAN BERSEPADU: ANTESEDEN INSTITUSI DAN AKIBAT TERHADAP PRESTASI FIRMA

ABSTRAK

Pelaporan bersepadu (IR) ialah suatu konsep baharu dalam pelaporan korporat yang telah menarik minat yang besar di kalangan ahli akademik, pengamal dan pengawal selia sepanjang dekad yang lalu. Dengan menggunakan teori institusi sebagai teori utama, kajian ini berusaha untuk mengkaji satu set pengaruh isomorfik institusi terhadap kualiti IR dan peranan kebebasan lembaga pengarah dalam menyederhanakan pengaruh tersebut. Analisis kandungan diguna pakai untuk mengukur kualiti laporan bersepadu yang diterbitkan oleh syarikat antarabangsa terbesar. Selain itu, kesan kualiti IR terhadap prestasi firma menggunakan teori pihak berkepentingan juga disiasat, ini termasuk peranan prestasi kelestarian dalam menyederhanakan hubungan antara kualiti IR dan prestasi firma. Sejumlah 200 sample syarikat yang menerbitkan IR pada tahun 2018 telah dianalisa. Berkenaan dengan anteseden kualiti IR, isomorfisme normatif mempunyai kuasa penjelasan paling banyak terhadap kualiti IR. Syarikat yang beroperasi di negara yang mempunyai kebebasan akhbar yang lebih tinggi, syarikat yang melantik CEO dengan kelayakan perakaunan, mematuhi kriteria untuk status penyenaraian Indeks Kelestarian Dow Jones dan anugerah IR mempunyai hubungan positif yang signifikan dengan kualiti IR. Walau bagaimanapun, kualiti IR hanya dipengaruhi secara positif oleh isomorfisme paksaan seperti yang diproksikan oleh perlindungan pelabur, manakala kualiti kawal selia mempunyai pengaruh yang signifikan dan negatif ke atas kualiti IR. Walau bagaimanapun, isomorfisme mimetik seperti yang diproksikan oleh industri sensitif alam sekitar tidak memberi sebarang kesan ke atas kualiti IR. Selain itu, pengarah bebas melaksanakan peranan penyederhana terhad pada hubungan antara isomorfisme paksaan dan normatif dan kualiti IR tetapi penyederhanaan positif didapati hanya untuk syarikat yang beroperasi dalam industri sensitif alam sekitar (isomorfisme mimetik) terhadap kualiti IR. Berkenaan dengan akibat kualiti IR, kualiti IR didapati mempunyai pengaruh positif ke atas prestasi firma manakala prestasi kelestarian tidak mempunyai peranan penyederhana terhadap hubungan tersebut. Kajian ini menyumbang kepada penyisian jurang literatur sedia ada dengan menambah pemahaman tentang kesan isomorfisme yang digambarkan di bawah teori institusi terhadap kualiti IR dan dengan menggunakan teori pihak berkepentingan untuk menerangkan kesan kualiti IR ke atas prestasi firma dan peranan penyederhana prestasi kelestarian prestasi kelestarian dalam persekitaran antarabangsa. Hasil kajian ini dapat memberikan lebih banyak pandangan untuk penyedia laporan bersepadu, pengguna dan pembuat dasar yang berkaitan dengan pembangunan masa depan untuk meningkatkan kemampuan dan akauntability model pelaburan korporat.

INTEGRATED REPORTING QUALITY: INSTITUTIONAL ANTECEDENTS AND CONSEQUENCE ON FIRM PERFORMANCE

ABSTRACT

Integrated reporting (IR) is a novel concept of corporate reporting which has drawn immense interest among academics, practitioners, and regulators over the last decade. Primarily using institutional theory, this study endeavours to examine a set of institutional isomorphic influences towards IR quality and the role of board independence in moderating such influences. Content analysis is adopted to measure the quality of IR published by largest international companies. The effects of IR quality on firm performance using the stakeholder theory is also investigated, including the role of sustainability performance in moderating the relationship between IR quality and firm performance. A sample of 200 companies which published IR in 2018 have been analyzed. Pertaining to the antecedent of IR quality, normative isomorphism has the most explanatory power with IR quality. Companies that operate in countries with higher press freedom, companies that appoint CEOs with accounting qualification, have complied with criteria for the Dow Jones Sustainability Index listing status and IR award have significant positive relationship with IR quality. Nevertheless, IR quality is only positively influenced by coercive isomorphism as proxied by investor protection, whereas regulatory quality has a significant and negative influence on IR quality. However, mimetic isomorphism as proxied by environmental sensitive industry does not exert any effect on IR quality. Moreover, independent directors exert limited moderating role on the relationship between coercive and normative isomorphism and IR quality but moderate only positively for the companies operating in the environmental sensitive industry (mimetic isomorphism) on IR quality. With regards to the consequences of IR quality, IR quality has a positive influence on the firm performance, while sustainability performance has no moderating role on such relationship. This study contributes to fill existing literature gap by advancing the understanding of the effects of isomorphism depicted under the institutional theory on IR quality. This study also fills the research gap by using stakeholder theory to explain the effects of IR quality on firm performance and the moderating role of sustainability performance in the international setting. The results of this study also provide more insights for IR preparers, users, and policy makers related to future development of new corporate reporting model to enhance corporate sustainability and accountability.

