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IMPACT OF INTEGRATED REPORTING DISCLOSURE ON ACCOUNTING-BASED PERFORMANCE OF ASIAN LISTED COMPANIES

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ABSTRACT

This study aims to examine the relationship between the quality of integrated reporting (IR) disclosure and firm performance in Asia listed companies. An integrated report score based on eight content elements taken from the IIRC framework was used to assess the quality of the IR disclosures of 90 Asian companies in 2019. Firm performance is evaluated using accounting-based measures such as return on assets (ROA) and return on equity (ROE). This study used a positivist research approach, the results show that the quality of IR disclosure of listed companies in Asia is sufficient. The study found a significant positive relationship between IR disclosure quality and ROA & ROE. It shows that the higher the quality of IR disclosure, the better the economic benefits of the company. The main practical implications of this study focus on calling for improved quality of IR issued by listed companies in Asia, as it provides evidence for a higher degree of financial performance achieved through high-quality disclosure of IR.

Keywords: Integrated Report, Firm Performance, Disclosure Quality, Asian

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1. INTRODUCTION

After the outbreak of the COVID-19 crisis in early 2020, the world economy experienced a deep downturn. According to the "World Economic Outlook Report" released by the International Monetary Fund (IMF) in October 2021, the world economy will decline by 3.1% year-on-year in 2020. Starting in Asia, many companies face various financial performance issues and sustainability issues that make it difficult to generate revenue (Huei & Kee, 2021). According to Van der Laan, Van Ees and Van Witteloostuijn (2008), stakeholders are concerned about the

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financial performance of the companies they are related to because it is one of the goals necessary for the long-term survival of the business. As the epidemic continues, many companies will increase the disclosure of non-financial information reported by the company, so that more stakeholders can understand the company's sustainable development concept for building long-term business value (IIRC, 2020). Through these non-financial reports, stakeholders can gain a comprehensive understanding of how the company creates value and the impact it faces beyond the company. At this point, a new type of report, the integrated report, is particularly important. Because IR combines financial and non-financial information, and its main purpose is to explain to providers of financial capital how firms create value over time (Atkin & Maroun, 2015).

IR is a new innovation in accounting that links financial and non-financial information to fulfil relevant stakeholder requirements and obtain useful information about a company's future sustainable value creation potential (Hamad et al., 2020). The history of IR began in August 2010 when Prince's Accounting for Sustainability Project (A4S) and the Global Reporting Initiative (GRI) co-founded the International Integrated Reporting Council (IIRC, 2011) with the aim of establishing a globally recognized and Sustainability framework accounting and integrating financial, environmental, social and corporate governance information. In the same year, listed companies in South Africa began to mandate IR. Although IR is mandatory in South Africa, it remains voluntary in other jurisdictions. With the development of Asian integration, IR has also received more and more attention in Asia (Deloitte, 2016), but few studies have considered the impact of integrated report disclosure from an Asian perspective. Therefore, based on the above research gaps, this study decided to conduct research on the quality disclosure of integrated reports in Asian listed companies in a voluntary environment.

Furthermore, in the wake of the COVID-19 pandemic, there are many opportunities for Asian companies to improve their financial disclosures to enhance performance and thus sustain long-term growth in a more volatile environment (McKinsey, 2020). Therefore, this study chooses 2019 as the research background, which can better highlight the significance of IR quality (IRQ) on firm performance. In addition, many studies have been conducted since IR entered the public eye, but most focus on whether implementing IR affects company performance (Samy, 2019; Adegboyegun et.al, 2020; Wahl, Charifzadeh & Diefenbach, 2020), but few studies on the impact of post-implementation IR disclosure quality on firm performance. Some existing research suggests that integrated reports produced by companies are of low quality in some respects. For example, a study by PricewaterhouseCoopers (PWC) reviewed the top 40 companies for JSE reporting quality and found that these companies had a significant weakness in the speed at which they repeated information. This trend suggests some form of rephrasing or repetition of the same message while excluding certain social, environmental and moral messages (PwC, 2013). Therefore, an incentive is needed to enable companies to increase their level of compliance, thereby ensuring high-quality IR. This motivation is in the form of empirical evidence that seeks to determine whether firms that produce high-quality integrated reports gain economic benefits over firms that produce low-quality integrated reports.

