“Impact of integrated reporting on firm value and earnings quality as a moderator in Southeast Asia”

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IMPACT OF INTEGRATED REPORTING ON FIRM VALUE AND EARNINGS QUALITY AS A MODERATOR IN SOUTHEAST ASIA

Abstract

The study analyzes the factors influencing integrated reporting and its implications for firm value with earnings quality as a moderating variable. The study was conducted on energy sector companies on stock exchanges of several Southeast Asian countries. The selection is due to Southeast Asia's vulnerability to global market sentiment changes related to financial and sustainability aspects. The study employed the SEM-PLS analysis method. 208 data from 26 companies over 8 years were used. The investigation affirms that leverage, age, and board size have positively impacted integrated reporting. Firm size, growth, and board independence have a negative impact on integrated reporting. Profitability, board activity, and stakeholder pressure have not significantly influenced integrated reporting, but integrated reporting positively impacts firm value. Additionally, earnings quality does not moderate the influence of integrated reporting on firm value. The study provides insights for companies to improve the presentation of high-quality information to stakeholders. Increasing the firm value of energy companies in Southeast Asian countries needs to be done as a progressive concern for environmental impacts and sustainably creating integrated reporting.

Keywords earnings quality, integrated reporting, growth, profitability, Southeast Asia

JEL Classification G32, L21, M41

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INTRODUCTION

Firm Value is closely related to the company's performance in generating profits and fulfilling stakeholders' objectives. Firm value is an evaluation conducted on a company and in line with the firm's performance to gain high profits and successfully implement social responsibility (Akinleye et al., 2019; Khunkaew et al., 2023; Kurniasih et al., 2022; Mahmudah et al., 2023). Integrated corporate reporting informs the performance of social and environmental responsibility activities to increase company value. The company will strive to improve financial performance to meet stakeholder desires. Christofi et al. (2023), Adegboyegun et al. (2020), and Harnovinsah et al. (2023) asserted that financial performance is a crucial factor in determining firm value. Integrated reporting, as a new method, combines various aspects of an organization into one report, providing a comprehensive view of the company (Agarwal & Samanta, 2023; Hoque, 2017). This study focuses on the impact of integrated reporting on firm value because both are core elements of the International Integrated Reporting (IIRC) Framework that explains the value creation process (Barth et al., 2017; Conway, 2019; Yorke et al., 2023). The novelty of this study stems from the use of earnings quality as a moderating variable in the longer research period compared to previous studies.

1. LITERATURE REVIEW

Stakeholder theory recognizes the importance of considering various stakeholders in organizational decision-making and the disclosure of relevant information. Integrated reporting integrates both financial and non-financial dimensions, enabling organizations to meet the expectations and needs of various stakeholders. According to Villiers and Maroun (2017), stakeholder theory plays a central role in the development of integrated reporting. The key objective of integrated reporting is to offer a more comprehensive perspective to financial stakeholders, particularly investors, regarding an organization's performance. It achieves this by elucidating how value is generated over time. This is crucial because the accessibility, excellence, and cost-effectiveness of resources and inputs can have a profound impact on the organization's ability to sustain itself over the long term.

Research indicating a positive impact of integrated reporting on firm value (ESG Performance proxy) was conducted by Conway (2019), firm value (Market Value of Equity, return on equity, and leverage proxies) by El-Deeb (2019), firm value (expected future cash flows proxy) by Flores et al. (2019), and firm value (Tobin's Q proxy) by Komar et al. (2020). Research on the negative impact of integrated reporting on firm value (financial performance and risk proxies) was conducted by Conway (2019), firm value (leverage proxy) by Lemma et al. (2019), and firm value (cost of equity capital proxy) by Vitolla et al. (2019) and Vitolla et al. (2020).

