INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN ECONOMICS & MANAGEMENT SCIENCES

OPEN ACCESS JOURNAL

Vol 14, Issue 1, (2025) E-ISSN: 2226-3624

The Impact of Audit Firm Industry Specialization on the Relationship between Integrated Reporting and Sustainability Performance: Conceptual Paper

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To Link this Article: http://dx.doi.org/10.6007/IJAREMS/v14-i1/24653 DOI:10.6007/IJAREMS/v14-i1/24653

Published Online: 22 February 2025

Abstract

The current study recognizes the importance of sustainability, so it selects two factors that have long been called for to achieve business success: integrated reporting and external auditor quality. Integrated reporting has emerged as a result of the ongoing efforts to integrate environmental, social and governance (ESG) disclosure into the traditional report. An audit firm's industry specialisation has long been considered a vital indicator of audit quality. Although integrated reporting and audit firm industry specializations are important according to the intended and desired goals, their impact is not well established, according to previous studies. Accordingly, this study recommends that future empirical studies verify the interactive effect of vital factors instead of verifying the impact of each factor individually. This study expects that the interactive effect of integrated reporting and audit firm industry specializations on sustainability will be strongly significant. In other words, this study expects that sustainability performance—whether financial sustainability performance or ESG performance—will be strongly enhanced in the presence of industry-specialist auditors supervising integrated reports.

Keywords: Integrated Reporting, Audit Firm Industry Specialization, Financial Sustainability Performance, ESG Sustainability Performance.

Introduction

In general, sustainability, under other names, has existed since ancient times and throughout the ages to this day through divine laws. Many sustainability rules have been established in Islam, including Zakat. Islam obligated the disbursement of a percentage of money according to certain conditions, taken from those who met them and spent on specific categories of society, including the poor and needy. In addition, Islam urged charity to spread the benefit among members of society, or what is known today in the sustainability business environment as shared value.

In the context of business, the main goal of companies was to maximise wealth according to traditional financial reports, which then evolved to create value. Value is not limited to shareholders only but includes all stakeholders, including society and the environment, which is known as the shared value opportunity (Spiliakos, 2018), resulting from the overlap of environmental, social and financial progress. Financial and non-financial sustainability performance are widely used terms to describe sustainability performance. Financial sustainability performance generates value for shareholders, while ESG sustainability performance generates value for all other stakeholders, including society and the environment. In other words, shareholder value was an indicator of business success for the period before the emergence of sustainability indicators based on creating value for all stakeholders. Then, value for stakeholders, including society and the environment, has become an essential indicator for measuring the extent of business success (Miller, 2020). In short, the function of corporations has transitioned from generating shareholder value to producing shared value for all stakeholders in recent years (Al-Nohood et al., 2025; Al Sanasleh et al., 2025a, 2025b).

Financial sustainability performance is the paramount and widely recognised aspect of sustainability performance, serving as the foundation of business sustainability. The primary objective function of any business entity is to attain economic performance by generating financial returns and creating value for shareholders. Financial sustainability disclosure encompasses any financial information that pertains to the profitability and expansion of business entities. Historically, businesses have emphasised profit maximization (Rezaee & Rezaee, 2021). Key performance indicators of financial sustainability include reported earnings, cash flows, the return on assets, and the return on investment.

Environmental sustainability performance is founded on the fundamental principle of bequeathing an improved environment to future generations (Rezaee & Rezaee, 2021). Stakeholders anticipate that business organisations will furnish clearer and more supplementary information than what is mandated by law. Investor interest in environmental sustainability performance is rising due to heightened concerns regarding climate change and global warming (Mansour, Al Zobi, Altawalbeh, et al., 2024; Mansour, Saleh, et al., 2024). The environmental sustainability performance dimension includes enhancing air and water quality in the property and its community; improving the work environment; addressing climate change; and reducing an organization’s carbon footprint. Social sustainability performance evaluates the enhancement of positive societal impacts and the reduction of negative impacts, as well as the effectiveness of a company in implementing its social objectives (Rezaee & Rezaee, 2021). It entails actualizing the company’s social purpose and harmonizing it with societal interests. It must be associated with the presence of corporate policies primarily focused on community service to enhance social conditions. Social sustainability performance indicators include community support, educational assistance, philanthropic contributions, and housing support for low-income individuals. Finally, corporate governance sustainability performance reflects the extent to which corporate governance participants are able to fulfill their responsibilities to manage the entity (Al-Nohood et al., 2024a, 2024b; Mansour, Al Zobi, Saleh, et al., 2024), each within its jurisdiction, whether executive or supervisory, to enhance investor confidence in financial reporting, promote economic stability, and create value over time for all stakeholders.

