Integrated Reporting and Firm Value in an Emerging Economy: The Moderating Role of Firm Size

Manimore Makri¹ * 10 | Kailash C. Kabra² 10

¹North-Eastern Hill University, Department of Commerce, Shillong, India ²North-Eastern Hill University, Department of Commerce, Shillong, India

*Correspondence to: Manimore Makri, North-Eastern Hill University, Department of Commerce, Shillong, India

E-mail: manimoremakri@nehu.ac.in

Abstract: This paper aims to investigate the relationship between Integrated Reporting Quality and Firm Value in the presence of a moderating variable, Firm Size. The study uses a market capitalization-based sample of the top 100 companies listed on Bombay Stock Exchange for the years 2017-2018 to 2019-2020. Partial Least Squares-Structural Equation Model (PLS-SEM) has been applied to observe the relationship between IRQ & FV, as well as the moderating effect of FS. The analysis confirms Stakeholder Theory by presenting a significant positive relationship between Integrated Reporting Quality & Firm Value. The insignificant effect of Firm Size as a moderator between IRQ and FV shows that Indian firms irrespective of their size disclose qualitative IR. The study presents one of the first investigations in the context of India on the relationship between IR & FV while moderating for FS. The study is beneficial for companies to understand the firm performance benefits of voluntary reporting such as IR.

Keywords: emerging economy, firm size, firm value, integrated reporting, voluntary context.

Article info: Received 16 February 2023 | revised 16 May 2023 | accepted 1 June 2023

Recommended citation: Makri, M., & Kabra, K. C. (2023). Integrated Reporting and Firm Value in an Emerging Economy: The Moderating Role of Firm Size. *Indonesian Journal of Sustainability Accounting and Management*, 7(1), 235–247. https://doi.org/10.28992/ijsam.v7i1.697

INTRODUCTION

Corporate reporting has long been criticized for its complexity and lack of connection to a company's overall objectives, strategy and financial performance (KIIIÇ & Kuzey, 2018). While sustainability disclosures convey a great deal of corporate social responsibility (CSR) policies, they often fail to integrate a firm's financial, environmental, and social performances (Robertson & Samy, 2015). To address these issues, the International Integrated Reporting Council (IIRC) introduced the concept of Integrated Reporting (IR) in 2013. IR aims to provide qualitative, long-term value creation to all stakeholders, including employees, customers, suppliers, communities, legislators, and policymakers. By focusing on a wider range of capitals, including financial, manufactured, intellectual, human, social and relationship, and natural capital, IR serves as an innovative and effective reporting tool that integrates environmental and social reporting into business practices.

The relative novelty of IR in the accounting field has sparked interest in whether this reporting approach offers financial benefits to reporting entities (REs). While the IR Framework encompasses various capitals and stakeholder users, the primary focus is on providers of financial capital. Thus, without evidence of substantial positive contributions to firm performance, companies may be hesitant to adopt IR voluntarily. This raises the



crucial question: does IR genuinely enhance firm performance, or is it merely an impression management tool? (Adegboyegun et al., 2020; Brown & Dillard, 2014). Stakeholder Theory emerges as an illuminating framework that seeks to offer valuable insights in resolving this inquiry. At its core, Stakeholder Theory emphasizes that businesses should conscientiously address the diverse needs and well-being of stakeholders, ranging from employees, customers, and suppliers to local communities and society at large. By embracing this inclusive perspective, firms can unlock the potential for enhanced firm performance (Chettri et al., 2021; Makan & Kabra, 2020).

