

**AUDIT COMMITTEE AND INTEGRATED REPORTING QUALITY:
EMPIRICAL EVIDENCE FROM AN EMERGING MARKET****Mohd Ariff A.H., Fayad A.A.S., Sawandi N.,
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Abstract: This study aims to investigate the influence of audit committees on integrated reporting quality (IRQ). The characteristics of the audit committee that are taken into consideration include its size, independence, financial expertise, meetings, and audit committee chair expertise. A total sample of 64 companies was considered from 2017 until 2020, which resulted in the generation of 173 integrated reports. IRQ and audit committee data are hand-collected from the integrated reports using the content analysis method. The regression analysis using the Panel Corrected Standard Errors shows that audit committee size, independence, and chair expertise are positively related to integrated reporting quality. Meanwhile, audit committee meetings are found to be negatively associated with integrated reporting quality. The findings of this study contribute to the existing body of literature in a variety of different ways, and they add to the vigorous discussion about integrated reporting that is taking place in academia and among practitioners. In addition, it is the first study in Malaysia to analyse such a link between audit committee and IRQ.

Key words: audit committee, integrated reporting, integrated reporting quality, agency theory, Malaysia

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Introduction

In recent times, the new method of corporate reporting known as "integrated reporting" has captured the interest of government regulators, professional accountants, and academics. In addition, several calls have been made for a modern business reporting model that would help to improve corporate reporting and address the knowledge needs of the business stakeholders. Conventional corporate reporting was criticized for failing to assist stakeholders with more detailed information, especially about environmental and societal impacts (Gray et al., 2014; Pistoni et al., 2018; Hamad et al., 2020). In corporate reporting, the most recent development is a concept known as integrated reporting (IR). The financial and non-financial information of a company, as well as its impact on the environment, society, and governance, are represented and clarified in an integrated report. It provides a straightforward and comprehensive overview of the resources, performance, opportunities, and risks the firm had in creating value for the company (IIRC, 2021). IR provides the management's view and initiatives on governance, social, and economic issues to investors and stakeholders (Brown and Dillard, 2014; Churet and Eccles, 2014; Darus et al., 2019; Mohammed et al., 2020; Fayad et al., 2023). Additionally, IR shows ties between a company's environmental, societal, and economic aspects, which leads to better reporting (Stubbs and Higgins, 2014; Adhariani and de Villiers, 2019; Vitolla et al., 2020).

IR has also expanded significantly in Malaysia in order to keep up with global corporate reporting trends. The International Integrated Reporting Council (IIRC) supported Malaysia's efforts to incorporate IR into its corporate reporting landscape and governance transformation to expedite the transition from developing country into a developed economy (Mohammed et al., 2020). Likewise, the Securities Commission of Malaysia (SC) suggested establishing the Integrated Reporting Steering Committee (IRSC), incorporating IR into the corporate governance road plan for 2011, and forming a task group to research the development of IR in Malaysia (Pirzada et al., 2023; Singh et al., 2019). Also, Practice 12.2 and Practice 11.2 of the Malaysian Code on Corporate Governance (MCCG) (Malaysian Securities Commission, 2017; 2021) recommended large companies implement IR. In addition, the Malaysian Institute of Accountants (MIA), the country's highest accounting body, is focused on promoting IR as high-quality reporting to boost Malaysian businesses' competitiveness internationally, and it is at the leading edge of this movement (Darus et al., 2019). Nonetheless, implementing IR practices in Malaysia remains optional at this stage (Mohammed et al., 2020; Qaderi et al., 2021). Both the degree of IR practices and the level of expertise in the field of IR remain low (Adhariani and de Villiers, 2019; Mohammed et al., 2020). Prior research has

delved further into the topic of IR adoption (Ghani et al., 2018; Darus et al., 2019; Masduki and Mohd Zaid, 2019; Mohammed et al., 2020). Nevertheless, the study of integrated reporting quality (IRQ) in Malaysia is limited. There is a significant lack of understanding concerning the elements that contribute to the high quality of integrated reporting in Malaysia; as a result, it is essential to examine these factors. Prior studies showed that audit committee (AC) attributes affect corporate reporting quality due to their crucial role in monitoring and internal control system of a company (Alzeban, 2020; Eriandani, Pirzada, and Kurniawan, 2020; Hasan et al., 2020). Thus, this study aims to examine how AC attributes affect the quality of IR.

Literature Review and Hypothesis Development

Audit Committee Size and Integrated Reporting Quality

Audit committee (AC) size is described as among the crucial features of the AC that enhance its ability to conduct monitoring duties (Li et al., 2012). Moreover, the extent of disclosure may be correlated with the size of the AC, supporting the idea that a more diverse pool of AC members will enhance the quality of the information revealed and substantially influence the corporate reporting quality (Akhtaruddin et al., 2009). According to agency theory, AC members are assigned by the board of directors to act through effective monitoring mechanisms to improve the interests of all stakeholders. As a result, AC size would be an essential monitoring instrument for reducing agency costs and increasing accountability and disclosure (Al-Moataz and Hussainey, 2013).