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Integrated Reporting (IR) is the latest development in the field of corporate reporting over the past decade. The International Integrated Reporting Council (IIRC) defines IR as a "concise communication about a company's strategy, governance, performance and prospect in the context of its external environment, lead to the creation of value, preservation or erosion of value over the short, medium and long term" (IIRC, 2021, p. 10). IR also involve the process of strategic implementation of "integrated thinking" that takes into account the connectivity and inter-dependencies between the range of factors that affect an organization's ability to create value over time (Guthrie et al., 2017; IIRC, 2013, 2021). After the millennium, there have been rapid development of IR as a response to a series of corporate financial scandals, corporate governance failure and the Global Financial Crisis (GFC), so as to strengthen the confidence of both shareholders or non-shareholder stakeholders on corporate reporting practice (Dah & Jizi, 2018; De Villiers et al., 2017a; IIRC, 2013; Wild & van Staden, 2013).

Traditional corporate reporting, in the form of corporate annual reports and standalone sustainability reports, are now argued to be insufficient to provide a holistic view of the connectivity between financial and non-financial information (Cheng et al., 2014; De Villiers et al., 2014; Nwachukwu, 2021). In addition, sustainability reports are simply separate standalone or "silios" non-financial reports rather than a unique integrated report (Kılıç & Kuzey, 2018b). Although IR is usually perceived as an evolution of sustainability reporting (Alfiero et al., 2018; IIRC, 2011; Janek et al., 2016) and adopted to address the criticisms and deficiencies of sustainability reporting (Stubbs & Higgins, 2018), IR and sustainability reporting are incommensurable (Barker & Kasim, 2016). IR is a corporate reporting model aimed at an "integrated sustainability", documenting financial effects of non-financial issues (Barker & Kasim, 2016) and primarily targeted to financial capital providers or other stakeholders interested in the value creation process of the organization (Vitolla, Raimo, & Rubino, 2019). Sustainability reporting focuses on communicating social and environmental impacts of an organization to the society and have a multi-stakeholder perspective (VRF, 2021) and aimed at "ideal sustainability" with priority on civil society over economic interest (Thomson, 2015).

Nevertheless, the preliminary concept of IR can actually be dated back to 1999, by which the PwC which promoted the concept of "Value Reporting Framework" (De Villiers et al., 2017b; PwC, 2015). The Value Reporting Framework suggested companies to supplement traditional financial information with more detailed and transparent picture related to market opportunities, strategies, risk and non-financial performance in four categories of information, including market overview, strategy, value creating activities and financial performance. A Danish enzyme company named Novozyme was one of the earliest IR adopters in 2002 (De Villiers et al., 2017b). However, the IR concept was only an "emerging construct" and was implemented only on a small scale worldwide during the period from 2002 to 2010 (Rowbottom & Locke, 2016). Moreover, Rowbottom and Locke (2016) argued that integrated reporting is an "unstable concept" as there are different approaches to IR due to the diversity in the definitions, motivations and intended audience (Dumay et al., 2016, 2017; Rowbottom & Locke, 2016). Subsequently, there has been a rapid development of the IR concept worldwide after 2010 due to the evolution of three "approaches" of IR.

Dumay et al. (2016) summarized these three major IR approaches. The first major IR approach is the South Africa's Institute of Director King III Code of Corporate Governance Report in 2009, where IR is recommended for listed companies on a "apply or explain" basis. The Johannesburg Stock Exchange mandated the principles of "King III" as part of the listing requirement for all JSE listed companies post 2010 (IRC, 2011; Lee & Yeo, 2016). More recently, the King IV adopted an "apply and explain" approach effective from 1 April 2017 (Toit, 2017). The second approach is the "One Report" concept proposed by Eccles and Krzus in their book, "One Report, Integrated Reporting for a Sustainable Strategy" in 2010. The main theme of their idea is to encourage companies to publish "One Report" that integrates a company's financial and non-financial information in a way that shows their impacts on each other (Eccles & Krzus, 2010). The "One Report" approach is similar with the "King III" approach in a way that both versions emphasis a variety of stakeholders as the intended audience of IR.