Empirical literature assert benefits such as diminished cost of capital and heightened financial performance attributed to the improvement in the information environment surrounding REs (Lee & Yeo, 2016; Zhou et al., 2017). However, most research findings are predicated on mandatory settings, particularly in South Africa (Barth et al., 2017) or developed countries (Cosma et al., 2018). Consequently, the generalizability of these findings to emerging and voluntary contexts, typified by unique institutional settings such as India, remains questionable. Therefore, the primary objective of the current study is to scrutinize the impact of integrated reporting quality (IRQ) on firm performance within the distinctive context of Indian companies. Given the inherent divergences in socio-cultural, political, and economic factors, the generalizability of findings from developed countries to emerging economies is tenuous. Furthermore, the influx of foreign investment into India, presents corresponding environmental and societal challenges, necessitating business accountability through IR. Acknowledging this, the Securities and Exchange Board of India (SEBI) recommended IR for the top 500 listed companies based on market capitalization on a voluntary basis from 2017-18. Nevertheless, concerns persist regarding the extent to which companies genuinely adhere to the IR framework or merely adopt a symbolic approach (Ahmed Haji & Anifowose, 2016; Roman et al., 2019). Previous studies on IR have often been confined by limited sample sizes, underscoring the need for comprehensive content analysis encompassing a broader sample of Indian companies (Pistoni et al., 2018). In addition to examining the impact of IRQ on firm performance, this study aims to investigate the role of firm size as a potential moderator. Theoretically, larger firms may possess greater resources, capabilities, and visibility, enabling them to more effectively utilize IR to enhance their performance outcomes. Conversely, smaller firms may face resource constraints and limited external visibility, which could moderate the relationship between IRQ and firm performance. By exploring the moderating effect of firm size, this study seeks to uncover nuanced insights into how the relationship between IRQ and firm performance may vary across different company sizes. Recent strands of literature (Dey, 2020 and Islam, 2020) provide contradictory evidence on the relationship between IRQ & Firm Value (FV). The divergence in results is due to methodological and contextual variations. Further, the inconclusive evidence can be attributed to the implied assumption of direct relationship between IRQ & FV, but this relationship, if moderated by any firm characteristic remains unexplored.

To study the relationship between IRQ & FV and the existence of Firm Size as a moderator, the study employs Partial-Least Squares-Structural Equation Modelling (PLS-SEM) on a sample of the top 100 companies listed on the Bombay Stock Exchange (BSE) for the years 2017-2018 to 2019-2020. To gauge the IRQ among Indian companies, the paper employs content analysis as a methodological approach, providing insights into the level of integration, transparency and comprehensiveness of the reporting practices among Indian companies. The analysis will enhance our understanding of how IR practices are implemented and utilized in a unique sociocultural, political, and economic setting.

The study's outcomes are expected to be particularly useful for regulators in voluntary settings. By assessing the quality of integrated reports, this research can identify areas where guidelines and frameworks may need improvement by regulators. From a practical standpoint, the findings of the study hold relevance

for firms aiming to enhance their competitive advantages by leveraging their communicating and marketing strategies. The rest of the paper is structured as follows: Section-2 describes the literature review & hypothesis development; Section-3 outlines empirical design; Section-4 delves into the results & discussion, and Section-5 concludes.

METHODS

SEBI on voluntary basis recommended IR for the first time in India since 2017-2018 for its top 500 companies producing Business Responsibility Report (BRR). Following it, the population for the study comprises of market-capitalization based top ranked 500 firms listed on the BSE (Bombay Stock Exchange) Ltd as on 31st March 2018. For the purpose of the study, a sample of top 100 firms is considered because they represent approximately 94% of the entire market capitalization on BSE as of 2020. However, three companies have been dropped from the sample as they went under merger during the period. The final sample reduces to 97 firms for the period 2017-18 to 2019-20. The data on IRQ are collected from respective company's integrated reports, annual reports and sustainability reports of both financial and non-financial companies listed in the National Stock Exchange (NSE) and Bombay Stock Exchange (BSE). Additionally, for dependent and control variables, data are collected from CMIE Prowess IQ and Capitaline Plus.

The current study uses Partial Least Squares- Structural Equation Modelling (PLS-SEM) which is a popular method for analysing relationships in path models with latent variables. The benefit of this method lies in its provision for complex analysis through the usage of two models, the measurement model and the structural model in an integrated manner without imposing distributional assumptions on the data (Hair et al., 2019). In order to test the hypotheses, SMART PLS 4.0 which is a complete Structural Equation Modeling (SEM) tool was employed (Ringle et al., 2021). A bootstrap analysis with 5000 subsamples has been utilized to evaluate the significance of the path coefficients in the structural model.