Legislative and regulatory bodies have shown increasing interest in business disclosures of sustainability based on the last three types of sustainability, namely ESG, as companies are seen as creating value for all stakeholders. So, most companies have focused on sustainable performance based on creating value for all stakeholders. A recent McKinsey survey found that 70% of people who answered said that their companies have formal sustainability governance (Spiliakos, 2018). A sustainable business strategy aims to take responsibility for and make a positive impact on sustainability, which can include ESG aspects. If this doesn't happen, harmful things like social injustice, environmental degradation, and conflicts of interest will spread (Spiliakos, 2018). Moreover, business leaders recognise the power of sustainable business strategies to drive their companies' success—not just by addressing the world's most pressing challenges. In light of the great importance of ESG sustainability performance as well as financial sustainability performance, sustainability can be considered a bird with two wings, one of which is financial performance and the another is ESG performance.

In light of the likely business success based on sustainability performance based on ESG sustainability performance as well as financial sustainability performance, legislative and regulatory bodies and companies have adopted policies that are likely to enhance sustainability performance. These policies include integrated reporting and corporate governance, including audit quality.

Integrated reporting is expected to play a significant role in future corporate reporting and in rebuilding investor confidence in public financial information. Trust in public company financial reporting has eroded in recent years (Rezaee et al., 2019). Traditional corporate reporting, based on historical financial information, focuses primarily on the financial dimension of sustainability performance. Integrated reporting provides an opportunity to move beyond this short-term focus on financial performance and enable companies to integrate financial and non-financial indicators to simultaneously demonstrate their governance, social benefit, environmental initiatives and financial value. Integrated reporting is a means for public companies to communicate their strategies, decisions and actions to create value through short-, medium- and long-term performance across all sustainability performance metrics to all stakeholders. Integrated reporting is a combination of financial and non-financial information. Non-financial information refers to sustainability reporting based on ESG factors. Therefore, the International Integrated Reporting Council (IIRC) says that integrated reporting improves financial performance and ESG performance. Previous empirical studies (e.g., Appiagyei & Donkor, 2024) confirm IIRC's claims that integrated reporting enhances sustainability performance.

In addition, Anifowose et al. (2020) revealed that, based on overall disclosure, integrated reporting capital has a significant positive effect on revenue growth as a measure of a company's sustainable value. They employed a quantitative approach to data analysis and mainly sourced secondary data from the integrated reports of 83 sampled companies from 2015 to 2018. Increased ESG scores are associated with the production of superior-quality reports (Conway, 2019). Because of this, she urges businesses to use integrated reporting because it's beneficial for them and for regulatory bodies to think about making it mandatory so that national social and environmental goals can be met.

Besides, Hsiao et al. (2022) asserted that voluntary adoption of IIRF is more probable for firms with established sustainability practices. These findings indicated that the IIRF represents an incremental innovation for sustainability rather than a radical transformation of management and reporting practices. A substantial correlation was observed between integrated reporting and superior ESG performance, along with increased earnings per share (Mans-Kemp & Van der Lugt, 2020). Omran et al. (2021) demonstrated a positive correlation between integrated reporting and corporate environmental performance. Pavlopoulos et al. (2019) showed the positive relation between firm performance and the quality of integrated reporting disclosure. Akisik and Gal (2020) demonstrate a substantial positive correlation between integrated reporting and various indicators of financial performance.