Leverage has a corresponding influence on the propensity to adopt integrated reporting. Companies with higher leverage levels have serious agency problems and higher agency costs (Ghani et al., 2018; Obeng et al., 2020). Integrated reporting can be an effective communication tool for explaining a company's plans and strategies to reduce its debt levels sustainably. In integrated reporting, companies can highlight the steps taken to manage financial risks, improve cash flow, and optimize capital utilization, thereby instilling confidence in stakeholders about the company's commitment to addressing leverage challenges. Fuhrmann (2019) showed a negative relationship between leverage and integrated reports. High leverage can result in financial constraints and limited resources for engaging in integrated reporting practices. Research conducted by Fuhrmann (2019), Grassmann et al. (2019), Grassmann (2021), and Vitolla et al. (2020) indicates that leverage influences integrated reporting. Both the voluntary disclosure theory and the stakeholder theory propose that the necessity and advantages of voluntary disclosure grow in proportion to the number of external entities concerned with a company's operations (Dienes et al., 2016). Larger-scale companies are also prone to experiencing more significant agency conflicts compared to smaller ones (Fahad & Nidheesh, 2021). Managers of larger firms tend to appreciate the benefits of enhanced disclosure, whereas smaller companies may perceive full information disclosure as potentially detrimental to their competitive position. However, different results are shown in the study by Dumay et al. (2016), which suggests that firm size has a negative influence on integrated reporting. Dumay et al. (2016) and Ghani et al. (2018) also show that firm size influences integrated reporting.

Companies with high profitability levels tend to actively use forward-looking information in integrated reporting and can help companies identify new opportunities to develop profitable business units (Bernardi & Stark, 2018; Bochenek, 2020). Fuhrmann (2019) suggests that Profitability has a negative influence on integrated reporting. Companies with higher profitability have less urgency to engage in integrated reporting to attract investors or lenders. These companies believe that good financial performance is sufficient to gain the trust of stakeholders and attract investments. As a result, companies see less incentive to adopt integrated reporting practices that emphasize non-financial aspects and long-term sustainability. Menicucci (2018), Fuhrmann (2019), Grassmann et al. (2019), and Vitolla et al. (2020) indicate that profitability influences integrated reporting.

Agency theory underscores the advantages of adopting voluntary disclosure policies (Brammer et al., 2012). This emphasis is rooted in the recognition that information imbalances can harm potentially lucrative company initiatives. This imbalance erodes investor trust as they fear that managers might not select the best projects or that their actions could be driven by motives to

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benefit at the expense of investor wealth (Aboud & Diab, 2018; Camodeca & Almici, 2017; Sheikh, 2018). Companies with substantial growth opportunities tend to embrace greater voluntary disclosure as a means to mitigate information imbalances and agency-related costs. The companies enhance investment efficiency by reducing external financing expenses (Hsiao et al., 2022; Simnett & Huggins, 2015; Villers et al., 2017). These considerations highlight that companies may need to pay a higher "price" to investors in order to secure external funding. Companies with lower growth prospects face pressure from stakeholders, including investors and shareholders, to focus on achieving financial goals and improving operational performance. These companies tend to deprioritize non-financial aspects accommodated by integrated reporting to meet market expectations and improve financial performance. Nurkholis (2020) found that older companies do not tend to have higher levels of integrated reporting disclosure than younger ones. Pillai and Seetah (2022) and Senani et al. (2022) found that a company's age has a positive relationship with the quality of integrated reporting disclosure in annual reports. These findings suggest that as a company ages, there is a higher likelihood of integrating sustainability information into its reporting. Integrated reporting requires a shift in reporting approach, where companies need to pay more attention to non-financial issues and integrate this information with financial reporting. Established companies that are accustomed to traditional reporting may be reluctant to adopt integrated reporting, seeing it as a complex and disruptive change.

Board size informs controls to realize good corporate governance. Ioannou and Serafeim (2015), García-Sánchez et al. (2018), and Liu and Zhang (2017) revealed a positive association between board size and the extent of sustainability information disclosed in annual reports. Their findings suggest that companies with larger boards of directors are more inclined to include sustainability-related information in their reports. Furthermore, Mawardani and Harymawan (2021) and Fasan and Mio (2017) also found a positive correlation between board size and integrated reporting disclosure in company reports. This implies that the presence of a larger board of directors is linked to a higher likelihood of a company reporting sustainability-related information in its reports. Companies with larger boards may face challenges in achieving consensus and agreement on relevant non-financial issues related to integrated reporting. Differences in opinions and priorities can complicate the decision-making process related to the implementation of integrated reporting.

The independence board is a party that is really needed to ensure that corporate governance does not have conflicts of interest. Mawardani and Harymawan (2021) and Omran et al. (2021) reveal a positive association between the degree of board independence and the extent of sustainability information disclosed in company reports. Senani et al. (2022) and Mawardani and Harymawan (2021) have robust empirical evidence highlighting the significance of board independence in encouraging the disclosure of sustainability information within company reports. Independent boards tend to play a stronger oversight role in company management. Independent boards are more diligent in monitoring both the financial and non-financial performance of companies and provide specific recommendations and demands for improvement. In this context, efforts to implement integrated reporting may not receive full support from independent boards.