The third approach, which is also the key theme of this study, prioritizes "financial capital providers" as the major intended audience. This approach was proposed through the IIRC's Discussion Paper in 2011, subsequently finalized in an infrastructure known as "The International <IR> Framework 2013 (or hereafter The International IR Framework)". Nevertheless, the IIRC has amended the framework and has released the amended version in January 2021, which gives clear insights on the IR reporting and clear elaboration on reporting outcomes, and scenarios of value preservation and erosion (IIRC, 2021; Tho, 2021).

In June 2021, the Value Reporting Foundation was formed, after the merger of International Integrated Reporting Council (IIRC) and the Sustainability Accounting Standards Board (SASB), which promote three key themes: Integrated Thinking Principles, Integrated Reporting Framework and SASB Standards (VRF, 2021). The International IR Framework is a principles-based framework, structured with three fundamental concepts, seven guiding principles and eight content elements. The details of the framework will be introduced in Chapter 2.

This study will specifically focus on the International IR framework as it is the only global framework which has significant impacts on worldwide adopters at the moment. Due to the proliferation and diffusion of IR concepts over the last decade, previous studies showed that the number of companies publishing a self-declared "integrated reports" has been growing steadily (Liu et al., 2018). Currently, over 2,000 companies in 70 countries adopted the principles of IR (IIRC, 2019). A survey by KPMG (2020a) showed that 16 percent of the N100 (a worldwide sample of top 100 companies from each of the 52 countries[1]) in 2020 labeled their annual reports as "integrated report" and 70 percent of these companies declared they adhered to the International Integrated Reporting Council (IIRC) framework for integrated reporting. Nevertheless, prior empirical evidence indicated that some of the "self-declared" integrated reports did not really follow the requirements of IIRC framework (e.g. Dilling & Caykoylu, 2019; Dumay et al., 2017; Liu et al., 2018; Marcon & Mancin, 2016).

[1] These countries include Angola, Argentina, Australia, Austria, Belgium,. Brazil, Canada,. China, Colombia, Costa Rica, Cyprus, Czech Republic, Ecuador, Finland, France, Germany, Greece, Hungary, Iceland, India, Ireland, Italy, Japan, Kazakhstan, Luxembourg, Malaysia, Mexico, New Zealand, Nigeria, Norway, Pakistan, Panama, Peru, Poland, Portugal, Romania, Saudi Arabia, Singapore, Slovakia, South Africa, South Korea, Spain, Sri Lanka, Sweden, Switzerland, Taiwan, Thailand, The Netherlands, Turkey, United Arab Emirates, the UK and the US

Early literature focused specifically on assessing the IR quality were underdeveloped and focused more on CSR or sustainability disclosure quality rather than IR quality (Pistoni et al., 2018). Previous IR studies (e.g. Haji & Anifowose, 2016a, 2017; Haji & Hossain, 2016; Setia et al., 2015) focused mostly on the assessment of IR quality of South Africa companies since South African played a leading role in the IR development. Recently, there have also been a growing academic interest to investigate the IR quality in the international context (e.g. Raimo et al., 2020; Vitolla, Raimo, & Rubino, 2019; Vitolla, Raimo, Rubino, et al., 2019a; Vitolla, Raimo, et al., 2020, etc). This study will refine further Pistoni et al. (2018)'s IR measurement to capture four main dimensions of IR quality, including background of IR, assurance and reliability, content and form (Pistoni et al., 2018).

In addition, institutional theory is adopted as the primary theory to explain the antecedents of IR quality, as this theory has offered new insights to explain why and how an organization choose a new accounting practice. Institutional theory argues that organizations will adopt similar practice and become more homogeneous over time as they are facing various types of institutional pressures in the environment (or fields) that they operate (DiMaggio & Powell, 1983, 1991). As IR adoption has become internationalized, the variations of IR quality will be affected by isomorphism in a given institutional context or environment (Fuhrmann, 2019). Institutional environments "are characterized by the elaboration of rules and requirements to which individual organizations must conform in order to receive legitimacy and support". (Scott, 1987, p. 132). It is important to understand how these isomorphic pressures (e.g. political, legal, or pressure from other organizations) which comprises certain rules and requirements in the international context may exert influence on companies to improve the quality of IR.