Furthermore, Rivera-Arrubla et al. (2016) contended that integrated reporting has come a long way in both theoretical frameworks and institutional initiatives around the world that deal with sustainability reporting and non-financial information. Gerwanski (2020) found that integrated reporting significantly reduces a firm's cost of debt. Pavlopoulos et al. (2017) claimed that companies that provide high-quality integrated reporting information tend to adopt more moderate earnings management techniques. Caglio et al. (2020) found that integrated reporting that is easier to read is linked to a higher market valuation, that is, to more stock liquidity. They also found that tone bias is linked to less variation in analysts' estimates. Using data from Compustat North America and the Global Reporting Initiative, Gal and Akisik (2020) showed a positive impact of integrated reporting and internal control systems on market value. Nevertheless, Camodeca et al. (2018) indicated that sustainability disclosure via integrated reporting does not influence market valuations. Maniora (2017) found that the level of ESG integration and economic and ESG performance are worse when integrated reporting is used instead of stand-alone ESG reporting.

Another important factor that has been linked to business success is the quality of the audit. This is because a good audit can find financial mistakes and misstatements, limit the risk, lower the cost of capital, and increase the quality of earnings and long-term performance (sustainability). Audit quality has several indicators, including the Big Four and industry-specialist auditors. The Big Four have been investigated in many studies to have an impact on business dimensions, both directly and indirectly (as a moderating variable). Industry-specialist auditors are a distinguishing factor of audit quality acknowledged by auditees and the broader community (Chen et al., 2005). Therefore, they are likely to play a vital role in strengthening the relationship between integrated reporting and sustainability performance. A differentiation strategy employed by audit firms is industry specialisation, which permits them to distinguish themselves from competitors by meeting client demands and allowing competition based on attributes beyond mere pricing (Habib, 2011). International Standards on Auditing (ISAs) 315 says that auditors should "identify and assess the risks of material misstatement through understanding the entity and its environment." This means that auditors need to know a lot about how the company runs its business. So, Cahan et al. (2008) said that when there are a lot of investment opportunities in a certain industry, specialist auditors spend a lot of money learning about it. This lets them offer a unique product and makes it hard for other audit firms to get into the market. Industry-specialist auditors are defined as the auditors who perform training and obtain practical experience in a specific field (Solomon et al., 1999). Put simply, auditors who have acquired a particular area of expertise are identified as industry specialists (Audousset-Coulier et al., 2016). Consequently, they are capable of offering their clients services that are both more efficient and of superior quality. Industry-specialist auditors play a vital role in overseeing the reporting process. Industry-specialist auditors may be able to restrain earnings management not only by auditing statements but also through their contact with internal corporate governance mechanisms, including the board of directors (Sun & Liu, 2012). Balsam et al. (2003) demonstrated that clients of industry specialists exhibited superior earnings quality compared to those of non-specialists. Clients of industry specialist auditors exhibit lower discretionary accruals and higher earnings response coefficients compared to clients of non-specialist auditors. DeBoskey and Jiang (2012) assert that industry specialisation serves a significant monitoring function by limiting management’s discretionary accounting choices. They indicated that auditor specialisation is more effective in mitigating potentially income-increasing earnings management. They also presented compelling evidence that industry specialisation restricts income smoothing. Carcello and Nagy (2004) observed a substantial inverse correlation between audit industry specialisation and client financial fraud.

Elaoud and Jarboui (2017) examined whether the effect of accounting information quality on investment efficiency is increasing or decreasing with the presence of the specialist auditor, i.e., how the auditor specialisation moderates the effect of accounting information quality on investment efficiency. They revealed that the accounting information quality is positively associated with investment efficiency for firms whose auditor is an industry specialist. Also, auditor specialisation helps greatly improve investment efficiency while reducing the underinvestment problem. Elaoud and Jarboui (2017) contend that, through substantial investments in information technology, specialised staff training, and extensive auditing experience, a specialist can develop a high level of industry expertise. This specialised knowledge allows auditors to provide superior audit services by reducing information asymmetry through their improved ability to detect significant anomalies.