The effectiveness of the board is determined not only by the number of its members but also, more importantly, by the number of activities carried out through meetings and investigations to make policies and strategic decisions. Vitolla et al. (2020) inform that board activity influences integrated reporting and indicate that inadequate board characteristics and activities, such as low expertise and experience, were negatively associated with the quality of integrated reporting. An active board involved in daily decision-making may have limited time and resources to focus on non-financial issues related to integrated reporting. In this regard, efforts to implement integrated reporting may be deprioritized because the board's attention is more directed towards immediate operational issues and financial performance.

A company receives pressure from various stakeholders to adopt and implement integrated reporting. The greater pressure that a company

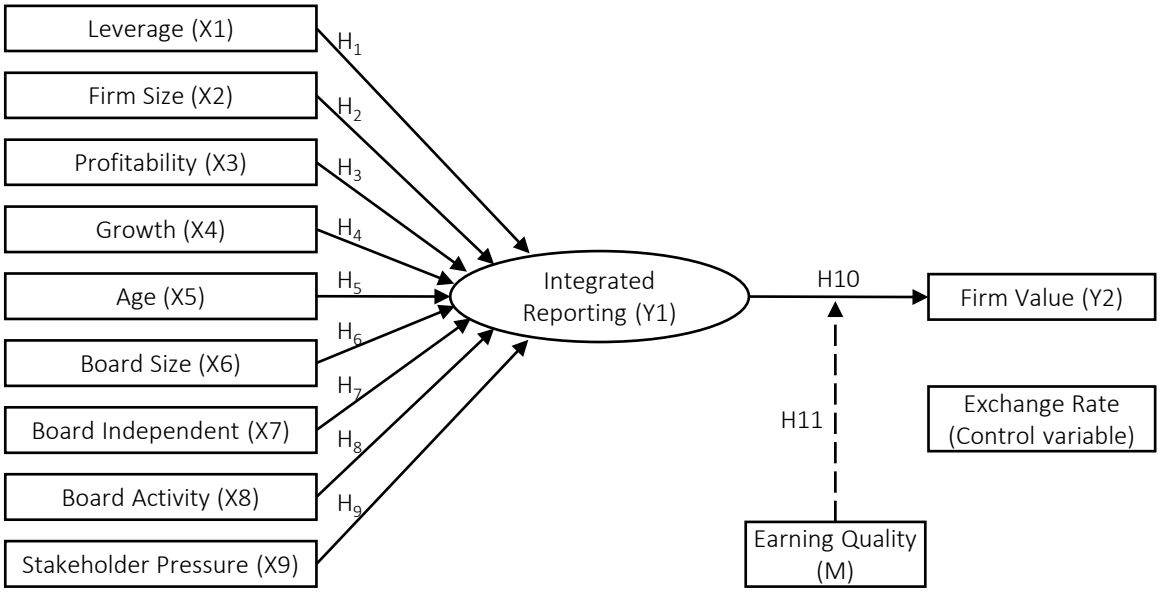

Figure 1. Research model

receives from external stakeholders leads to the company producing high-quality integrated reporting. Simnett and Huggins (2015) explore the role of stakeholder pressure in the adoption and implementation of integrated reporting practices. Therefore, companies strive to mitigate risks by using reputable public accounting firms with good track records to minimize the risks they face so that the information presented is free from material misstatements (Chouaibi & Hichri, 2020). Pressure from stakeholders can lead companies to adopt a responsive approach rather than a strategic approach in managing sustainability and social responsibility issues. Simnett and Huggins (2015), Ghani et al. (2018), and Vitolla et al. (2019) indicate that stakeholder pressure influences integrated reporting.

Integrated reporting is expected to provide more relevant information on a company's performance in both financial and sustainability aspects. Comprehensive information can help investors make better investment decisions and enhance transparency and accountability within the company. Integrated reporting can enhance a company's reputation and brand image. It can influence investor perceptions and increase the company's value (El-Deeb, 2019). Furthermore, the financing decisions of a company may also be affected by investor perceptions of integrated reporting practices (Lemma et al., 2019). Conway (2019), El-Deeb (2019), Flores et al. (2019), Komar et al. (2020), Lemma et al. (2019), and Vitolla et al. (2019) suggest that integrated reporting influences firm value.