Therefore, some researchers have begun to focus on the relationship between integrated report disclosure quality and firm performance. A study from Malaysia showed that increased information disclosure by companies makes the company more transparent to stakeholders, thereby improving the reputation of the company, and it is expected that more integrated report disclosure will reduce information asymmetry and improve firm performance (Huei & Kee, 2021). The results also encourage firms to invest in improving the quality of disclosures in their IRs, which are value-added to firms because of their financial performance benefits. Furthermore, empirical evidence on the impact of IR disclosure quality on improved financial performance and value creation remains relatively scant. In general, firms may not necessarily consider IR to be important if there is no evidence that IR disclosures contribute positively to firm performance. Based on the above findings, this study intends to investigate the quality level of consolidated reporting of listed companies in Asia, so as to study its relationship with firm performance based on accounting measures.

2. LITERATURE REVIEW

2.1. Integrated Report

The IIRC's International Integrated Reporting Framework (IIRF) defines integrated report is a succinct report in which an enterprise communicates with the outside world on how it creates value. The value creation process of the enterprise's benefits, prospects and governance during the period (IIRC, 2013). Another definition of IR is derived from GRI: "IR that provides information about an organization's financial performance together with information about environmental, social, and corporate governance (ESG) performance in an integrated manner." (GRI, 2011). The main purpose of IR is to explain to providers of financial capital how a business creates value over time (Atkin & Maroun, 2015). A consolidated report benefits stakeholders interested in an organization's ability to create value over time, including employees, customers, suppliers, business partners, local communities, legislators, regulators and policy makers (IIRC, 2013).

In order to promote global enterprises to implement a more unified and standardized IR, in December 2013, IIRC released the authoritative "IIRF". The overall content of the reporting framework consists of guiding principles and content elements. The guiding principles specifically refer to the seven principles of focusing on strategy and future orientation, information connectivity, stakeholder relations, materiality, conciseness, reliability and completeness, consistency and comparability (IIRC, 2013). The 8 major content elements include institutional overview and external environment, governance, business model, risks and opportunities, strategy and resource allocation, performance, prospects, and presentation basis (IIRC, 2013). The 7 guiding principles in IIRF are mainly to guide the accuracy and comparability of content. An integrated report is primarily structured around eight elements that define the content of the report and communicate the organization's unique value creation story. At the same time, the integrated report is based on the sustainable creation of value, and the change of enterprise value is the result of internal environment, external environment and interaction.

2.2. Firm Performance Based on Accounting Measures

Firm performance is reflected in the financial benefits achieved by the enterprise within a certain period of operation and the internal capabilities that reflect the future development potential of the enterprise (Xu, 2015). The former reflects the current operating conditions of the enterprise, while the latter reflects whether the enterprise can achieve sustainable development, and is represented by financial performance (short-term performance of the enterprise) and market performance (long-term performance of the enterprise) respectively. Corporate financial performance is often measured using accounting-based or market-based metrics. However, accounting-based measures are available to all companies and are more comparable. Accounting-based measures can effectively measure the profitability of firms (Al-Matari et al., 2014). Enterprises aim at maximizing profits and shareholders' wealth, and their profitability is directly related to shareholders' investment income and creditors' acquisition of principal and interest, and further affects investors' decisions on whether to invest in the enterprise (Vanitha & Selvam, 2012).

Return on Equity (ROE) and Return on Assets (ROA) have been the most popular and perhaps one of the most widely used overall measures of financial performance of businesses (Rappaport, 1999). According to Kasbun, Teh and San Ong (2017), return on assets (ROA) and return on equity (ROE) are the most commonly used financial performance indicators for listed companies. Using ROA and ROE as KPIs can quickly focus management's attention on the assets needed to run the business (Epps & Cereola, 2008). Although these two financial indicators can be used to measure a company's return on investment, but to really understand a company's true operating capabilities, it should be analyzed in combination with ROE and ROA, because together they provide a clearer corporate performance (Tho, Dung, & Huyen, 2021). Based on the representativeness of the above indicators, many recent studies have used ROA and ROE to verify the relationship between IR and firm performance (Matemane, 2019; Nurkumalasari, Restuningdiah, and Sidharta, 2019; Buallay, 2019; El-Deeb, 2019). Therefore, this study chooses to use ROA and ROE to measure company performance.