Furthermore, the market’s perception of disclosure quality is higher for companies that engage industry specialist auditors, according to Almutairi et al. (2009). They argued that higher-quality audits should reduce information asymmetry more because they are better at finding and stopping accounting errors and misstatements than lower-quality audits. In short, audits serve as a mechanism to mitigate information asymmetry and related agency costs. Industry-specialist auditors ensure, as the prevailing market opinion suggests, more complete, relevant and reliable information (Almutairi et al., 2009). Dunn and Mayhew (2004) also discovered a positive correlation between the disclosure quality perceptions of analysts and the employment of an industry-specialist auditor.

This study contributes to the sustainability literature in several ways. First and foremost, a large number of previous studies have addressed financial sustainability performance. A fair number of previous studies have addressed ESG sustainability performance. What distinguishes this study is that it proposes to build a composite measure of sustainability. Second, earlier research has mostly looked at sustainability itself, whether it’s financial or ESG. This study wants to improve empirical research by looking into more factors that might affect sustainability performance, such as integrated reporting and auditors who are industry-specific. Third, in the social sciences, the methodology of integrating variables into models is common to improve and gain a better understanding of the causal relationship between variables. The interactive role of industry-specialist auditors has been measured with many financial accounting measures. However, to the best of the researcher's knowledge, the interactive role of this important characteristic with integrated reporting on sustainability has not been verified. In the future, it will be important to check how industry-specialist auditors affect the link between integrated reporting and sustainability. This will help us understand the cause-and-effect relationship between them better, especially since previous research on direct relationships was mixed and inconsistent. Defining the roles of both integrated reporting and industry-specialist auditors in sustainability performance may provide insights for legislators and policymakers to maintain, enhance or revise regulations and legislation that help create value for all stakeholders, including the environment and society.

Literature Review and Hypotheses Development

Interactive Effect of Integrated Reporting and Audit Firm Industry Specialization on Sustainability Performance

Sustainability performance is not limited to financial performance alone but also includes ESG sustainability performance. Sustainability performance with these factors aims to serve all stakeholders rather than just shareholders, for example, by protecting the environment from industrial waste (environment), providing services to the community (society) and meeting regulatory and legislative requirements (governance). Integrated reporting and industry-specialist auditors are likely to improve transparency and communication with stakeholders, which means enhancing sustainable performance. This study paves the way for more empirical research to check how these two factors (integrated reporting and industry-specialist auditors) work together to impact sustainability performance.

Recently, the IIRC and its integrated reporting pilot program have established global standards for value-creating integrated reporting (Mervelskemper & Streit, 2017). An integrated report is a tool for presenting financial and non-financial information in a cohesive manner, capable of significantly enhancing value for the firm and its stakeholders. Mervelskemper and Streit (2017) found that integrated reporting is positively associated with a company's ESG performance and with superior results compared to a standalone report. Integrated reporting is found to be positively associated with corporate environmental performance (Omran et al., 2021). Akisik and Gal (2020) and Appiagyei and Donkor (2024) revealed a favourable correlation between the quality of integrated reporting and sustainability performance. However, Camodeca et al. (2018) assert that sustainability disclosure through integrated reporting does not affect market valuations. Maniora (2017) found that, unlike stand-alone ESG reporting, integrated reporting is negatively linked to the level of ESG integration and both economic and ESG performance.

Despite the increasing initiatives calling for the importance of adopting integrated reporting, empirical studies have produced contradictory results between integrated reporting and business success and sustainability. Therefore, this study enhances the sustainability literature by investigating the interactive effect of audit quality (industry-specialist auditors) and integrated reporting on sustainability performance.

Audit firm industry specialization refers to the focused expertise that some audit firms develop within specific industries. Previous studies (e.g., Almutairi et al., 2009; Balsam et al., 2003; Carcello & Nagy, 2004; DeBoskey & Jiang, 2012; Dunn & Mayhew, 2004; Elaoud &

Jarboui, 2017) have demonstrated the quality of industry-specialist auditors. They argued that industry-specialist auditors have deeper knowledge of industry-specific regulations, risks, and best practices, which, in theory, can enhance audit quality and thus improve the financial sustainability of the companies they audit. They showed that industry-specialist auditors provide a deeper understanding of industry-specific regulations, risks, and best practices, which can translate into more effective audits and better financial outcomes for the companies they audit. In addition, they contended that industry-specialist auditors have a deep understanding of the specific challenges and opportunities within the industry, which enables them to provide more detailed and relevant audit services. This expertise allows them to identify potential risks and inefficiencies that may not be apparent to general auditors. By addressing these issues, industry-specialist auditors can help companies improve their operational and sustainability performances.