The dependent variable (Table 1), Market Capitalisation (price per share multiplied by total number of shares outstanding in a firm) which is basically a market-based measure is used as a proxy for firm performance because it is also characterized by its forward-looking aspect that reflects shareholders expectation regarding a firm's future performance (Luo & Bhattacharya, 2013). The independent variable taken is IR Quality (IRQ) for which content analysis has been employed. The formative model under PLS-SEM is applied in forming IRQ because it is influenced by eight causal indicators (Organizational Overview and External Environment, Governance, Business Model, Risks and Opportunities, Strategy and Resource Allocation, Performance and Outlook) (Coltman et al., 2008) as derived from IIRC Framework, 2013.

The study controls the effect of several firm-specific variables. Debt-Equity (D/E) Ratio which represents financial leverage that requires to be controlled because high-levered firms are associated with large agency costs and in order to overcome the same, they prefer better voluntary disclosure including IR (Jensen & Meckling, 1976). However, this action may result in additional cost of making discretionary disclosure (Andrikopoulos & Kriklani, 2013). For high growth firms mandated disclosures being exogenous in nature mount information asymmetry problem while accessing market for their ever-increasing capital needs that results in higher litigation and proprietary costs and in order to minimize these costs, such firms prefer quality voluntary disclosure (Core, 2001), which needs to be controlled in the present study. In regards to Liquidity, Agency Theory posits that firms with lower liquidity produces better disclosures to alleviate any disruptions in their cash flows which is controlled in the present study. Finally, from the argument mentioned above and following Orlitzky (2001) the study uses Firm Size as a moderator between IR & FV.

Table 1 Measurement of dependent and independent variables

Acronym	Measure	Туре	Operationalization	References
IRQ	Integrated Reporting Quality	Independent	Score obtained divided by maximum possible score (150)	Pistoni et al. (2018)
LnMC	Firm Value	Dependent	Natural Logarithm of Market Capitalisation (market price per share X total no of shares outstanding)	Uyar & Kiliç (2012)
LnTA	Firm Size	Moderating	Natural log of Total Assets	Rahman et al. (2020)
D/E Ratio	Financial Leverage	Control	Book value of total debt divided by book value of equity	Andrikopoulos & Kriklani (2013)
Growth	Firm Growth	Control	Yearly growth rate in firms' sales	Muth & Donaldson (1998)
CR	Liquidity	Control	Current Assets to Current Liabilities	Masum et al. (2020)
Advt	Firm's Popularity	Control	Advertisement to Sales	Fahad & Nidheesh (2020)

Source: Compiled from literature

In order to measure the independent variable, content analysis is employed using the IIRC Framework. The study utilizes a checklist adapted from the latest version IIRC Framework, 2013 consisting of 50 items categorized into 8 main dimensions: organizational overview and external environment, governance, business model, risks and opportunities, strategy and resource allocation, performance, outlook and basis of presentation (Appendix 1). The checklist is matched against the annual reports, sustainability reports and integrated reports of the sampled companies. To ascertain the level of integration amongst Indian companies, content analysis has been performed irrespective of whether the firm has labelled the report as "integrated" or not. Referring to Pistoni et al.(2018), the scoring of IRQ is based on the quality of disclosure which ranges from 0 to 3. A score of 'o' is given if an item is absent, '1' is given if an item is present but poorly disclosed,'2' is given if an item is not quantitative but specific, '3' is given if an item is comprehensively disclosed with supporting quantitative figures and/or pictorial representations.

After obtaining the item-wise score, the overall disclosure score is calculated by: $IRQ = \frac{\sum_{t=1}^{n} X_{ijt}}{N_{ijt}}$

Where N_i is the maximum expected score, 'j' denotes the company, 'i' stands for particular disclosure item and 't' stands for time for the j_{th} firm. X_{ii} assumes either value of 'o', '1', '2', or '3'.