Earnings quality refers to the quality of income generated by a company, reflecting the extent to which a company's income has high quality. If a company has high earnings quality, it means its income is more reliable and reflects actual performance. Previous studies indicate that the reported income of high-accrual companies is not likely to be sustained. They may then take short positions to exploit the overvaluation of these companies (Pavlopoulos et al., 2019). García-Sánchez and Noguera-Gámez (2017) and Obeng et al. (2020) inform that the quality of earnings has a moderating effect on how integrated reporting influences a firm's value.

This study investigates the factors that influence integrated reporting and its implications for company value which is moderated by earnings quality. The research hypotheses developed in this study are:

H_1: *Leverage influences integrated reporting.*

H_2: *Firm size influences integrated reporting.*

H_3: *Profitability influences integrated reporting.*

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H_4: *Growth influences integrated reporting.*

H_5: *Firm age influences integrated reporting.*

H_6: *Board size influences integrated reporting.*

H_7: *Board independence influences integrated reporting.*

H_8: *Board activity influences integrated reporting.*

H_9: *Stakeholder pressure influences integrated reporting.*

H_{10}: *Integrated reporting influences firm value.*

H_{11}: *Earnings quality moderates the influence of integrated reporting on firm value.*

2. METHODS

The energy sector companies listed on the stock exchanges in several Southeast Asian countries such as Indonesia, Singapore, Malaysia, Philippines, and Thailand over 8 years were used as population. The years considered in this study are from 2014 to 2021. Data were collected from annual reports accessed through the official Stock Exchange websites in each respective research country or directly referring to the relevant companies. The population size in the Energy Sector, from largest to smallest in sequential order, starts with Indonesia with 76 companies, Thailand with 69 companies, Singapore with 41 companies, Malaysia with 32 companies, and the Philippines with 12 companies. The sample size, from largest to smallest in sequential order, starts with Indonesia with 10 companies, Thailand with 9 companies, Malaysia with 3 companies, Singapore with 2 companies, and Philippines with 2 companies. 208 samples were used. A sample is a portion of the quantity and characteristics possessed by a population with specific characteristics and criteria established (Sugiyono, 2022). The data analysis technique used is Partial Least Squares (Hair et al., 2021).

Firm value is measured using Return on Average Assets (ROAA) conducted by Conway (2019) and Akisik and Gal (2020). An integrated reporting assessment matrix by Pratama et al. (2021) is used for evaluation. The assessment is done on a nominal scale based on the summation of a Likert scale ranging from 0 to 4, where 0 represents very poor or nonexistent, and 4 represents excellent. There are 39 assessment indicators in the matrix of 8 elements with details as follows: overview of organization and external environment (8 indicators); governance (7 indicators); business model (7 indicators); risks and opportunities (2 indicators); strategy and resource allocation (4 indicators); performance (4 indicators); perspective (3 indicators); and basics of preparation and presentation (4 indicators).

The measurement used for Earnings Quality is Operating Accrual, which was used in Sloan's (1996) study, with the formula as follows:

$$Operating\ Accrual = \frac{Earning - Cash\ Flow\ from\ Operation}{Average\ Assets}. \quad (1)$$

The debt-to-assets ratio, calculated as total debt divided by total assets, is used to measure leverage. This measurement is based on prior research conducted by Menicucci (2018).

$$Debt\ to\ Assets = \frac{Total\ Debt}{Total\ Assets}. \quad (2)$$

Firm size is a measure of a company's significant impact on efficiency, innovation capabilities, and company performance. In this study, the measurement used is the natural logarithm (Ln) of the total assets (Menicucci, 2018).

$$Firm\ size = \ln\left(Total\ Assets\right). \quad (3)$$

Profitability reflects a company's ability to generate income or profits from its operational activities. The measurement used in this study is Return on Equity (ROE), calculated as total comprehensive income for the year divided by total equity (Brigham & Ehrhardt, 2016).

$$Return\ on\ Equity = \frac{Comprehensive\ Income}{Total\ Equity}. \quad (4)$$

Company growth results from the combination and utilization of the company's internal resources. In this study, Revenue growth is used as the measurement, based on prior research by Harnovinsah et al. (2023) with the following formula:

$$Revenue\ growth = \frac{\left(\begin{matrix}Revenue\\ current\ year\end{matrix}\right) - \left(\begin{matrix}Revenue\\ prior\ year\end{matrix}\right)}{Revenue\ prior\ year}. \quad (5)$$

Age refers to the length of time that has passed since a company's establishment or the beginning of its operations. A company's age has a significant impact on its behavior and performance. The measurement used is the age of the company, calculated from the date of the company's establishment, based on a prior study by Geroski (1995).