Moreover, prior studies showed that corporate governance mechanisms also influence corporate IR reporting practice. In particular, a company with higher level of board independence would enhance the corporate governance and improve the decision-making process (Dah & Jizi, 2018). Board independence refers to the appointment of independent directors who are non-executive directors “independent of management and free from any business or other relationship” with the company (Cadbury, 1992). Independent directors are more responsive to the interest of different stakeholders because they can demonstrate higher level of objectivity and independence in analyzing managerial behavior (Ibrahim & Angelidis, 1995). Board independence is an important corporate governance monitoring mechanism affecting the dissemination of IR information (e.g Fason & Mio, 2017; Frias-Aceituno et al., 2013b; Kılıç & Kuzey, 2018a). Prior studies did not find consistent results for direct impact of board independence on IR quality. This study attempts to take another approach as independent directors may be more effective only upon certain institutional environments on improving IR quality. Thus, board independence is adopted as the first moderator for the relationship between isomorphic forces and IR quality.

The last theme of this study will also examine the effects of IR on firm performance. As IR is considered as an evolution of traditional financial reporting and sustainability reporting (Alfiero et al., 2018), it contains incremental information contents compared with that of standalone financial and sustainability reporting for stakeholders (Barth et al., 2017). The instrumental branch of stakeholder theory argues that companies can maximize long term value and financial performance if different stakeholder groups are managed properly (Benson & Davidson, 2010;

Donaldson & Preston, 1995; Jensen, 2001; Jones, 1995). Thus, companies published better IR quality may result in better firm performance.

Furthermore, IR is a novel corporate reporting concept and the International IR Framework is argued to place less emphasis on sustainability as it prioritizes financial capital providers' interests over those of other stakeholder groups (Flower, 2015). Thus, investors may perceive the integrated reports more positively only if a company demonstrate true sustainability, rather than simply a "green talk". IR can be merely a green-washing activity as companies still have discretion on the information disclosed on the integrated reports (Velte, 2021). IR may not reflect the state of a company's sustainability performance as an organization's true sustainability is evaluated by independent organizations. Thus, sustainability performance is adopted as the second moderator for the relationship between IR quality and firm performance.

Overall, there is a research gap to fill to understand the determinants of IR quality and the economic consequence of IR quality in the international context (Velte, 2021). Firstly, it is essential to postulate new variables depicted as proxies of the three forms of isomorphism from the lens of institutional theory and complemented with agency theory to explain the IR quality determinants. Secondly, there is limited and inconclusive research regarding to the economic consequence of IR (Hossain et al., 2022). Thus, it is also necessary to further comprehend if stakeholders will accept this novel form of reporting model by examining the consequence of IR quality on firm performance.

1.2 Problem Statement

The IIRC has already made good progress to enhance the global acceptance of IR framework since its establishment (IIRC, 2013, 2018). Regulatory bodies around the world have started to endorse the adoption of IR for the listed companies (IIRC, 2018). Countries such as South Africa, The Netherlands and Brazil also encourage the adoption of IR through regulations and Stock Exchange requirements. In spite of these development, there are considerable discretion on the heterogeneity of IR nature (Velte, 2021). The overall quality of post-IIRC's IR quality is still considered to be only moderate or even low and there is still a wide gap in IR quality among countries due to different stages of the national IR development (Eccles, et al., 2019; Pistoni et al., 2018). There are also large variations regarding to different dimensions (namely background of IR, assurance and reliability, contents and form) of IR quality (Pistoni et al., 2018). For instance, Pistoni et al. (2018)'s study showed companies only achieved 50 to 60 percent of total maximum possible IR quality across these four dimensions. IR preparers usually regard IR from the perspectives of combination of the conventional financial and sustainability reporting or present in a way that the report appeared to be "integrated" with sustainability indicators (Briem & Wald, 2018). IR may be simply a "greenwashing" activity and management may simply provide "biolerplate" information (Velte, 2021). A reassessment of the quality of recent integrated reports is therefore essential in order to identify the areas (dimensions) that IR preparers should improve.

Moreover, it is not yet fully comprehended of why IR disclosure choices varies and how companies respond to different international institutional contexts by amending their IR disclosure choices. Thus, there is an opportunity to explore whether there are any influences of international institutional environments on the variations of IR quality. Previous research on the determinants that influence IR are many, where some view from the legitimacy, stakeholder and institutional theory (e.g. Jensen & Berg, 2012; Wild & van Staden, 2013), legitimacy theory (e.g. Lai, et al., 2016), agency theory (e.g. Cooray et al., 2020; Vitolla, Raimo, & Rubino, 2019) or stakeholder theory (e.g. Vitolla, Raimo, Rubino, et al., 2019a). The findings are still inconclusive, which warrant for further investigation and this research choose to adopt institutional theory.