RESULTS AND DISCUSSIONS

The practice of IR marked a beginning in India since 2013-2014 when Kirloskar Brothers Ltd. came up with the first IR. Later, few pioneering Indian companies such as Tata Steel, Mahindra and Mahindra, Wipro, Yes Bank and Reliance Industries have joined the journey of reporting through IR. Since the recommendation of SEBI as to IR on voluntary basis for top 500 companies from 2017-18, a growth of 300 percent in 3 years' time is noticed in sampled companies (97) making IR as their number grew from 16 (2018) to 33 (2019) to 46 (2020). The gradual rise in adoption of IR reveals the existence of normative and mimetic practices within the sampled companies. Mimetic practice transpires as a result of industry pressure to conform to the disclosure practices of the counterparts. In this regard, large market cap companies may have influenced the practice amongst

other listed companies. The normative practice is also evident within the sampled companies wherein every adopter disclosed in their reports the rationales or core beliefs behind IR adoption. Therefore, the study ratifies Institutional Theory (DiMaggio & Powell, 1983). However, the proprietary costs of disclosure preparation and publication is a deterrent to non-adopting companies' desiring to adopt IR.

To study the IRQ of the companies, a year-wise average disclosure score based on the IIRC Framework is computed. The outcome shown in Figure 1 reveals a marginal but positive change in the overall disclosure pattern from 2017-18 to 2019-20. The mean IRQ of 59.08% in 2019 rose to 61.68% in 2020. The snail's pace of improvement in IRQ is attributed to: i) it being a voluntary framework; ii) measurement issues; iii) difficulty in implementing integrated thinking; iv) reluctance of management to adapt to change; v) costs of preparation and publication of IR; vi) companies' biased reporting geared towards positive information to promote corporate image rather than adopting IR in both letter and spirit (Ahmed Haji & Anifowose, 2016); and vii) nominal compliance to restrain political costs. There is gradual inclination towards inclusive stakeholder mentality thereby improving the overall reporting climate.

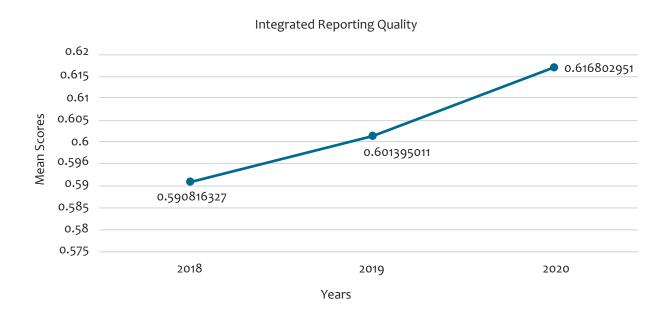


Figure 1 Movement of IRQ

Table 2 presents the descriptive statistics of the variables in the study. The independent variable IRQ has a mean of 59% along with a high standard deviation, indicating that there is a wide variation of IR quality amongst the sampled companies. This can be ascribed to the fact that IR is a principles-based framework which allows for flexibility in reporting while considering a sufficient degree of comparability. Further, in the Indian context, IR is still a voluntary framework which explains the large variation in the level of integration amongst sample firms. The standard deviation of the variables LnMC and LnTA suggests that there is less variability amongst the companies in terms of organizational size and total asset size. Further, the mean of D/E Ratio shows that Indian firms are highly dependent on debt capital. The mean of the Current Ratio shows that the sampled companies have good liquidity position i.e 158% ability to liquid their assets.

Table 2 Descriptive Statistics

	Obs	Mean	S.D	Min	Max
IRQ	294	.5939683	.1846089	.1733333	1
LMC	294	5.835788	0.3894581	4.064366	6.951779
LnTA	294	4.483349	0.7568865	1.230449	6.59764
D/E Ratnio	294	0.9389184	2.333929	0	15.37
Growth	294	1.105896	0.5273551	0	8.07779
Current Ratio	294	1.585408	1.487611	0.03	12.99
ADV	294	211.1734	500.1709	0	4686

Source: Computed using Stata

Table 3 presents the correlation coefficients among the study's variables. Several correlations are noteworthy. As expected, that there is a significant positive correlation between IRQ, LnMC & LnTA at 5% level. This suggests that firms with larger market cap and greater total assets produce better reports by virtue of the availability of resources. The insignificance of D/E Ratio could be because of creditors ability to obtain information privately instead of attaining them through integrated reports. Multi- collinearity diagnostics show that the highest individual VIF value is 1.46 and the Mean VIF value is 1.26. These values are well below the generally accepted threshold of 10 (Neter et al., 1990), indicating that multicollinearity should not affect the results of the study.