Board size refers to the number of members on a company's board of directors. Mawardani and Harymawan (2021) present a broader view of the influence of board size on a company's performance and internal control mechanisms. In this study, the measurement used is the number of directors and commissioners, based on prior research conducted by Geroski (1995).

Board independence refers to a company's board of directors' ability to make decisions that are not influenced by personal interests or conflicts of interest with other parties that may interfere with the interests of shareholders (Fama, 1980). The measurement used is the number of independent directors and commissioners, based on prior research by Senani et al. (2022) and Mawardani and Harymawan (2021).

Board activity includes the actions and decisions taken by a company's board of directors in carrying out its responsibilities to oversee management and make strategic decisions that can affect the company's performance and value. The measurement used in this study is the number of combined board and commissioner meetings in one year, based on prior research conducted by Fama (1980).

Stakeholder pressure represents the influence or pressure exerted by stakeholders on a company to consider the company's interests in decision-making and company actions (Simnett & Huggins, 2015). In this study, the measurement used is the dummy of the Big 4 Audit Firms, based on a prior study by Fama (1980).

Exchange Rate to USD is a control variable, adjusted to the original exchange rate and the end of the sample's fiscal year using the middle rate (between buying and selling rates). A prior study conducted by **Setiawanta et al.** (2020) has shown that the exchange rate has an impact on firm value.

3. RESULTS

Each construct has a formative (measurable) indicator which is a regression relationship from indicator to construct, so the way to evaluate the outer model is to look at the indicator weight (SE) value and the t-statistical significance value (P Value). Based on Table 1 of the weight indicators below, it can be seen that all the marginal indicators (> 0.05) of the test results include LEV, FSIZE, IR, EQ, FV, PROF, GROW, AGE, BS, BI, BA, SP and EQ*IR shows an average weight indicator value of 0.057 above the minimum limit (0.05) and all indicators are valid with significant P-Value <0.001 equals 1%). So it can be concluded that all the formative indicators of this research model are valid based on marginal weight indicator values (above the minimum limit) and significance <0.001 (1%)

Table 1. Indicator weight

Variable	Standard Error (SE)	P Value
Leverage (LEV)	0.057	<0.001
Firm Size (FSIZE)	0.057	<0.001
Integrated Reporting (IR)	0.057	<0.001
Earning Quality (EQ)	0.057	<0.001
Firm Value (FV)	0.057	<0.001
Profitability (PROF)	0.057	<0.001
Growth (GROW)	0.057	<0.001
Age (AGE)	0.057	<0.001
Board Size (BS)	0.057	<0.001
Board Independence (BI)	0.057	<0.001
Board Activity (BA)	0.057	<0.001
Stakeholder Pressure (SP)	0.057	<0.001
Earnings Quality*Integrated Reporting (EQ*IR)	0.057	<0.001

Inner model test results from Table 2 show, in general, that the model used in this study meets all model fit indices. The test results of various model fit indicators are the p-value of each indicator, Average R-squared, Adj. Average R-squared (AARS), and Average Path Coefficient (APC) have significance below 0.05. The Average block Variance Inflation (AVIF) and Average Full collinearity Variance Inflation (AFVIV) values meet the specified requirements below 3.3. These results

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Table 2. Structural model test

No	Model fit indicator	Criteria	Test result		Conclusion
			Index	P value	
1	Average R-Squared	P-value <0,05	0.293	<0.001	Accepted
2	Adj. Average R-Squared (AARS)	P-value <0,05	0.271	<0.001	Accepted
3	Average Path Coefficient (APC)	P-value <0,05	0.162	0.004	Accepted
4	Average block Variance Inflation (AVIF)	≤ 5, ideal ≤ 3,3	1.135	–	Accepted
5	Average Full collinearity Variance Inflation (AFVIF)	≤ 5, ideal ≤ 3,3	1.683	–	Accepted
6	Q-Squared	Weak ≥ 0,02; Middle≥ 0,15; Strong ≥ 0,35	0,472	–	Strong
7	Tenenhaus GoF	Small ≥ 0,1; Medium ≥ 0,25; Large ≥ 0,36	0.542	–	Large
8	Sympson's Paradox Ratio (SPR)	Ideal = 1, ≥ 0,7	0.750	–	Accepted
9	R-Squared Contribution Ratio (RSCR)	Ideal = 1, ≥ 0,7	0.905	–	Accepted
10	Statistical Suppression Ratio (SSR)	≥ 0,7	1.000	–	Accepted
11	Non-Linear Bivariate Causality Direction Ratio (NLBCDR)	≥ 0,7	0.792	–	Accepted