Prior research has offered empirical proof of the benefits of the AC's size in terms of enhancing corporate disclosure (Alzeban, 2020). For example, al-Moataz and Hussainey (2012) discovered a correlation between the size of AC and the degree of corporate disclosures. Furthermore, Agyei-mensah (2019) discovered a positive correlation between AC size and the quality of company voluntary disclosure. According to Hasan et al. (2020), large AC effectively perform their supervisory role, which in turn leads to better quality. Raimo et al. (2020) indicated that the size of the AC positively influences the IRQ. However, Oussii and Boulila Taktak (2017) found that AC size has a negative effect on financial reporting timeliness in Tunisian listed companies.

Since the IRQ reflects reporting quality, it is expected the larger the size of the AC, the more positively it affects the IRQ. Thus, the next hypothesis is formulated:

H1: There is a positive relationship between audit committee size and integrated reporting quality.

Audit Committee Independence and Integrated Reporting Quality

Independence makes the AC more independent and freer from all-powerful interests (Yatim, 2009). Therefore, independent AC results in more productive supervision, as claimed by agency theory (Song and Windram, 2004). Based on agency theory, effective management control may be guided by the independence of the AC members (Fama and Jensen, 1983a). This is emphasized by the fact that the members of the independent AC have no personal or economic connection with the

management and are more able to operate independently and professionally, free from management control (Bédard and Gendron, 2010). In light of this, AC independence will ensure the accountability and consistency of the financial reporting process, reducing the asymmetry of details (Allegrini and Greco, 2013; Li et al., 2012).

Several studies have attempted to investigate the relationship between AC independence and financial reporting as well as financial performance with mixed results. For instance, Beasley et al. (2010) disclosed that financial statement manipulation could be faced by a corporation with more freedom from the AC. In the context of Malaysia, Puasa et al. (2014) found that AC independence positively influences financial reporting quality. Likewise, Zaman et al. (2021) discovered that the audit independent member is positively associated with the sustainability assurance quality. Adegboye et al. (2020) also found a strong correlation between sustainability reporting and audit-independent members. In a study on IR, the results of Raimo et al. (2020) showed that there is a positive influence of AC independence on IRQ. However, Ahmed Haji and Anifowose (2016) revealed that audit committee independence does not affect the IR practice.

With regard to IRQ, the higher degree of independence of the AC, by strengthening the supervisory and oversight roles of the AC, will benefit the adequacy of the information gathering and representation process in an integrated and high-quality manner. Thus, the hypothesis is formulated as follows:

H2: There is a positive relationship between audit committee independence and integrated reporting quality.

Audit Committee Financial Expertise and Integrated Reporting Quality

The financial experts participating in the AC might create an effective system of internal controls, therefore leading to improved financial reporting (Sharma et al., 2009). According to agency theory, AC, with experience and skills in finance, will minimize the agency's problems by enhancing the supervision function of the AC (Fama and Jensen, 1983). Thus, the expertise of an AC helps AC to be better functional in addition to monitoring financial statements, resulting in lower agency costs (Ahmed Haji and Anifowose, 2016).

According to Abernathy et al. (2014), there is a positive correlation between the quality of financial reporting and the proportion of AC members who possess legal competence. In other words, the AC members have the necessary qualifications to help supervise the management effectively and monitor the preparation of the financial statements (Badolato et al., 2014). On the other hand, if the AC does not possess knowledge and expertise, it reduces its ability to deal with issues and influences the quality of financial reporting (Nelwan and Tansuria, 2019). The AC is crucial to the IRQ, which will have the competence and resources to maintain a good degree of corporate information disclosure (Raimo et al., 2020). IR calls for integrating financial and non-financial data in a single, interconnected collection. In this respect, including a financial expert on the AC committee improves the committee's supervision and oversight roles for disclosure procedures. As a result,

the AC's financial expertise is anticipated to improve IRQ. Thus, the following hypothesis is proposed:

H3: There is a positive relationship between audit committee financial expertise and integrated reporting quality.

Audit Committee Meetings and Integrated Reporting Quality

More frequent meetings assist in improving the AC's functions and ensuring that it successfully carries out its oversight obligations, minimizing agency issues and the information asymmetry between not only shareholders and management but also between major and minority shareholders (Allegrini and Greco, 2013; Katmon and Farooque, 2017). Agency theory assumes that frequent meetings among AC members make them highly informed and alert about key financial and accounting issues in the company (Moumen et al., 2013; Raghunandan and Rama, 2007).