Table 3 Correlation Matrix

	IRQ	LnMC	LnTA	D/E Ratio	Growth	ADV	Current Ratio
IRQ	1.0000						
LnMC	0.2283*	1.0000					
LnTA	0.1337*	0.4567*	1.0000				
D/E Ratio	0.0053	0.0410	0.4565*	1.0000			
Growth	0.0038	0.0834	0.0874	0.2272*	1.0000		
ADV	0.0853	0.2391*	-0.0531	-0.0759	-0.0250	1.0000	
Current Ratio	-0.2188*	0.0045	-0.0360	0.1446*	0.0447	-0.1015	1.0000

Shows significance at 5% level* Source: Computed using Stata

Evaluation of the validity of the formative model requires assessment of three indicators: convergent validity, indicator collinearity and statistical significance of the indicator weights. Convergent validity refers to the degree to which the formative construct correlates with its alternative reflective measured variable. The correlation of the formatively measured construct should be 0.78 or higher, indicating the construct's explanatory power of more than 50% of the alternative measure's variance. The current study employed yields coefficient of 0.995 which is above the approved threshold of 0.78, thus exhibiting convergent validity (Hair et al., 2019). Concerning indicator collinearity, a high degree of correlation of two or more indicators in

a formative measurement model assessed by a high Variance Inflation Factor of 5 or above indicates critical collinearity issues. Table 4 shows the relevant VIF's which are lesser than 5 which implies a lack of collinearity issues in the model. Finally, the statistical significance of weights indicates the indicator's relative importance in constituting the construct. Larger significant weights are more relevant to the construction of the latent variable.

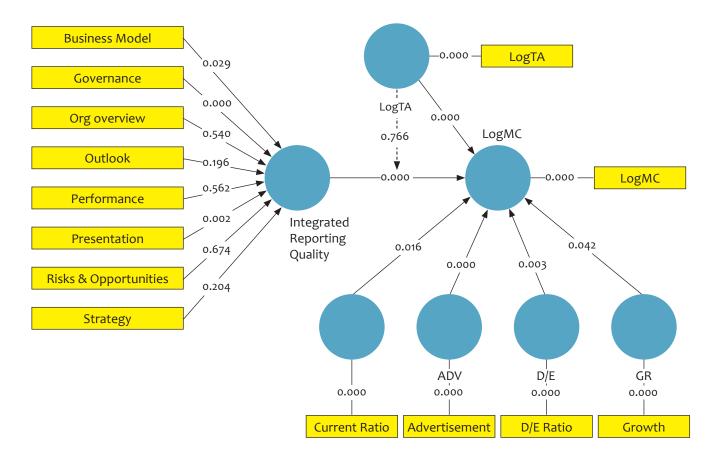


Figure 2 Path Model

Table 4 Results of the Measurement Model

Indicators under IRQ	Collinearity (VIF)	Statistical significance of weights
Organizational overview \rightarrow IRQ	3.484	0.536
$Governance \mathop{\rightarrow} IRQ$	2.447	0.000
Business Model \rightarrow IRQ	2.180	0.013
Risks & Opportunities \rightarrow IRQ	1.763	0.971
$Strategy \mathop{\rightarrow} IRQ$	2.765	0.207
$Performance \mathop{\rightarrow} IRQ$	3.531	0.892
$Outlook \mathop{\rightarrow} IRQ$	2.680	0.233
$Presentation \mathop{\rightarrow} IRQ$	1.627	0.004