An earlier major contribution related to institutional theory and IR practice comes from Jensen and Berg (2012) who selected a wide range of national institutional factors affect IR adoption. Nevertheless, they did not investigate the various type of isomorphic forces on IR adoption, as these forces were insignificant at that time of their study during the pre-IIRC era. The problem is whether companies are influenced by external regulatory, legal or other organizational level forces to enhance IR quality. Wild and van Staden (2013) and Riveria-Arrubla et al. (2017) argued that early IIRC pilot companies only exhibit mimetic pressure when they prepare the integrated reports, whereas the effects of coercive and normative pressures on IR were insignificant among those early IR adopters. Although both studies from Fuhrmann (2019) and Kılıç et al. (2020) also examined the impact of institutional isomorphism on post IIRC IR adopters, their investigations were focused on the adoption of IR, rather than the IR quality. Hence, these prior IR studies were unable to provide a comprehensive depiction of the isomorphic pressures affecting IR quality. In addition, there are variables adopted as determinants of sustainability or CSR practice (e.g. regulatory quality, environmental sensitive industry, award factor, sustainability listing status, press freedom, CEO qualification) in prior literature, which can be adopted as proxies of these isomorphic forces and be extended to the IR context. The study will address all the issues related to the combined effects of these isomorphic pressures on IR quality in the international context, as these pressures are different due to different political and legal context.

On the other hand, board independence has been considered as a main corporate governance monitoring mechanism that may affect IR quality but the findings are not coherent (Cooray, 2020; Fason & Mio, 2017; Kılıç & Kuzey, 2018a; Songini et al., 2021; Vitolla, Raimo, & Rubino, 2019). The role of independent directors in enhancing disclosure quality is debatable. One possible reason is that independent directors may be only more effective in monitoring the companies under certain institutional settings and play a complementary role to strengthen the external institutional pressure on companies for better disclosures (Fuente et al., 2017; García-Sánchez et al., 2018). García-Sánchez et al. (2018) found that the strength of board, as proxied by level of board independence and board diversity, have a moderating effect between companies in munificence environment (i.e. institutional setting where abundant resources to support high-growth rate) and IR adoption. In a similar vein, board independence may interact with different institutional factors that affect IR quality. For instance, independent directors are more likely to comply with disclosure standards to avoid negative pressure from the media (Zaman et al., 2018).

Additionally, IR is also an accountability tool for managing and engaging stakeholder relationship (Silvestri et al., 2017). IR can change expectation of stakeholders as it implies higher level of accountability and transparency. Most previous studies have explored the effect of IR quality on firm performance based on samples in the mandatory IR setting, such as South Africa (e.g. Baboukardos & Rimmel, 2017; Barth et al., 2017; Lee & Yeo, 2016; Zhou et al., 2017), or in other voluntary settings in selected countries during the pre-IIRC period (e.g. Appiagyei et al., 2016; Lee & Yeo, 2016; Suttipun, 2017). Recently, more literature related to the effect of IR quality in the international setting emerged, but the samples are restricted to early IR pilot companies (e.g. Pavlopoulos et al., 2019) or the emphasis on the effect of IR adoption (e.g. Fernando et al., 2017; Wahl et al., 2020), rather than IR quality. The generalizability of the results to other voluntary or other international IR settings for the post–IIRC period is unclear.

Lastly, it is unclear if investors will perceive a better firm performance only if a company has a higher sustainability performance. Kaspereit and Lopatta (2016) argued that "being sustainable" (ie real sustainability performance) and "claiming to be sustainable" (ie sustainability reporting) are different notions. Prior studies mainly analyze the moderating role of sustainability performance in the context of CSR or sustainability reporting. There is probably a stronger effect of IR quality on firm performance only if companies demonstrate better sustainability performance (i.e. true sustainability rather than claimed to be sustainable) because the sustainability elements may not be reflected in IR as it is argued that IR may disregard sustainability (Flower, 2015).

To conclude, this study intends to address three major issues about IR quality. The primary issue is the inconclusive findings on determinants of IR quality and underdeveloped literature related to the assessment of IR quality as well as the wide variations of IR quality in different institutional context. The secondary issue is to address the moderating role of board independence in IR quality. The last issue is to address the effects of IR quality on firm performance.