Felo and Solieri (2009) argue that firms with a higher AC meeting frequency play an effective role in improving the quality of financial reporting compared with firms with less AC meeting frequency. Similarly, Al-Maghzom et al. (2016) found that frequent AC meetings can effectively indicate the quality of information disclosed. When the AC meetings are regular, the AC will probably be more able to comply with its responsibilities in monitoring the financial reporting. Some studies, on the other hand, have revealed different findings. For example, Ismail et al. (2008) discovered that the frequency of AC meetings had no meaningful connection with the quality of corporate reporting. Another study by Felo and Solieri (2009) also revealed that frequent AC meetings had little effect on financial statements. However, the findings of Raimo et al. (2020) recently demonstrated that the AC meeting was positive on IRQ.

The current study predicts that more frequent AC meetings will result in better reporting quality and enhanced monitoring functions based on agency theory and the prior discussion. As a result, the following hypothesis is put forth:

H4: There is a positive relationship between audit committee meetings and integrated reporting quality.

Audit Committee Chair's Accounting Expertise and Integrated Reporting Quality

Baatwah and Stewart (2019) stated that it is the duty of the Audit Committee Chairperson (ACC) to ensure that information is appropriately conveyed to the committee and effective working relationship between the AC and other participants, such as management and both internal and external auditors. Schmidt and Wilkins (2013), the chair of the AC assumes the overall accountability for the supervision of financial reporting and is the one who is held accountable for any failures in financial reporting. According to the agency theory, directors with higher education and more skills function effectively in monitoring roles (Jensen and Meckling, 1976; Pfeffer and Salancik, 2003).

Previous studies support the potential role of AC accounting expertise in earnings management. For instance, Al-absy et al. (2019) found that the audit chairman with financial expertise had a negative relationship with earning management. Farber et al. (2018) indicated that there is a significant correlation between analyst and AC

accounting expertise. In addition, they discovered that knowledge in accounting by AC is connected with lower liquidity risk and higher trading volume. Furthermore, they argued that knowledge of AC accounting improves both the quality of financial reporting and the information environment of firms.

IR requires more skills to enhance the process of adoption. Thus, an ACC with accounting knowledge is expected to be more effective in monitoring IR than ACC without accounting expertise. As a result, the ACC expertise is expected to enhance the level of IRQ based on prior discussions. Thus, the following hypothesis is proposed.

H5: There is a positive relationship between Audit Committee Chair's accounting expertise and integrated reporting quality.

Research Methodology

This study initially includes all 915 companies publicly listed on Bursa Malaysia from 2017 until 2020. The period was chosen because the Malaysian Corporate Governance Code (MCCG) was revised in 2017 and 2020, encouraging large companies to prepare IR based on global standards (Malaysian Securities Commission, 2017; 2021). The sample is refined by identifying integrated reporting adopters, which involves a two-step process. First, we included companies self-declaring integrated reporting adoption in their corporate governance reports (under "Practice 11.2") and in their financial reports. In the second step, we incorporated companies that adhered to the International Integrated Reporting Framework from the International Integrated Reporting Council (IIRC), resulting in 173 observations involving 64 companies.

Our dependent variable, IRQ, is challenging to measure as integrated reporting lacks inherent characteristics. It is crucial not to mistake quantity for quality. Quality measurement should not solely focus on content, considering that published documents may be incomplete. In this study, IRQ is assessed using the Pistoni et al. (2018) scoreboard. This method has several merits. First, it encompasses both financial and non-financial data. Second, it evaluates more than just content quality. Third, it covers IR concepts and elements. Specifically, this scoreboard explicitly includes four areas to evaluate IR quality, i.e. background, assurance and reliability, content, and form (Vitolla et al., 2019; Filippo et al., 2020; Songini et al., 2021). Table 1 below shows the items assessed for each area in IR and the scoring method applied to determine IRQ. Total score is obtained by adding up the scores of each area ranging from 0 to 75, with higher quality represented by a higher total score (Pistoni et al., 2018).

Table 1. Integrated Reporting Scoreboard

Area	Items assessed	Scoring range
Background	Objectives, motivations behind IR, manager responsibilities, consumers, title, compliance with disclosure, and CEO commitment	0 (absence of all items) and 7 (presence of all items)
Assurance and reliability	Internal audit reports, third-party verification, and awards received by the company for IR practices	0 (absence of all items) and 3 (presence of all items)
Content	Organizational overview and external environment, business model, risks and opportunities, strategy and resource allocation, governance, performance, outlook, basis of presentation, capital, and value creation process	0 (very low quality) and 5 (very high quality)
Form	Accessibility, number of pages, and readability and clarity	0 (very low quality) and 5 (very high quality)

Next, the measurement for independent variables and control variables of the study are summarized in Table 2 below.