2.3. Quality of IR disclosure and Firm Performance

The quality of IR disclosures is a relatively new concept in the field of corporate reporting, and its impact on corporate financial performance has been the subject of numerous studies (Nurkumalasari et al., 2019). Some existing research suggests that integrated reports produced by companies are of low quality in some respects. For example, a study by PWC reviewed the top 40 companies for JSE reporting quality and found that these companies had a significant weakness in the speed at which they repeated information. This trend suggests some form of rephrasing or repetition of the same message while excluding certain social, environmental, and moral messages (PwC, 2013). Therefore, an incentive is needed to enable companies to increase their level of compliance, thereby ensuring high-quality IR. This motivation is in the form of empirical evidence that seeks to determine whether firms that produce high-quality integrated reports gain economic benefits over firms that produce low-quality integrated reports. According to Hoque (2017), high-quality IR disclosure can give investors a better understanding of the company's financial status and future prospects, which can enhance investor confidence and improve the company's financial performance. Companies that provide detailed and transparent information about their operations and financial results are generally perceived by investors as more credible and trustworthy, which can lead to higher valuations and better financial performance (Dhaliwal et al., 2011). Just as agency theory believes that by disclosing more information in the report, it will increase transparency and reduce the information asymmetry between managers and organizations, thereby improving firm performance (Lobo & Zhou, 2001).

In addition, the disclosure quality of integrated reports depends on the degree of compliance with the IIRC framework, Zhou, Simnett and Green (2017) developed a self-constructed IRQ agent that captured 31 disclosure components out of 8 content elements. Using a sample of 443 companies listed in South Africa from 2009 to 2012, it is found that the consistency level of integrated reports and frameworks is negatively correlated with analysts' earnings forecast errors, which indicates that the information contained in integrated reports helps analysts formulate earnings forecasts. This may be because integrated reports contain information about the company's strategy, business model and future orientation. The research also finds that producing high-quality integrated reports (measured by a higher level of alignment with the IR framework) reduces firms' cost of capital and thus improves firm performance. Similarly, Lee and Yeo (2016) scored integrated reports based on 8 content elements, and studied the impact of integrated reports on corporate value using the data of listed companies in South Africa from 2010 to 2013. The findings show that IR disclosure is positively related to firm value.

The above studies were conducted in a mandatory environment in South Africa, while studies in a voluntary disclosure environment as in Albetairi, Kukreja and Hamdan (2018) used descriptive and linear regression analysis to analyse five listing companies in Bahrain from 2012 to 2015. Their results show that firms' compliance with IR varies widely and that firms use non-uniform disclosure formats. Content elements that appear to have increased levels of disclosure include the external environment and organizational profile, governance and outlook. On the other hand, the level of disclosure of risks and opportunities is on the decline. Business model, strategy, and resource allocation are positively correlated with ROA, while performance, risk, and opportunity elements are significantly negatively correlated with ROA. The same Pavlopoulos, Magnis and Iatridis (2019) examined the relationship between the IR disclosure quality level and firm performance of 82 listed companies in 25 countries, using profitability (ROA) as a variable, and found that companies with high IR disclosure quality Tends to show higher firm performance.

This result was also verified by Soriya and Rastogi (2023), who constructed the Integrated Report Disclosure Quality Index (IRDQI) by manual content analysis to assess the performance of 93 integrated annual reports in India for the three years from 2017-2018 to 2019-2020. Disclosure, the results show that IRDQI is significantly positively correlated with ROA. The result implies that improving the level of information disclosure makes a company more transparent to stakeholders and thus improves the company’s reputation. In contrast, Haddad, Barakat and Mahmoud (2022) evaluated the quality of the integrated annual reports of all 47 listed companies in Palestine according to the eight main content elements in the IIRC framework, and concluded that IR disclosure has no significant impact on financial performance measured by ROA, but has a significant impact on financial performance as measured by ROE and earnings per share (EPS). Similarly, according to Matemane and Wentzel (2019), there is only a positive correlation between IR quality (IRQ) and earnings per share (EPS). However, there was no significant relationship between IRQ and ROE & ROA. These findings suggest that South African listed banks have not yet developed a long-term view of value creation, but have instead taken a short-term view by focusing more on earnings per share.