Source: Computed using Smart PLS 4

The results in Table 4 reveal that firm value is affected by the most well reported indicators forming the latent variable, IRQ. Governance (p-value: 0.000), Business Model (p-value: 0.013) and Presentation (p-value: 0.004) have significant weight as indicators of IRQ. Indian regulation on mandatory Corporate Governance reporting under the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements 2015) have a major role to play on the efficient reporting of governance structure and efficiency in integrated reports. Therefore, governance attributes documenting a company's stakeholder inclusivity behaviour contribute positively impact on FV. Similarly, Business Model is a central feature of integrated reports illustrating how an organization uses multiple capitals and create value. Such a critical component of IR usually depicted through pictorial representations provides a concise representation of the business and in doing so expedites the decision-making process of the investor. As the Business Model shows the potential future cash flows of the firm, it affects the perception of the investors and ultimately the FV. Finally, investors determine future potential based on firms' explicit declaration of adoption of IR. This is reflected in the significance of the indicator 'Presentation' towards influencing FV. These results have also derived an acceptable coefficient of determination (R²) of 0.364 which is considered as having moderate explanatory power (Chin, 1998).

Table 5 Results of the Structural Model

	Coeff	t-stats	p-value
$IRQ \rightarrow LogMC$	0.224	4.388	0.000
$CurrentRatio \mathop{\rightarrow} LogMC$	0.118	2.324	0.016
DERATIO → LogMC	-0.202	3.170	0.003
$Growth \mathop{\rightarrow} LogMC$	0.086	1.926	0.042
$ADV \rightarrow LogMC$	0.228	4.261	0.000
$LogTA \rightarrow LogMC$	0.489	9.328	0.000
$LogTA \times IRQ \rightarrow LogMC$	0.025	0.326	0.766

Source: Computed using Smart PLS 4

Table 5 shows the results of the PLS-SEM estimation of the structural model. As hypothesized, IRQ has a significant and positive relationship with LnMC after controlling for other factors. Therefore, H1, examining whether IR has a positive relationship with FV is accepted. In line with Stakeholder Theory, companies that are progressive, desire to be inclusive of a wide number of interested parties, thereby incentivizing disclosure such as IR. Similar results have been found by Adegboyegun et al. (2020); Lee & Yeo (2016) as well as Dey (2020) and Islam (2020) in the emerging market context of Bangladesh. In the Indian scenario, companies were already disclosing IR and maintaining integration in reporting before SEBI recommendation of voluntary adoption of IR in 2018 (Ghosh, 2019). Therefore, improved information environment caused by a reduction in information complexity through IR is reflected in the positive increase in Firm Value.

In regards to the second hypothesis, the results show a negative but insignificant effect of LnTA on enhancing the relationship between IRQ & LnMC. The coefficient of 0.025 has a negative p-value of 0.730 implying insignificance which could be ascribed to the fact that irrespective of company size, discretionary disclosures such as IR need to be evaluated on its costs and corresponding benefits. Larger firms also face

greater public pressure than smaller firms and may resort to greenwashing or box-ticking, thereby diminishing the positive effects of disclosure on Firm Value (Delmas & Burbano, 2011). Therefore, H2 that examines if FS moderates the relationship between IR & FV is rejected. Similar results have been obtained by Ting (2021) using a sample of Taiwanese companies and found that large companies engage in symbolic CSR disclosure. Further, previous study by Orlitzky (2001) also confirm the study's findings. In addition to the main variables, the study has also included control variables. The results show that Current Ratio and ADV has a positive and significant association with LnMC. Similarly, as expected D/E Ratio has a significant negative association with the dependent variable. However, Growth has an insignificant association with LnMC. This could be attributed to the fact that the yearly sales growth of companies does not directly reflect on LnMC because Firm Value is also contingent also upon overall financial performance.