Table 2. Measurement of Independent Variables

Variables	Acronym	Measurement
Audit Committee Size	ACZI	The number of directors on the audit committee
Audit Committee Independent	ACIND	The proportion of independent directors on the audit committee to total audit committee members
Audit Committee Financial Expertise	ACEX	Number of financial experts to total size
Audit Committee Meeting	ACMEE	The number of audit committee meetings each year
Audit Committee Chair Accounting Expertise	ACCEX	Dummy = 1, if the audit committee chair has a degree or professional qualification in accounting or auditing
Return on Assets	ROA	Ratio of net income to total assets
Return on Equity	ROE	Net income divided by total owners' equity.
Firm Age	FAG	The number of years between incorporation and the calendar year-end of each firm
Firm Size	FSZ	Firm size is the natural log of total assets at the beginning of the year

Research Results and Discussion

Table 3 presents the descriptive statistics (mean, standard deviation, minimum and maximum, Skewness and Kurtosis) for the dependent, independent, and control variables. The average value for IRQ is 54.37. Thus, on average, the sample companies in Malaysia have a considerably high level of IRQ. However, the low minimum value of 39 indicates a low level of IRQ, which is probably due to the lack of knowledge of IR among preparers (Adhariani and de Villiers, 2019; Mohammed et al., 2020). Moving to audit committee characteristics, the mean value for the AC size of 3.5 which indicates that, on average, a company has three members on their AC, which meets the Bursa Malaysia requirements and is consistent with other studies in Malaysia by Al-Rassas and Kamardin (2016) and Mohd Saleh et al. (2007). The average number of AC independent members is 84.9 per cent of members, consistent with Al-Rassas and Kamardin (2016).

Looking at AC members' financial expertise, the mean number of members with financial experience stands at 50%, indicating the presence of expertise in the audit committee. Our results are close to Al-Rassas and Kamardin (2016). The number of AC meetings held during the year is 6.68 times on average, showing a high audit activity. This result is due to the frequent meetings in 2020 due to the COVID-19

pandemic, where audit intensified their activity. Finally, the mean for audit committee chair with accounting expertise is 88%, which indicates that the majority of audit chair is accounting experts.

In terms of firm characteristics, the descriptive statistics suggest a wide amount of variation within the sample. The mean for ROA is 6.012 (minimum=-20.67, maximum=32.74) and for ROE, the mean is 15.485 (minimum=-15.08, maximum=100). At the same time, the firm age ranges from 6 to 173, with a mean of 42.092. Lastly, firm size ranges between 12.42 and 20.56, with a mean of 16.283.

Table 3. Descriptive Statistics of Variables

Variable	Obs.	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis
IRQ	173	54.37	4.515	39	60	-1.435	4.856
ACZI	173	3.549	.735	2	6	.491	3.049
ACIND	173	.849	.169	.333	1	-.611	2.383
ACEX	173	.500	.209	0	1	.219	3.225
ACMEE	173	6.676	3.339	3	21	2.175	7.783
ACCX	173	.884	.338	0	1	-1.943	6.437
ROA	173	6.012	7.874	-20.67	32.74	.961	5.497
ROE	173	15.485	26.12	-15.08	100.35	2.264	7.544
FAG	173	42.092	26.491	6	173	1.644	6.668
FSZ	173	16.283	1.64	12.425	20.568	.446	3.214

The selection of an appropriate model is contingent on a number of assumptions and examinations (Baltagi, 2013). An initial analysis using the Pesaran Cross-sectional Dependence (CD), Wooldridge test for autocorrelation, and Breusch–Pagan/Cook–Weisberg test for heteroscedasticity show cross-sectional dependence, serial correlation and heteroscedasticity issues are found in the data. Given these, ordinary least squares, fixed effect and random effect are unsuitable estimators because of their sensitivity, particularly regarding heteroscedasticity and serial correlation issues (Hoechle, 2007). To solve these issues, this study employed the Panel Corrected Standard Errors (PCSEs) used by previous scholars in such situations (Hategan, 2019; Rahman and Zahid, 2021). Table 4 summarizes the regression results.

Table 4. Prais-Winsten regression, correlated panels corrected standard errors

	Coef.	Std. Err.	t-value	p-value	Sig
IRQ					
ACZI	.975	.235	4.15	0	***
ACIND	2.723	.981	2.77	.006	***
ACEX	-1.456	.456	-3.19	.001	***
ACMEE	.028	.122	0.23	.816	
ACCX	1.328	.382	3.48	.001	***
ROA	.045	.058	0.77	.444	

ROE	-.026	.023	-1.10	.271	
FAG	-.031	.012	-2.67	.008	***
FSZ	.985	.287	3.44	.001	***
Constant	27.853	3.746	7.43	0	***
R-squared	0.906	Number of obs		173	
Chi-square	39.317	Prob > chi2		0.000	

Table 4 shows the regression results that test the relationship between the AC attributes and the IRQ. The adjusted R² has a value of 0.906, which shows that the model explains variations of 90.6% in the dependent variable.