Such research shows that IR is becoming an increasingly important reporting trend that will replace traditional corporate reporting and will become an important tool to support economic transformation, and high-quality IR disclosure can enable companies to have higher value (MIA, 2022). As Hoque(2017) found, companies with high quality of information disclosure showed higher corporate value and value relevance than other companies. Companies with high quality and successful IR strategies may reap non-financial benefits (e.g., increased cash flows, liquidity) that enhance their corporate value. According to stakeholder theory, a company's stakeholders can use IR to assess the quality of CSR management, as well as the associated corporate risks. If

stakeholders are convinced that management strategies are effective, they will reward companies with lower risk premiums, thus increasing company value (Velte, 2021). However, most researchers have tried to highlight the relationship between IR disclosures and firm value using a sample of South African listed companies (Lee & Yeo, 2016; Zhou, Simnett & Green, 2017; Pavlopoulos et al., 2019), but in a voluntary reporting environment, the evidence for the benefits of IR to firms remains lacking, especially in Asia. In conclusion, the quality of IR disclosure is an important factor affecting firm performance based on accounting measures. Companies that prioritize high-quality IR disclosure practices may be better positioned to achieve strong financial performance and boost investor confidence. Therefore, this study aims to examine the relationship of the quality of IR disclosures to the firm performance based on accounting measures. Based on the literature, this study is expected to indeed identify a positive relationship. That is, companies that already incorporate IR with high-quality disclosures are expected to improve their financial performance.
Therefore, this study hypothesis the following:

H1: There is a positive relationship between the quality of IR disclosure and return on assets (ROA).

H2: There is a positive relationship between the quality of IR disclosure and return on equity (ROE).

3. METHODOLOGY

3.1. Research Design

Quantitative research records observations in numerical form and uses statistical methods to analyze the data. Compared with qualitative research, quantitative research focuses more on quantitative and formal data analysis to prove or disprove hypotheses or conclusions (Gelo, Braakmann & Benetka, 2008). Since this research involves data numerical, statistical and mathematical analysis methods, quantitative research methods are used to explore the relationship between the quality of integrated report disclosure and the firm performance of listed companies in Asia. In addition, descriptive analysis, correlation analysis, and regression analysis were carried out to test the proposed hypotheses. Among them, descriptive statistical analysis is the initial cognition of data sources. This study uses descriptive statistical methods to determine the distribution and central tendency of variables in all samples. Correlation analysis is used to find whether there is a relationship between two variables and the strength of this relationship. Regression analysis will help to determine whether the two hypotheses proposed in this study are supported.

3.2. Sampling Strategy

This study adopted a non-probability purposive sampling design. Therefore, the sample selected for this study was the 117 Asian companies shown in the IIRC IR examples database as of 28 February 2021 (the date of data collection). This database is a collaborative project between the IIRC and Black Sun Plc, an international stakeholder communications agency with roots in corporate reporting. The sample also includes companies from the following industries: food and beverages, retail, pharmaceuticals, machinery manufacturing, electronics, telecommunications, real estate, insurance, banking and financial services, etc. This diversity of industries is one of the benefits of using IIRC databases. Because the financial sector such as insurance, banks and stock exchanges are regulated in a very different way than corporations and they have very different business models, objectives, revenue sources and risks from non-financial corporations, resulting in large differences in financial statements (Llewellyn, 2006). Therefore, a total of 11 of them were excluded from the sample and considering that unlisted companies do not have that much influence in the market, 12 unlisted companies were deleted from the sample. After observing the results, the time frame of this study was determined to be 2019 because this was before the COVID-19 pandemic, and this study can be compared with the impact of the company after the epidemic. In addition, the IIRC also released the 2019 integrated report *Building Consensus Towards a Global System* to address challenges by focusing on sustainable development. Therefore, after excluding 4 companies missing the 2019 IR, the final 90 Asian listed companies in the IIRC examples database were used in this study.