The study has both practical and regulatory implications. First, emerging economy such as India require extensive capital to finance their growth which requires quality reporting to attract investors. IR, being an international framework acts as a bridge that overcomes information asymmetry between companies and foreign investors, thereby encouraging capital inflow into the country. Second, the positive impact of IRQ on FV serves as a signal to the companies to capitalize on the market valuation benefits of a superior reporting framework. Third, in regards to implications for regulatory bodies, the rise in the integration level amongst Indian companies suggests that regulation plays a pertinent role in improving the overall reporting climate. Considering that South Africa has a high threshold of IRQ due to mandatory setup, it is an encouraging sign for Indian regulators (Securities Exchange Board of India and Ministry of Corporate Affairs) to frame guidelines for IR's mandatory implementation. The present study recommends that emphasis should be made by larger companies intrinsically facing higher agency costs to improve disclosure quality as such a practice mitigates organizational information asymmetry.

CONCLUSION

The current paper is a modest attempt to present one of the first empirical studies on the relationship between the IRQ and FV in the emerging economy context of India. The research objective was to shed light on the quality of IR amongst Indian companies and if this has any impact on the firm value. Further, the study examined whether firm size plays any moderating relationship between IRQ and FV. Through a meticulous analysis of the top 100 companies listed on the Bombay Stock Exchange (BSE), the current study has made significant contributions to the existing body of knowledge. The findings revealed a noteworthy upward trajectory in the adoption and quality of integrated reporting, with IRQ percentages witnessing a remarkable ascent over the years from 2018 to 2020. These results reflect the growing recognition and acceptance of IR among Indian companies, signalling their willingness to embrace a more transparent and comprehensive reporting framework. Furthermore, the study has established a positive and statistically significant relationship between IRQ and firm performance. By employing the robust technique of Partial Least Squares- Structural Equation Modelling (PLS-SEM), the empirical analysis reaffirmed the predictions posited by Stakeholder Theory. However, the effect of Firm Size in moderating the relationship between IRQ & Firm Value is insignificant. Thus, it can be concluded that Indian firms irrespective of their size are proactive in adopting IR in line with international standards. The present study is not free from limitations. First, the study's scope is confined to the Indian context. Future research may endeavour to explore the nuances of IR in diverse geographic contexts to ascertain the broader applicability and

cross-cultural variations of the observed relationships. Additionally, the study focused on Firm Size as a moderator affecting the relationship between IRQ & FV. Future studies could delve deeper into exploring additional factors such as organisational culture or governance mechanisms to unravel the multifaceted interplay between IRQ & FV.

ORCID

Manimore Makri https://orcid.org/0000-0002-8644-7115 Kailash C. Kabra https://orcid.org/0000-0003-0635-2341

REFERENCES

- Adegboyegun, A. E., Alade, M. E., Ben-Caleb, E., Ademola, A. O., Eluyela, D. F., & Oladipo, O. A. (2020a). Integrated reporting and corporate performance in Nigeria: Evidence from the banking industry. *Cogent Business and Management*, 7(1). https://doi.org/10.1080/23311975.2020.1736866
- Ahmed Haji, A., & Anifowose, M. (2016). The trend of integrated reporting practice in South Africa: ceremonial or substantive?. Sustainability Accounting, Management and Policy Journal, 7(2), 190–224. https://doi.org/10.1108/SAMPJ-11-2015-0106
- Andrikopoulos, A., & Kriklani, N. (2013). Environmental Disclosure and Financial Characteristics of the Firm: The Case of Denmark. Corporate Social Responsibility and Environmental Management, 20(1), 55–64. https://doi.org/10.1002/csr.1281
- Barth, M. E., Cahan, S. F., Chen, L., & Venter, E. R. (2017). The Economic Consequences Associated with Integrated Report Quality: Capital Market and Real Effects. *Accounting, Organizations and Society,* 62, 43–64. http://dx.doi.org/10.1016/j.aos.2017.08.005
- 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. https://doi.org/10.1108/AAAJ-04-2013-1313
- Chettri, N., Kabra, K. C., & Rani, N. (2021). Understanding the Relationship between CSR and Dividend Policy: Review and Future Prospects. *Indonesian Journal of Sustainability Accounting and Management*, 6(1), 13–23. https://doi.org/10.28992/ijsam.v6i1.372
- Chin, W. W. (1998). The Partial Least Squares Approach for Structural Equation Modeling. In Modern Methods for Business Research (pp. 295–336). Lawrence Erlbaum Associates Publishers.
- Coltman, T., Devinney, T. M., Midgley, D. F., & Venaik, S. (2008). Formative versus reflective measurement models: Two applications of formative measurement. *Journal of Business Research*, 61(12), 1250–1262. https://doi.org/10.1016/j.jbusres.2008.01.013
- Cosma, S., Soana, M. G., & Venturelli, A. (2018). Does the market reward integrated report quality?. *African Journal of Business Management*, 12(4), 78–91. https://doi.org/10.5897/ajbm2017.8469
- Core, J. E. (2001). A review of the empirical disclosure literature: discussion. *Journal of Accounting and Economics*, 31(1-3), 441–456. https://doi.org/10.1016/S0165-4101(01)00036-2
- Delmas, M. A., & Burbano, V. C. (2011). The Drivers of Greenwashing. *California Management Review*, 54(1), 64–87. http://dx.doi.org/10.1525/cmr.2011.54.1.64
- Dey, P. K. (2020). Value relevance of integrated reporting: a study of the Bangladesh banking sector. *International Journal of Disclosure and Governance*, 17(4), 195–207. https://doi.org/10.1057/s41310-020-00084-z