We find a significant positive relationship ($\beta=.975$, $p<0.01$) between AC size and IRQ. This finding demonstrates that companies that have larger ACs are much more inclined to offer integrated reports that are of good quality. This could be due to large resources and knowledge among the big ACs, as proposed by the resource dependency theory, and the finding is consistent with the study by Raimo et al. (2020). Therefore, we accept the first hypothesis (H1), which predicts that the quality of IR will increase when the number of audit committees is higher.

With regards to the second hypothesis (H2), the finding shows a significant positive relationship ($\beta=2.723$, $p<0.01$) between independent AC members and IRQ. This is emphasized by the fact that the members of the independent AC have no personal or economic connection with the management and are more able to operate independently and professionally free from management control (Bédard and Gendron, 2010). This finding is also in line with Raimo et al. (2020), who indicated that the independence of the AC positively influences IRQ. Consequently, the acceptance of H2 is grounded in the reasonable expectation that the independence of the AC facilitates effective oversight in the preparation of quality IR.

Notably, with regards to our third hypothesis (H3), we find a statistically significant negative relationship ($\beta=-1.456$, $p<0.01$) between AC members possessing financial expertise and IRQ. Ideally, effective monitoring can be intensified by having knowledgeable AC members aligned with the agency theory, resulting in more accurate financial reporting and improving corporate reporting quality. However, knowledge and exposure to IR in Malaysia are still quite low (Mohammed et al., 2020). Based on our findings, we are compelled to reject H3; more presence of financial expertise among AC members does not improve the quality of IR. Although the financial expertise within the AC might facilitate effective monitoring and dissemination of information, the findings suggest that the presence of professional expertise among AC members does not necessarily result in higher quality in IR. Moving on to the fourth hypothesis (H4), we discover a positive coefficient but insignificant ($\beta=.028$, $p>0.10$) relationship between the number of AC meetings and IRQ. Thus, the results do not provide strong evidence despite the previous expectations that frequent AC meetings will enhance the board's effectiveness in monitoring and reporting roles as proposed by the agency theory. The quality of the

meeting may be more crucial than the quantity, which is why no significant relationship was observed between the number of AC meetings with IRQ, as found in a study by Ismail et al. (2008). Therefore, H4 is not supported. Finally, the coefficient of the AC chair with accounting expertise variable is positive and significant ($\beta=1.328$, $p<.001$), suggesting the existence of a relationship between the AC chair expertise and IRQ. As expected in the agency theory, an effective monitoring role of the board, including AC chair expertise, could enhance the reporting quality. Therefore, we can accept the fifth hypothesis (H5).

Conclusion

Numerous businesses have responded to mounting pressure to disclose comprehensive financial and non-financial information by issuing integrated reports. However, the crucial issue of disclosure quality remains underexplored by scholars and practitioners alike. Thus, this paper investigates factors influencing Integrated Reporting Quality (IRQ) concerning audit committee (AC) characteristics. Specifically, we examine the roles of five AC attributes, i.e., size, independence, financial expertise, number of meetings, and the AC chair's accounting expertise on the quality of IR. The authors follow the IR scoreboard by Pistoni et al. (2018) to assess IRQ. The analysis of the study encompasses 64 Malaysian companies listed on Bursa Malaysia from 2017 to 2020, comprising a total of 173 integrated reports. Using Panel Corrected Standard Errors (PCSEs), we assess the relationship between AC attributes and IRQ while controlling for ROA, ROE, firm age, and firm size. Our findings indicate a significant positive effect of AC size, AC independent members, and the AC chair with accounting expertise on IRQ. It is also found that AC meeting is negatively associated with IRQ.

However, the researchers do not find conclusive evidence that the presence of AC members with financial expertise influences IRQ. This paper makes substantial contributions to the IR literature on multiple fronts. First, it delves into an unexplored area by examining one corporate governance factor that influences IRQ. Second, it pinpoints key audit committee characteristics that impact the quality of IR, offering a foundation for future research. Third, it rigorously interprets these results through the lens of agency theory. Fourth, the paper enriches the ongoing scholarly discourse on IR in Malaysia, particularly in a voluntary reporting context. Lastly, it underscores the significance of AC members' understanding of IR, shedding light on their crucial role. The study's implications are twofold. Firstly, it provides actionable insights for companies and regulators, highlighting the vital role of specific audit committee characteristics in enhancing the quality of IR. This knowledge can guide organizations in strengthening their IR practices. Secondly, the study contributes to the broader discourse on voluntary IR, particularly within the Malaysian context. It underscores the need for awareness and training among audit committee members, ultimately influencing the overall effectiveness of IR within corporations. The study has notable limitations. First, potential subjectivity in measuring IRQ may persist, even though we took steps to enhance measurement reliability. The limited sample

size and selection could hinder result generalization to other firms. Expanding the analysis to a larger pool of integrated reports could mitigate this issue. Additionally, future research could explore alternative IRQ measurement approaches beyond the Pistoni et al. (2018) scoreboard. Furthermore, investigating the impact of board characteristics, CEO traits, chairman attributes, and ownership structure on integrated reporting quality in Malaysia could offer valuable insights. Lastly, extending the analysis beyond four years with a broader sample of integrated reports is advisable for a more comprehensive view.