Table 1: Sample Selection Criteria

Criteria	Number of Sample
IIRC examples database at Asia	117
(Less) Non-listed companies	(12)
(Less) Stock exchanges, banks and insurance companies	(11)
(Less) Report missing companies	(4)
Final sample	90

3.3. Data Collection

This study collected the annual integrated reports from the official website of each company. Yahoo Finance provides various types of financial information such as financial statements, ratios, reports related to companies around the world, so the variables (ROA and ROE) that this study is based on accounting measurements are extracted from Yahoo Finance.

This study conducted a content analysis of their respective integrated reports. When conducting content analysis, this study measures the quality of IR disclosures against the eight main content elements of the IIRC's IIRF. The 8 content elements include organizational overview and external environment, governance, business model, risks and opportunities, strategy and resource allocation, performance, outlook, basis of preparation. This study adopted the scoring method established by Lee & Yeo (2016), and Pistoni, Songini and Bavagnoli (2018), and the final coding framework has 40 components or 8 content elements and each content element contain 5 questions for evaluating IR disclosure the quality of. A raw score is assigned to each question, as shown in Table1, ranging from 0 (does not fit the <IR> framework) to 5 (strongly fits the <IR> framework). Therefore, the maximum total score disclosed in the integrated report is 200 points. The higher the total score of IR, the more consistent the company's integrated report disclosure is with the IR framework. In determining whether or not the disclosure quality of an integrated report was poor or high, this study utilised the quality scoring range proposed by Pivac, Vuko, and Cular (2017) presented in Table 3, where the percentage of the integrated report's score was obtained by dividing the total score of each content element by 200 points.

Table 2: Scoring system of the content area

Score	Description
0	Content element absent.
1	Content element present, but poor description and scarce reference to Content.
2	Content element present; description based on some quantitative information and on a few Contents.
3	Content element present; balanced description of contents.
4	Content element present; good and detailed description of contents.
5	Content element present; excellent description of contents.

Source: Pistoni, A. et al. (2018)

Table 3: Quality Scoring Model

IR Score (%)	Quality of IR Disclosure
0-20	Poor
21-40	Low
41-60	Average
61-80	Sufficient
81-100	High

Source: Pivac et al. (2017)

4. RESULTS AND DISCUSSION

4.1. Descriptive Statistics

Table 4 reflects the descriptive statistics of the dependent, independent, and control variables used to investigate the relationship between the quality of IR disclosures and firm performance.

Table 4: Descriptive Statistics

	Minimum	Maximum	Median	Mean	Std. Deviation
IRQ	101.0	181.0	149.00	146.511	15.0312
ROA	-0.052	0.237	0.043	0.048	0.038
ROE	-0.175	0.196	0.094	0.081	0.063
FS	0.079	5.49	2.93	2.97	0.779
LEV	0.001	8.33	0.496	0.864	1.17

Note: ROA = return on assets; ROE = return of equity; FS= firm size, the natural logarithm of total assets; LEV= Leverage, total debt divided by equity.

As mentioned earlier, the selected sample includes 90 listed companies in Asia in 2019. The mean score of IRQ is 146.5 (73 percent of the full score), indicating that the integrated report has reached a sufficient level of disclosure quality as described in the quality scoring model in Table 2, but companies still need to take more measures to improve the quality of disclosure.

For firm performance based on accounting measures, the mean of ROE was higher (8 percent) than the mean of ROA (5 percent). ROE is a measure of a company's efficiency in generating revenue from its shareholders' equity investments, and the mean of 8 percent means shareholders received substantial benefits. An ROA of 5 percent or higher is generally considered good. The higher the ROA, the more efficient the company is in generating profits. However, a company's ROA must be considered in conjunction with its competitors in the same industry and sector. Regarding the control variables of firm size and leverage, the mean values were 2.97 and 0.86, respectively. These values indicated that the firms were large on average and their leverage was relatively safe. In general, a debt-equity ratio below 1 is considered relatively safe, indicating that the firm's risk is relatively low, whereas a ratio of 2 or higher is considered risky (Subramaniam & Wasiuzzaman, 2019; Hertina & Saudi, 2019).