1.3 Research Objectives

This is a relational study which has seven research objectives. The primary objective is to answer questions related to the effect of isomorphism on the variations of IR quality drawing from the context of institutional theory. The secondary objective is to examine how IR quality affects firm performance from the lens of stakeholder theory. The seven research objectives are stated as follows:

1. To assess the IR quality based on the International IR Framework in the international context
2. To examine the effect of coercive forces (regulatory quality and level of investor protection) on IR quality
3. To examine the effect of mimetic forces (environmental sensitive industry) on IR quality
4. To examine the effect of normative forces (CEO qualification, IR award criteria, sustainability listing criteria and press freedom) on IR quality
5. To examine the role of board independence in moderating the effect of different isomorphic forces on IR quality
6. To examine the effect of IR quality on firm performance
7. To examine the role of sustainability performance in moderating the effect of IR quality on firm performance

1.4 Research Questions

Based on the research objectives stated above, this study examines the quality of IR as well as its antecedents and consequence by addressing the following questions:

1. What is the current state of IR quality based on the International Framework in the international context?
2. Do coercive forces (regulatory quality and level of investor protection) affect companies' IR quality?
3. Do mimetic forces (environmental-sensitive industry) affect companies' IR quality?
4. Do normative forces (CEO qualification, IR award criteria, sustainability listing criteria and press freedom) affect companies' IR quality?
5. Does board independence moderate the effect of different isomorphic forces and IR quality?
6. Does IR quality affect firm performance?
7. Does sustainability performance moderate the effect of IR quality on firm performance?

1.5 Significance of the Research

This study contributes to the understanding of the current development of IR and fills the research gaps in the growing academic interest of IR research (Melloni et al., 2017; Nwachukwu, 2021; Soriya & Rastogi, 2021; Velte, 2021). The study provides new insights of different institutional factors as antecedents and firm performance as consequences in the international context. This study intends to analyse the most recent state of IR practice and to investigate the antecedents and effect of this novel corporate reporting model.

1.5.1 Theoretical Contributions

This study contributes to the understanding of the effects of various factors on IR quality, combining multi-theories in a unique framework. The framework is unique in a sense that it combines both instituional theory and agency theory to explain IR determinants. Recent literature argued that a single theoretical framework is not able to explain the IR disclosure decision affected by different economic firm characteristics in different socio-economic and institutional environments (Fuhrmann, 2019; Songini et al., 2021). This study makes theoretical novel contribution to research on the basis of using agency theory to complement the institutional theory in explaining the interaction of board independence with the institutional isomorphism (namely, coercive, normative and mimetic) on IR quality. The study of interaction between board independence with institutional factors is also a response to a call by Jain and Jamali (2016) to study potential interactions between multi-level factors in disclosure studies.

This study also provides a complete elaboration of how a complete set of isomorphic forces including new variables (e.g. regulatory quality, press freedom, accounting qualification of CEO, award factor) as proxies of the three forms of isomorphism that affect IR quality in the international context. Furthermore, this study also examines the impacts of IR quality on firm performance drawing on a stakeholder theory perspective on a global scale. Previous studies related to the economic consequences associated with IR mainly obtained data from a mandatory

IR setting such as the South Africa (e.g. Barth et al., 2017; Lee & Yeo, 2016;). This is a study to respond a call by Vitolla, Raimo, & Rubino (2019) to research on the both determinants and effects of IR quality**.** This study also attempts to further the stakeholder theory argument by examining the interaction between two aspects, being sustainable (sustainability performance) and claiming to be sustainable (i.e. better IR quality for this study) and the impact on firm performance. This study fills an existing research gap in integrated reporting literature and theories by providing comprehensive evidences for analyzing both determinants and consequence of integrated reporting.

1.5.2 Practical Contributions

This study has practical contributions for corporate IR adopters, users and regulatory authorities around the world. Current IR adopters or potential IR adopters can evaluate their present state of corporate reporting practice in the light of the results of this study, thus making necessary improvement and keep up with the latest international trends in the corporate reporting process. Moreover, if IR becomes the main model of corporate reporting, the decision-making process of corporate report users (both investors and other stakeholders) will be significantly affected by IR quality. The evidence presented in this study will provide insights for IR users to assess the usefulness of IR. In addition, regulatory bodies or IR standard setting bodies in different countries will also find the results of this study useful if they aim to promote the practice of IR aggressively in their own country. In particular, the international IR coalition, the Value Reporting Foundation, may find the results useful for promulgating future development strategies for IR or to make future improvements for their IR framework. The understanding of the how institutional forces and board independence affect IR will be useful for companies and policymakers to impose appropriate institutional or corporate governance mechanism so as to enhance the adoption and the quality of IR.

On other hand, this study will shed more lights not only on the future development of IR, but also on the field of sustainability reporting. Some academics such as Flower (2015) and Cheng et al. (2014) argued that the IIRC failed to meet the initial objective of IR to promote sustainability. The results of this study can provide more insights, related to the future prospect of this new model of corporate reporting and how the existing IR framework can be improved in enhancing corporate sustainability to meet the information needs of stakeholders.