indicate that there is no multicollinearity problem. The Q-squared value of 0.472 > 0 indicates the model has predictive relevance in the Strong category. The resulting Goodness of Fit (GoF) is 0.542 > 0.36, which indicates the Fit Model is very good. The Sympson's Paradox Ratio (SPR), R-squared contribution Ratio (RSCR), and Statistical Suppression Ratio (SSR) indices produce values above 0.7, which indicates that there is no causality problem in the model. The Non-Linear Bivariate Causality Direction Ratio (NLBCDR) index produces a value of 0.792 > 0.7, meaning it meets the requirements.

This study has completed the entire inner model test and proceeded to hypothesis testing (see Figure 2 and Table 3). By using a significance level of 10%, out of the 11 hypotheses proposed in this study, the results indicate that 7 hypotheses are accepted, leverage (LEV), size (FSIZE), growth

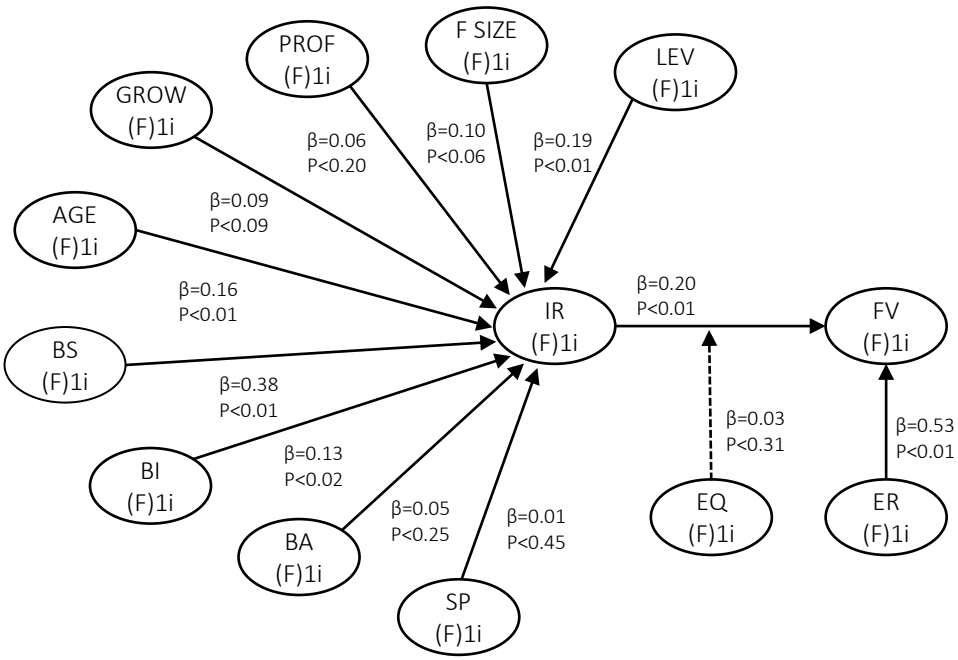

Figure 2. Research hypothesis test results

Table 3. Summary of P-value and path coefficient results

No.	Hypotheses	Hypotheses Test results		Conclusion
		Path coefficient	p-value	
1	LEV → IR	0,192	0,002	Significant influence
2	FSIZE → IR	−0,103	0,065	Significant influence
3	PROF → IR	0,057	0,201	No influence
4	GROW → IR	−0,092	0,090	Significant influence
5	AGE → IR	0,164	0,008	Significant influence
6	BS → IR	0,382	<0,001	Significant influence
7	BI → IR	−0,134	0,024	Significant influence
8	BA → IR	0,046	0,252	No influence
9	SP → IR	0,008	0,455	No influence
10	IR → FV	0,131	0,027	Significant influence
11	EQ*IR → FV	0,036	0,300	No influence

(GROW), age (AGE), board size (BS), board independent (BI) have a significant influence on integrated reporting (IR), and integrated reporting (IR) has a significant influence on firm value (FV). The remaining four hypotheses are rejected: profitability (PROF), board activity (BA), and stakeholder pressure (SP) have no influence on integrated reporting. Earnings quality (EQ) has not moderated the influence of integrated reporting on firm value.