4.2. Correlation Analysis

Table 5 shows the Pearson correlation coefficients among the variables. Through analysis, we can basically judge the correlation between variables. The results show the strength and course of the linear relationship between the variables (Brooks, 2014).

Table 5: Pearson Correlation Matrix

		IRQ	ROA	ROE	FS	LEV
IRQ	Correlation	1	0.257*	0.275**	0.095	-0.094
	Sig. (1-tailed)		0.014	0.009	0.372	0.380
ROA	Correlation	0.257*	1	0.552**	-0.007	-0.378**
	Sig. (1-tailed)	0.014		0.000	0.948	0.000
ROE	Correlation	0.275**	0.552**	1	0.011	-0.237*
	Sig. (1-tailed)	0.009	0.000		0.916	0.024
FS	Correlation	0.095	-0.007	0.011	1	0.369**
	Sig. (1-tailed)	0.372	0.948	0.916		0.000
LEV	Correlation	-0.094	-0.378**	-0.237*	0.369**	1
	Sig. (1-tailed)	0.380	0.000	0.024	0.000	

As Table 5 shows, the correlation coefficient between ROA and ROE was the highest at 0.552. ROE helps investors measure how their investments generate income, and ROA helps investors measure how management uses their assets or resources to generate more income. The result demonstrated the existence of a high positive correlation between ROA and ROE.

The results for the relationship between the quality of IR disclosure and firm performance showed that the correlation coefficient between IR disclosure quality and ROE was the highest at 0.275, followed by 0.257 with ROA. Thus, there was a significant positive correlation between the quality of IR disclosure and firm performance based on accounting-based measurements.

4.3. Main Regression Results

Correlation only observes the relationship between two variables and does not reveal in-depth relationships beyond binary data. Therefore, the regression analysis of the OLS model is used below to analyze the causal relationship between variables. In this section, regression analysis was performed on the independent variable (IRQ) and two control variables, namely firm size and leverage, and two dependent variables, namely ROA and ROE.

Table 6: Regression Analysis: ROA as the Dependent Variable

Variables	**β**	**t-Statistic**	**p-value**
Constant		-2.353	0.021
Independent variable:			
IRQ	0.277	3.147	0.002
Control variables:			
Firm Size	0.210	2.161	0.034
Leverage	-0.649	-6.710	0.000
F	17.39		
Sig.	0.000		
R Square	0.392		
Adjusted R Square	0.369		

Table 6 shows the regression analysis results between the independent variable (IR disclosure quality) and the dependent variable (ROA). Since the *p*-value of the *F* statistics was less than 5% (0.000), ROA using the OLS regression model had high statistical significance and explanatory power. The β value of the independent variable (IR disclosure quality) was 0.277, indicating that when IR disclosure quality increased by 1, company performance increased by 0.277. The *R*-squared of the regression analysis was 0.392, indicating that the independent variable explained 39.2% of variations in firm performance among Asian listed companies. In addition, the *p*-value of 0.002 was less than 5%, indicating the presence of a significant positive relationship between the quality of IR disclosure and ROA. Thus, H1 was accepted and supported by the stakeholder theory and agency theory. For the two control variables, the *p*-value of less than 5% for leverage (debt-to-equity ratio) indicated the presence of a significant negative relationship with ROA, whereas the *p*-value of .034 (less than 5%) for firm size indicated the presence of a significant positive relationship with ROA.

Table 7: Regression Analysis: ROE as the Dependent Variable

Variables	**β**	**t-Statistic**	**p-value**
Constant		-33.733	0.000
Independent variable:			
IRQ	0.287	2.795	0.006
Control variables:			
Firm Size	0.220	1.940	0.056
Leverage	-0.333	-2.948	0.004
F	5.585		
Sig.	0.002		
R Square	0.171		
Adjusted R Square	0.141		