1.5.3 Methodological Contributions

This study contributes to the measurement of IR quality by providing a more comprehensive IR scorecard, capturing a higher level of specificity for certain dimensions. Prior studies mainly measure the extent of IR disclosure or quality for certain attributes (e.g. either content element or guiding principles) or simply the level of adherence to the IIRC framework (e.g. Marrone & Oliva, 2019). Although the IR quality measurement in this study is similar to that of Pistoni et al. (2018)'s index, their measures did not provide detailed information of the content element. On the other hand, studies such as both Melegy and Alain (2020), and Lee and Yeo (2016)'s index provide a detailed description of each category of the content element only without measuring background information, assurance and reliability and form of IR. This study aims to provide a more holistic measure of IR quality based on different dimensions of the IIRC's 2013 framework.

In addition, the current study measures the isomorphism variables over three layers (i.e. country level, industry level and firm level). This study contributes to adopt this multi-layer measurements as a more comprehensive depictions of the antecedents of IR quality, whereas prior studies primarily measure institutional determinants of IR quality on either the country level (e.g. Fason et al., 2016; Fuhrmann, 2019; Jensen & Berg, 2012) or firm level (e.g. Adhikariparajuli & Hassan, 2021). It is essential to analyze the three layers of isomorphic forces as the country level, industry level and firm forces may complement or substitute among each other.

1.6 Scope of the Study

This study focuses on the issues related to a novel model of corporate reporting known as integrated reporting by analyzing its antecedents and consequence. This study considers institutional isomorphism variables as antecedents that may have an effect on IR quality, while also consider the effects of IR quality on firm performance. The measurement of IR quality is based on the level of compliance with the International IR Framework in the international context. This study collects secondary data from various sources, including the World Bank, Thomson Reuter Asset4 database (now renamed as Refinitiv), Reporters without Borders, etc. The sample size of this study is 200 companies that published integrated reports complied with the IIRC, available from the IIRC database website (http://examples.integratedreporting.org) for the year ended 2018. All the data are analyzed on the context of 25 countries across five different continents globally.

1.7 Definitions of Key Terms

The following sections provide the definition of key variables.

1.7.1 Integrated Reporting

Integrated Reporting (IR) is a process to "promote a more cohesive and efficient approach to corporate reporting and aim to improve the quality of information available to providers of financial capital to enable a more efficient and productive allocation of capital". This process is founded on integrated thinking that results in a periodic integrated report by an organization about value creation over time and related communications regarding aspects of value creation (IIRC, 2013, 2021).

1.7.2 Integrated Reporting Quality

This study adopts Pistoni et al. (2018)'s definition of IR quality which comprise four different aspects of assessments: background, form, content, and assurance and reliability. These aspects are drawing on Hammond and Miles (2004)'s CSR quality attributes for non-financial disclosures comprising six attributes, namely quantitative disclosure, establishment of appropriate targets, "Warts and all' reporting, ability to accurately assess performance from disclosure, good coverage of significant issues, and reporting of normalized data.

1.7.3 Integrated Report

An integrated report is the product of the integrated reporting process (Stent & Dowler, 2015). This study also adopts the definition suggested by IIRC (2013, 2021) that an integrated report is a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term (IIRC, 2013, p. 33).

1.7.4 Coercive isomorphism

According to DiMaggio and Powell (1983), coercive isomorphism is formal and informal pressures exerted on the organizations by other organizations in the form of force, persuasion or invitations to join in collusion upon which they are dependent.

1.7.5 Regulatory Quality

This study adopts the definition of regulatory quality as "the ability of the government to formulate and implement sound policies and regulations that permit and promote development of business sectors" (World Bank, 2006, p. 3).

1.7.6 Investor Protection

The level of investor protection relates to the level of transparency of related-party, liability for self-dealing and shareholders' ability to sue officers for improper behavior (World Bank, n.d.). This study follows the World Bank definition of investor protection indicating strength regards to the extent of disclosure, the extent of director liability and the ease of shareholder suit index.

1.7.7 Mimetic isomorphism

According to DiMaggio and Powell (1983), mimetic isomorphism occurs when organizations attempt to emulate or model themselves upon the best practice of other organizations due to the environmental uncertainties.

1.7.8 Environmental Sensitive Industry

Environmental sensitive industry are industries that may generate harm to the society and environment and are more sensitive to potential environmental legislation (Cho & Patten, 2007). Industries such as forestry, mining, paper and allied products, chemical and allied products, primary metal industries and fabricated metal products and finally electric, gas and sanitary services are regarded as environmental sensitive industry in this study (Cho & Patten, 2007).