In addition, industry-specialist auditors lead to better risk management practices and improved sustainability (e.g., Almutairi et al., 2009; Balsam et al., 2003; Carcello & Nagy, 2004; DeBoskey & Jiang, 2012; Dunn & Mayhew, 2004; Elaoud & Jarboui, 2017). They confirmed that industry-specialist auditors are often more adept at ensuring that companies comply with industry-specific regulations and standards. Their expertise enables them to identify and mitigate industry-specific risks, reducing the likelihood of financial penalties or operational disruptions. This improved compliance and risk management contributes to more stable sustainability performance.

Furthermore, industry-specialist auditors improve the accuracy and transparency of financial reporting (Almutairi et al., 2009; Balsam et al., 2003; Carcello & Nagy, 2004; DeBoskey & Jiang, 2012; Dunn & Mayhew, 2004; Elaoud & Jarboui, 2017). Industry-specialist auditors are better positioned to assess the quality of financial reporting within their industry of expertise. Their knowledge of industry-specific accounting practices enables them to provide more accurate and insightful assessments, which can enhance the credibility and reliability of a company’s financial statements. This in turn builds investor confidence and can lead to lower costs of capital and enhanced sustainability. Finally, industry-specialist auditors go beyond auditing to provide strategic advice and value-added services that are specifically relevant to their industry. This can include guidance on regulatory changes, industry trends, and best practices, all of which can help companies make better strategic decisions. These services can enhance operational efficiency, reduce costs, and identify new growth opportunities, leading to improved sustainability performance.

Previous research has shown that industry-specialist auditors can help increase the value of a business. This is because companies that are audited by these auditors tend to have better sustainable performance, transparency, and accountability through improved compliance, improved quality of financial reporting, help with managing risk professionally, and help with strategic decision-making.

The relationship between integrated reporting and sustainability performance, whether ESG or financial performance, is well established in the literature, but the factors that moderate this relationship are not widely studied. Industry-specialist auditors have been associated in previous studies with the quality of financial reporting, as they are associated with a lower likelihood of earnings management, a lower likelihood of accounting restatement, higher earnings response coefficients, and a lower incidence of financial fraud. Therefore, industry-specialist auditors are likely to be one of the vital moderating factors. Accordingly, industry-specialist auditors are likely to enhance their standing and reputation by strengthening the relationship between integrated reporting and sustainability performance. In light of the above, this study proposes the following hypothesis:

H1: Audit Firm Industry Specialization moderates the relationship between integrated reporting quality and sustainability performance score.
H1a: Audit Firm Industry Specialization moderates the relationship between integrated reporting quality and financial sustainability performance.
H1b: Audit Firm Industry Specialization moderates the relationship between integrated reporting quality and ESG sustainability performance.

Conclusion

The current study concludes that the prevailing sayings in the markets and business circles are the result of what is happening in the corridors of paper philosophical theorizing without relying on in-depth empirical studies in most cases. Integrated reporting has brilliant goals that serve all stakeholders, including the environment, society, legislators, and shareholders, and thus will enhance the sustainable performance of entities. However, the results of previous empirical studies of these direct relationships between integrated reporting and sustainable performance are inconsistent. One important explanation for the inconsistency of the results is that there are vital factors that affect this direct relationship between integrated reporting and sustainable performance. External auditor quality, through industry specialisation, is one of these factors that may play a fundamental role in influencing the relationship between integrated reporting and sustainable performance. Accordingly, the current study proposes to verify the extent to which sustainable performance is affected by integrated reporting in the presence of industry-specialist auditors. This study expects that future empirical studies will yield results that support companies' adoption of integrated reporting, provided that they contract with industry-specialist auditors to ensure they achieve the highest goal of establishing businesses, which is to create value for all stakeholders instead of limiting it to shareholders only, which means superior sustainable performance.

Funding Information

The authors received no direct funding for this research.

Conflict of Interest Statement

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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