Table 7 shows the regression analysis results between the independent variable (IR disclosure quality) and the dependent variable (ROE). Since the *p*-value of the *F* statistics was less than 5% (0.002), ROE using the OLS regression model had high statistical significance and explanatory power. The β value of the independent variable (IR disclosure quality) was 0.287, indicating that when IR disclosure quality increased by 1, firm performance increased by 0.287. The *R*-squared of the regression analysis was 0.171, indicating that the independent variable explained 17.1% of the variations in firm performance among Asian listed companies. Since the *p*-value of IR disclosure quality was .006 (less than 5%), the result indicated the existence of a significant positive relationship between the quality of IR disclosure and ROE. Thus, H2 was accepted and supported by the theories used in this study. In addition, the *p*-value of leverage (debt-to-equity ratio) of less than 5% indicated that it had a significant negative relationship with ROA. However, the *p*-value of firm size of .056 (greater than 5%) showed that it had no relationship with ROA.

The results in Tables 6 and 7 show that the OLS regression models of ROA and ROE had high statistical significance and explanatory power, and the *p*-values of the *F* test were less than 5% (0.000 and 0.002). The *R*-squared values of the regression model were 0.392 and 0.171, indicating that the independent variable explained at least 17.1%–39.2% of the variations in the accounting-based measures of firm performance among Asian listed companies.

Based on the above results, the quality of IR disclosure had a significant impact on firm performance measured using accounting-based measures. This result is in line with previous studies such as Velte (2021) and Samy (2019) which found the quality of IR had a positive impact on companies' financial performance based on ROA and ROE. The result is logical, and the positive relationship implies that the higher the company's compliance with the IIRF, the higher the profitability of the company. The reason is that some researchers believe that the higher the level of IR disclosure, the higher the trust of investors and creditors in the company, making it easier for the company to raise funds through the stock market or bond market (Samy, 2019).

5. CONCLUSION

Undoubtedly, IR is a prominent tool for business organizations (Havlova, 2015). The tool supports all types of reporting functions (Morros, 2016), and the higher the quality of the disclosure, the better it can reflect the firm future value creation (De Villiers, Venter & Hsiao, 2017). The results of this study show that the quality of IR disclosure is at a sufficient level, because the mean score of IRQ is 146.5 (73 percent of the full score), which is between 61 percent and 80 percent in table 2. However, given the limited empirical research on the economic consequences of IR disclosure, the main purpose of this study is to examine the relationship between the quality of IR disclosure and firm performance in Asian listed companies.

This study found that there is a significant positive relationship between the quality of integrated report disclosure and firm performance based on accounting measures, that is, the results support the hypotheses H1 and H2 of this study. Just as agency theory argues that a firm's desire to increase its value is achievable with increased information disclosure (Lobo & Zhou, 2001), the theory also advocates producing high-quality integrated reports to reduce the gap between managers and capital providers. information asymmetry (Moloi, & Iredele, 2020).

The main practical implications of this study focus on calling for improved quality of IR issued by listed companies in Asia, as it provides evidence for a higher degree of financial performance achieved through high-quality disclosure of IR. However, compared with traditional financial reports, high-quality IR disclosure achieves better integration of financial information and non-financial information, helps companies identify and manage risks more effectively, and promotes the improvement of business decisions. There is growing evidence that IR is an effective accounting tool and its use may be rewarded by capital markets as it helps companies rethink and integrate their strategies and business models to align with stakeholders' expectations (Busco & Sofra, 2021). Through communication and transparency, IR can be effectively used to explain the advantages of using the principles of the IIRC framework and explain to investors how an organization creates value over time (IIRC, 2013). At the same time, the study will also help policy makers, regulators and government authorities in Asia use these results to design more effective policy tools and strategies to further strengthen and improve the reporting of listed companies.

The main limitation of this study is that the concept of IR is relatively new in the field of corporate reporting. This study is thus limited by the observation period 2019 and the sample size due to the limited number of companies meeting the sample selection criteria. Secondly, this study focuses on 2019 and the Asian region before the outbreak of covid19. Future research could try to further examine (post covid-19) the impact of IRQ on economic benefits in combination with other countries, combining a case study approach for a more in-depth assessment of the quality of IR disclosure. Finally, the variables used in the study may be another limitation. The object of this study is accounting-based measures of firm performance, and future research could use both accounting-based and market-based performance measures in order to accurately demonstrate the link between performance and diversity.

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