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References

- Abernathy, J. L., Beyer, B., Masli, A. and Stefaniak, C., (2014). The association between characteristics of audit committee accounting experts, audit committee chairs, and financial reporting timeliness. *Advances in Accounting*, 30(2), 283–297.
- Adhariani, D., de Villiers, C., (2019). Integrated reporting: perspectives of corporate report preparers and other stakeholders. *Sustainability Accounting, Management and Policy Journal*, 10(1), 126–156.
- Ahmed Haji, A., Anifowose, M., (2016). Audit committee and integrated reporting practice: does internal assurance matter? *Managerial Auditing Journal*, 31(8–9), 915–948.
- Akhtaruddin, M, Haron, H., (2010). Board ownership, audit committees' effectiveness and corporate voluntary disclosures. *Asian Review of Accounting*, 18(1), 68–82.
- Akhtaruddin, Mohamed, Hossain, M., Hossain, M. and Yao, L., (2009). Corporate governance and voluntary disclosure in corporate annual reports of Malaysian listed firms. *Journal of Applied Management Accounting Research*, 7(1), 1–20.
- Alzaban, A., (2020). Influence of internal audit reporting line and implementing internal audit recommendations on financial reporting quality. *Meditari Accountancy Research*, 28(1), 26–50.
- Al-absy, M. S. M., Nor, K. and Ku, I., (2019). Audit committee chairman characteristics and earnings management. *Asia-Pacific Journal of Business Administration*, 11(4), 339–370.
- Al-Maghzom, A., Hussainey, K. and Aly, D., (2016). Corporate governance and risk disclosure: Evidence from Saudi Arabia. *Corporate Ownership and Control*, 13(2), 145–166.
- Al-Moataz, E., Hussainey, K., (2013). Determinants of Corporate Governance Disclosure in Saudi Corporations. *Journal of King Abdulaziz University-Economics and Administration*, 27(2), 430–411.
- Al-Rassas, A. H., Kamardin, H., (2016). Earnings quality and audit attributes in high concentrated ownership market. *Corporate Governance (Bingley)*, 16(2), 377–399.

- Allegrini, M., Greco, G., (2013). Corporate boards, audit committees and voluntary disclosure: Evidence from Italian Listed Companies. *Journal of Management and Governance*, 17(1), 187–216.
- Baatwah, S. R., Stewart, J., (2019). Audit committee chair accounting expertise and audit report timeliness The moderating effect of chair characteristics. *Asian Review of Accounting*, 27(2), 273–306.
- Badolato, P. G., Donelson, D. C. and Ege, M., (2014). Audit committee financial expertise and earnings management: The role of status. *Journal of Accounting and Economics*, 58(2–3), 208–230.
- Baltagi, B. H., Egger, P. and Pfaffermayr, M., (2013). A Generalized Spatial Panel Data Model with Random Effects. *Econometric Reviews*, 32(5–6), 650–685.
- Beasley, M. S., Carcello, J. V., Hermanson, D. R. and Lapedes, P. D., (2000). Fraudulent Financial Reporting in China: Consideration of Timing Traits and Corporate Governance Mechanisms. *Journal of Accounting Research*, 14(December), 441–454.
- Bédard, J., Gendron, Y., (2010). Strengthening the Financial Reporting System: Can Audit Committees Deliver? *International Journal of Auditing*, 14(2), 174–210.
- Brown, J., Dillard, J., (2014). Integrated reporting: On the need for broadening out and opening up. *Accounting, Auditing and Accountability Journal*, 27(7), 1120–1156.
- Churet, C., Eccles, R. G., (2014). Integrated Reporting, Quality of Management, and Financial Performance. *Journal of Applied Corporate Finance*, 26(1), 56–64.
- Darus, F., Safihie, S. F. M. and Yusoff, H., (2019). Propagating transparency and accountability through integrated reporting: An empirical insight from a developing country. *International Journal of Financial Research*, 10(5), 92–109.
- Dilling, P.F.A., Caykoylu, S., (2019). Determinants of Companies that Disclose High-Quality Integrated Reports. *Sustainability*, 11(13), 37–44.
- Eriandani, R., Pirzada, K. and Kurniawan, M. K., (2020). The role of auditor characteristics: Earnings management and audit committee effectiveness. *Entrepreneurship and Sustainability Issues*, 7(4), 3242–3252.
- Fama, Jensen., (1983). Agency Problems And Residual Claims. *The Journal of Law and Economics*, 26(2), 301–325.
- Farber, D. B., Huang, S. X. and Mauldin, E., (2018). Audit committee accounting expertise, analyst following, and market liquidity. *Journal of Accounting, Auditing and Finance*, 33(2), 174–199.
- Fayad, A. A. S., Mohd Ariff, A.H., Mohd, B. and Ooi, S. C., (2022). Dose board characteristics influence integrated reporting quality? Empirical evidence from an emerging market. *Cogent Economics and Finance*, 10(1).
- Felo, A. J., Solieri, S. A., (2009). Are all audit committee financial experts created equally? *International Journal of Disclosure and Governance*, 6(2), 150–166.
- Filippo, V., Raimo, N., Rubino, M. and Antonello, G., (2020). The determinants of integrated reporting quality in financial institutions. *Corporate Governance: The International Journal of Business in Society*, 20(3), 429–444.
- Gray, R., Brennan, A. and Malpas, J., (2014). New accounts: Towards a reframing of social accounting. *Accounting Forum*, 38(4), 258–273.
- Hamad, S., Draz, M. U. and Lai, F. W., (2020). The Impact of Corporate Governance and Sustainability Reporting on Integrated Reporting: A Conceptual Framework. *SAGE Open*, 10(2).