4. DISCUSSION

The results indicate that leverage has a positive influence on integrated reporting. Companies can invest more time, energy, and funds in the Integrated Reporting process with sufficient resources. This allows companies to develop more comprehensive reporting systems, expand the scope of presented information, and enhance the report quality. Companies with a high level of leverage indicate a capital structure funded by debt. This debt is obtained from investors who have confidence that the company's performance is good so that it can pay debts. Investors look at company performance not only in income statements but also in integrated reporting. Therefore, companies that have high leverage tend to present integrated reporting. The results of this study support previous research conducted by Grassmann et al. (2019) and Vitolla et al. (2020).

Firm size has a negative influence on integrated reporting. Larger companies tend to have complex organizational structures and intricate decision-making processes. This can complicate the coordination and integration of financial and non-financial information required for implementing integrated reporting. Companies can increase public and investor trust through financing contributions that generate profits. Larger companies can also improve the community's economy by being eco-friendly-oriented. Organizational complexity and bureaucracy can be obstacles to effectively implementing integrated reporting. The results of this study were supported by Dumay et al. (2016).

Profitability does not have a significant influence on integrated reporting. A company's profitability does not significantly affect the implementation of sustainability and corporate social responsibility aspects in integrated reporting. Profitability tends to focus more on financial performance and company earnings. In contrast, integrated reporting aims to integrate sustainability aspects, including social, environmental, and good governance, with financial aspects in a company's reports. The results of this study are supported by Mediaty & Pratiwi (2023), who found that profitability does not have a significant influence on sustainability Reporting. These findings are inconsistent with the research conducted by Menicucci (2018), Grassmann et al. (2019), and Vitolla et al. (2020), which indicated a positive influence of profitability on integrated reporting.

Growth has a negative influence on integrated reporting. This suggests that low or stagnant growth rates can hinder companies from paying attention to sustainability and corporate social

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responsibility aspects in integrated reporting. When companies decline growth, their primary focus is on operational sustainability and financial recovery. Companies tend to reduce their focus on sustainability and social responsibility. Using resources has become more centered on business recovery rather than developing comprehensive integrated reporting practices. The results of this study are inconsistent with Frias-Aceituno et al. (2014), who showed a positive influence of growth on integrated reporting.

Age has a positive influence on integrated reporting. Older companies tend to pay more attention to sustainability and corporate social responsibility in integrated reporting. Companies that have been in operation for a longer period generally have established experience and knowledge in managing sustainability and social responsibility issues. Companies can benefit from the learning and experience gained throughout history to develop best practices and integrate sustainability into the integrated reporting framework. Increasing age encourages companies to have a deeper understanding of the complexity and challenges associated with sustainability and effective ways to address them. The results of this study are supported by Pillai and Seetah (2022) and Senani et al. (2022).

Board size has a positive influence on integrated reporting. A larger board of directors can benefit from the implementation of integrated reporting practices. The board of directors of companies has the potential to represent various perspectives and interests of diverse stakeholders. This can enrich discussions and decision-making related to integrated reporting practices, ensuring that various viewpoints and sustainability aspects. The results of this study are supported by Ioannou and Serafeim (2015) and Mawardani and Harymawan (2021) who showed a positive influence of board size on integrated reporting. These findings are inconsistent with the research conducted by Fasan and Mio (2017), which found a negative influence of board size on integrated reporting.

Board independence has a negative influence on integrated reporting. Independent board members tend to focus more on their oversight responsibilities and fulfilling their obligations to shareholders rather than on sustainability issues, which are the primary focus of integrated reporting. Their lack of involvement and commitment to sustainability issues can reduce the priority and attention given to integrated reporting practices, hindering their development. Independent board members may have affiliations with other companies or personal interests that could potentially lead to conflicts of interest with the implementation of integrated reporting The results of this study are supported by Mawardani and Harymawan (2021) and Omran et al. (2021).

Board activity does not have a significant influence on integrated reporting. The level of board activity is not inherently related to the board's ability to promote integrated reporting. Board activity is more related to the board's duties and responsibilities in overseeing company management, making strategic decisions, and safeguarding shareholder interests. The results of this study are supported by Vitolla et al. (2020).