1.7.9 Normative isomorphism

According to DiMaggio and Powell (1983), normative pressures arising from group norms exerted on the organizations to fulfill professional expectations. The sources of this isomorphism come from educational and professional network.

1.7.10 CEO Qualification

CEO qualification is defined as a CEO possessing a professional accounting qualification, such as a Certified Public Accountant (CPA). The CPA qualification are recognized accounting qualification award by a professional accounting organization which is a member of the International Federation of Accountants (IFAC).

1.7.11 Integrated Reporting Award Criteria

Integrated reporting award criteria is defined as the criteria companies have to comply for winning an IR related award. Winning an IR award is considered to be leading practice in the field of IR. There are 14 different types of IR related award organized by different organization according to the IIRC emerging database website.

1.7.12 Sustainability Listing Criteria

Sustainability listing criteria is defined as companies that have complied with the criteria of listing on a sustainability index of a stock exchange and achieved sustainability listing status. Sustainability indices serve to systematically, accurately, consistently and transparently assess the environmental, social and economic performance of a corporation (Windolph, 2011). Specifically, this study adopts the Dow Jones Sustainability Index (DJSI) as it is more prominent and influential (De Souza Cunha & Samanex, 2013), which includes a transparent, rules-based component selection criteria to calculate the companies' total Sustainability Scores resulting from the RobecoSAM Corporate Sustainability Assessment (CSA).

1.7.13 Press Freedom

Press freedom of a country is defined as the degree that stakeholders can express their opinion freely and independently without restrictions in the society (Wang & Li, 2019).

1.7.14 Board Independence

Board independence relates to the appointment of outside directors, who are non-management members of the board. Independent directors demonstrate a high level of objectivity and independence in their analysis of the management and behaviour of the company (Ibrahim & Angelidis, 1995; Uribe-Bohórquez et al., 2018).

1.7.15 Firm Performance

Firm performance refers to financial performance in this study. Financial performance can be classified into accounting-based and market–based performance (Al-Matari et al., 2014). This study primarily adopts market-based performance as proxy for firm performance because of its long term and forward-looking nature and reflects investors' expectation of future performance of a company.

1.7.16 Sustainability Performance

There are various definition of sustainability performance. This study follows Luo et al. (2015)'s definition of the sustainability performance from the analyst perspective as they demand more information on environmental and social and governance information in firm valuation. Elkington (1998) proposed the idea of corporate sustainability based on "triple bottom line" classified into social, environmental and economical dimension, whereas Renzee (2016) further embrace ethical and governance dimension as sustainability performance. This study adopts environment, social and governance (ESG) dimension, excluding economic aspect of Elkington (1998) as this variable is related to finanical performance, and Rennee (2016)'s ethical dimension which is part of social dimension from the perspective of analysts.

1.8 Structure of the Thesis

This section outlines the structure of the current thesis. The thesis is organized into six chapters. The current chapter (Chapter 1) discusses the background, research issues and objectives of this study. The significance and the definition of key terms are also outlined in this chapter.

Chapter 2 provides a comprehensive review of the background related to the historical development of IR in the international context, followed by a review of previous literature related to assessment of corporate IR practice, as well as the antecedents and consequence of IR. The chapter commences with an overview of the evolution and emergence of IR from traditional corporate reporting leading to the latest development of the IIRC's IR framework. The chapter then explores prior literature on the assessment and issues of corporate IR practice. Next, previous literature related to the antecedents of IR adoption or quality and the consequence of IR adoption or quality will be discussed extensively. Other potential determinants, which have been studied in the field of sustainability/CSR reporting but may affect IR are also reviewed. Lastly, the chapter concludes with a discussion of research gap and identify opportunities of research in this study.

Chapter 3 outlines the theoretical framework and develop the hypotheses. The chapter begins with reviewing various theories related to the antecedents and consequence of IR quality, followed by presenting a detailed discussion of a theoretical framework and research model relating to both the antecedents and consequence of IR quality for this study. Lastly, the chapter will discuss extensively the rationale of each hypothesis based on the theoretical framework and research model proposed in this study.

Chapter 4 depicts the research methodology, sampling approach, data collection and explains the measurement of each independent and dependent variable depicted in each hypothesis in the proposed study. The chapter specifically employs quantitative analysis and content analysis of integrated reports, to examine the quality of IR. The rationale of the IR quality index developed in this study is explained.

Chapter 5 discusses the research results. This chapter will present the descriptive statistics, correlation and regression analysis.

Chapter 6 offers an overall summary and conclusions of the study. This chapter also focuses on the discussion for this study's results and findings, as well as the implications, limitations and recommendations for future research.