- Hasan, S., Kassim, A. A., Ali, M. and Hamid, A., (2020). The Impact of Audit Quality, Audit Committee and Financial Reporting Quality : Evidence from Malaysia. *International Journal of Economics and Financial Issues*, 10(5), 272–281.
- Hategan, C., (2019). The Romanian Family Businesses Philosophy for Performance and Sustainability. *Sustainability* 2019, 1–22.
- Hoechle, D., (2007). Robust standard errors for panel regressions with cross-sectional dependence. *Stata Journal*, 7(3), 281–312.
- IIRC., (2021). < IR > FRAMEWORK About the IIRC (Issue January). <https://integratedreporting.org/wp-content/uploads/2021/01/InternationalIntegratedReportingFramework.pdf>
- Ismail, H. Mohd. Iskandar, T. and Rahmat, M. M., (2008). Corporate reporting quality, audit committee and quality of audit. *Malaysian Accounting Review*, 7(1), 21–42.
- Jensen, M. C., Meckling, W. H., (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Katmon, N., Farooque, O. Al., (2017). Exploring the Impact of Internal Corporate Governance on the Relation Between Disclosure Quality and Earnings Management in the UK Listed Companies. *Journal of Business Ethics*, 142(2), 345–367.
- Li, J., Mangena, M. and Pike, R., (2012). The effect of audit committee characteristics on intellectual capital disclosure. *British Accounting Review*, 44(2), 98–110.
- Malaysian Securities Commission., (2017). Malaysian Code on Corporate Governance. In Malaysian Code on Corporate Governance (pp. 1–23). http://www.mia.org.my/new/downloads/circularsandresources/circulars/2012/21/MCCG_2012.pdf
- Malaysian Securities Commission., (2021). Malaysian Code on Corporate Governance. In Malaysian Code on Corporate Governance (pp. 1–23). http://www.mia.org.my/new/downloads/circularsandresources/circulars/2012/21/MCCG_2012.pdf
- Masduki, S. B., Mohd Zaid, M. H., (2019). Corporate Governance and Compliance of Integrated Reporting: Evidence from Malaysian Listed Companies. *Jurnal Intelek*, 14(2), 161–173.
- Mohammed, N. F., Kassim, C. F. C., Sutainim, N. A. and Amirrudin, M. S., (2020). Accountability through integrated reporting: The awareness and challenges in Malaysia. *Humanities and Social Sciences Letters*, 8(1), 123–132.
- Mohd Saleh, N., Mohd Iskandar, T. and Mohid Rahmat, M., (2007). Audit committee characteristics and earnings management: Evidence from Malaysia. *Asian Review of Accounting*, 15(2), 147–163.
- Moumen, N., Othman, H. B. and Hussainey, K., (2013). Board structure and informativeness of risk disclosure: Evidence from emerging markets. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.
- Nelwan, M. L., Tansuria, B. I., (2019). Audit Committee Characteristics and Earnings Management Practices. *Journal of Economics, Business and Accountancy Ventura*, 22(1), 85–97.
- Oussii, A. A., Boulila Taktak, N., (2017). Audit committee effectiveness and financial reporting timeliness: The case of Tunisian listed companies. *African Journal of Economic and Management Studies*, 9(1), 34–55.
- Pirzada, K., Ahmed, K. and Moens, G., (2023). Aligning Corporate Strategies with the Sustainable Development Goals. *Foresight and STI Governance*, 17(2), 5-7.