Stakeholder pressure does not have a significant influence on integrated reporting. Pressure from various stakeholders does not correlate with a company's attention and commitment to sustainability and social responsibility in integrated reporting. While pressure from stakeholders can influence a company's decisions and actions, it does not guarantee that such pressure will directly impact the adoption of integrated reporting practices. Integrated reporting is not solely a result of external pressure but is also an internal initiative of the company to disclose information related to sustainability and social responsibility. The results of this study are supported by Gerwanski et al. (2019).

Integrated reporting has a positive influence on firm value. Effective implementation of integrated reporting can significantly contribute to an increase in firm value. Integrated reporting provides more comprehensive and integrated information about a company's financial and non-financial performance, including sustainability and social responsibility issues. It will enhance the transparency and accountability of the company to stakeholders. Stakeholders have greater

confidence in the company's performance and can contribute to an increase in the company's value. The results of this study are supported by Conway (2019), El-Deeb (2019), Flores et al. (2019), and Komar et al. (2020).

The analysis results indicate that earnings quality cannot moderate the influence of integrated reporting on firm value. Earning quality is related to the reliability of earnings. Earning quality is more inclined toward financial aspects, so it raises the argument that non-financial factors disclosed in integrated reporting are not significantly influenced by earning quality. Stakeholders, especially investors, tend to evaluate firm value based on more traditional factors such as financial performance and growth potential. Although earnings quality can be an important consideration in financial analysis, its impact on the perception of firm value cannot be directly associated with integrated reporting practices. The results of this study are supported by Frias-Aceituno et al. (2014) and Obeng et al. (2020).

CONCLUSION

This study aims to investigate the factors that influence integrated reporting and determine its impact on company value by analyzing earnings quality as a moderator. The leverage affected integrated reporting, with companies having high leverage being more inclined to implement it to provide a better understanding of financial and sustainability performance. However, as the size of a company increases, the likelihood of adopting integrated reporting decreases due to organizational complexity and decision-making processes. Older companies and those with large boards of directors are more likely to adopt integrated reporting, but the proportion of independent board members cannot influence this decision. Companies need to realize that integrated reporting encompasses sustainability and social aspects and integrates them with financial aspects to enhance transparency and understanding. This can influence investors' and markets' perceptions of a company's value. Several sample energy sector companies from Southeast Asian countries have not presented complete company financial reports on each stock exchange's website or in Internet financial reporting, making data collection difficult as the limitation of the study. Integrated reporting is not only related to financial measurement and good corporate governance. Integrated reporting is also related to legal aspects and culture that were not explored and analyzed. The study suggests that future research could consider other factors such as ownership structure, civil law, legal enforcement, investor protection, and culture.

AUTHOR CONTRIBUTIONS

Conceptualization: Dwi Prastowo Darminto, Humaira Dinda Mulyadi.
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APPENDIX A

Table A1. Observed company data

No.	Code	Company	Country
1	**ADRO**	**Adaro Energy Indonesia Tbk.**	**Indonesia**
2	AKRA	AKR Corporindo Tbk.	Indonesia
3	BSSR	Baramulti Suksessarana Tbk.	Indonesia
4	DEWA	Darma Henwa Tbk	Indonesia
5	ELSA	Elnusa Tbk.	Indonesia
6	ITMG	Indo Tambangraya Megah Tbk.	Indonesia
7	MYOH	Samindo Resources Tbk.	Indonesia
8	PTBA	Bukit Asam Tbk.	Indonesia
9	RAJA	Rukun Raharja Tbk.	Indonesia
10	TOBA	TBS Energi Utama Tbk.	Indonesia
11	Hai Leck	Hai Leck Holdings Ltd	Singapore
12	Sinostar Pec	Sinostar Pec Holding Ltd	Singapore
13	DELEUM	Deleum Berhad	Malaysia
14	DIALOG	Dialog Group Berhad	Malaysia
15	YINSON	Yinson Holdings Berhad	Malaysia
16	CKP	CK Power Public Company Limited	Thailand
17	EA	Energy Absolute Public Company Limited	Thailand
18	EASTW	Eastern Water Resources Development andManagement Public Company Limited	Thailand
19	EGCO	Electricity Generating Public Company Limited	Thailand
20	PTG	PTG Energy Public Company Limited	Thailand
21	PTT	PTT Public Company Limited	Thailand
22	RATCH	RATCH Group Public Company Limited	Thailand
23	SCG	Sahacogen (Chonburi) Public Company Limited	Thailand
24	SPCG	Spcg Public Company Limited	Thailand
25	NIKL	Nickel Asia Corporation	Philipina
26	SCC	Semirara Mining and Power Corporation	Philipina

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