- Pistoni, A., Songini, L. and Bavagnoli, F., (2018). Integrated Reporting Quality: An Empirical Analysis. *Corporate Social Responsibility and Environmental Management*, 25(4), 489–507.
- Puasa, S., Fairuz, M., Salleh, M. and Ahmad, A., (2014). Audit Committee and Timeliness of Financial Reporting: Malaysian Public Listed Companies. *Middle-East Journal of Scientific Research*, 22(2), 162–175.
- Qaderi, S. A., Chandren, S. and Abdullah, Z., (2021). Integrated reporting disclosure in Malaysia: regulations and practice. *Journal of Financial Reporting and Accounting*, 21(3), 607-632.
- Raghunandan, K., Rama, D. V., (2007). Determinants of audit committee diligence. *Accounting Horizons*, 21(3), 265–279.
- Rahman, H. U., Zahid, M., (2021). Women directors and corporate performance: firm size and board monitoring as the least focused factors. *Gender in Management: An International Journal*, 36(5), 605–621.
- Raimo, N., Vitolla, F., Marrone, A. and Rubino, M., (2020). Do audit committee attributes influence integrated reporting quality? An agency theory viewpoint. *Business Strategy and the Environment*, 30(1), 522–534.
- Sharma, V., Naiker, V. and Lee, B., (2009). Determinants of Audit Committee Meeting Frequency: Evidence from a Voluntary Governance System. *Accounting Horizons*, 23(3), 254–263.
- Schmidt, J., Wilkins, M. S., (2013). Bringing Darkness to Light: The Influence of Auditor Quality and Audit Committee Expertise on the Timeliness of Financial Statement Restatement Disclosures. *Auditing: A Journal of Practice and Theory*, 32(1), 221–244.
- Singh, J., Sadiq, M. and Kaur, K., (2019). Integrated reporting: Challenges, benefits and the research agenda. *International Journal of Innovation, Creativity and Change*, 7(8), 1–16.
- Song, J., Windram, B., (2004). Benchmarking Audit Committee Effectiveness in the UK. *SSRN Electronic Journal*, 2(5), 195–205.
- Stubbs, W., Higgins, C., (2014). Integrated reporting and internal mechanisms of change. *Accounting, Auditing and Accountability Journal*, 27(7), 1068–1089.
- Vitolla, F., Raimo, N., Rubino, M. and Garzoni, A., (2019). How pressure from stakeholders affects integrated reporting quality. *Corporate Social Responsibility and Environmental Management*, 26(6), 1591-1606.
- Vitolla, F., Raimo, N., Marrone, A., & Rubino, M. (2020). The role of board of directors in intellectual capital disclosure after the advent of integrated reporting. *Corporate Social Responsibility and Environmental Management*, 27(5), 2188-2200.
- Yahya, F., Ghazali, Z. B., (2017). Effectiveness of board governance and dividend policy as alignment mechanisms to firm performance and CEO compensation. *Cogent Business and Management*, 6(1), 1398124.
- Yatim, P., (2009). Audit committee characteristics and risk management of Malaysian listed firms. *Malaysian Accounting Review*, 8(1), 19–36.
- Zaman, R., Farooq, M. B., Khalid, F. and Mahmood, Z., (2021). Examining the extent of and determinants for sustainability assurance quality: The role of audit committees. *Business Strategy and the Environment*, 30(7), 2887–2906.

ZESPÓŁ AUDYTOWY I JAKOŚĆ SPRAWOZDAWCZOŚCI ZINTEGROWANEJ: DOWODY EMPIRYCZNE Z RYNKU WSCHODZĄCEGO

Streszczenie : Niniejsze badanie ma na celu zbadanie wpływu zespołów audytowych na jakość zintegrowanej sprawozdawczości (IRQ). Cechy zespołu audytowego, które są brane pod uwagę, obejmują jego wielkość, niezależność, wiedzę finansową, spotkania i wiedzę przewodniczącego zespołu. Łączna próba 64 spółek była badana w przedziale czasu od 2017 do 2020 roku, co zaowocowało wygenerowaniem 173 zintegrowanych raportów. Dane dotyczące IRQ i zespołów audytowych zostały zebrane ręcznie ze zintegrowanych raportów przy użyciu metody analizy treści. Analiza regresji z wykorzystaniem błędów standardowych skorygowanych panelowo pokazuje, że wielkość zespołu audytowego, jego niezależność i doświadczenie przewodniczącego są pozytywnie powiązane z jakością zintegrowanej sprawozdawczości. Tymczasem spotkania zespołu audytowego są negatywnie powiązane z jakością zintegrowanej sprawozdawczości. Wyniki tego badania wnoszą wkład do istniejącej literatury na wiele różnych sposobów i stanowią uzupełnienie ożywionej dyskusji na temat zintegrowanej sprawozdawczości, która toczy się w środowisku akademickim i wśród praktyków. Ponadto jest to pierwsze badanie w Malezji, które analizuje taki związek między komitetem audytu a IRQ.

Słowa kluczowe: komitet audytu, sprawozdawczość zintegrowana, jakość sprawozdawczości zintegrowanej, teoria agencji, Malezja