- DiMaggio, P. J., & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48(2), 147–160. https://doi.org/10.2307/2095101
- Fahad, P., & Nidheesh, K. B. (2020). Determinants of CSR disclosure: an evidence from India. *Journal of Indian Business Research*, 13(1), 110–133. https://doi.org/10.1108/JIBR-06-2018-0171
- Ghosh, S. (2019). Integrated Reporting in India: Research Findings and Insights. In CSR, Sustainability, Ethics and Governance (pp. 365–386). Springer Nature. https://doi.org/10.1007/978-3-030-01719-4 18
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. European Business Review, 31(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203
- Islam, M. S. (2020). Investigating the relationship between integrated reporting and firm performance in a voluntary disclosure regime: insights from Bangladesh. *Asian Journal of Accounting Research*, 6(2), 228–245. https://doi.org/10.1108/ajar-06-2020-0039
- Jensen, M. C., & Meckling, W. H. (1976). Theory Of The Firm: Managerial Behaviour, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(6), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X
- Kılıç, M., & Kuzey, C. (2018). Assessing current company reports according to the IIRC integrated reporting framework. *Meditari Accountancy Research*, 26(2), 305–333. https://doi.org/10.1108/MEDAR-04-2017-0138
- Lee, K. W., & Yeo, G. H. H. (2016). The association between integrated reporting and firm valuation. *Review of Quantitative Finance and Accounting*, 47(4), 1221–1250. https://doi.org/10.1007/s11156-015-0536-y
- Luo, X., & Bhattacharya, C. B. (2013). Social Responsibility, Corporate Customer and Market Satisfaction, Value. *American Marketing Association*, 70(4), 1–18. https://doi.org/10.1509/jmkg.70.4.001
- Makan, L. T., & Kabra, K. C. (2020). Carbon Emission Reduction and Financial Performance in an Emerging Market: Empirical Study of Indian Firms. *Indonesian Journal of Sustainability Accounting and Management*, 5(1), 23–32. https://doi.org/10.28992/ijsam.v5i1.292
- Masum, M. H., Latiff, A. R. A., & Osman, M. N. H. (2020). Ownership Structure and Corporate Voluntary Disclosures in Transition Economy. *Journal of Asian Finance, Economics and Business*, 7(10), 601–611. https://doi.org/10.13106/jafeb.2020.vol7.no10.601
- Muth, M., & Donaldson, L. (1998). Stewardship Theory and Board Structure: A contingency approach. *Corporate Governance: An International Review*, 6(1), 5–28. https://doi.org/10.1111/1467-8683.00076
- Neter, J., Wasserman, W., & Kutner, M.H. (1990). Applied linear statistical models: regression, analysis of variance, and experimental designs. London: Irwin
- Orlitzky, M. (2001). Does firm size confound the relationship between corporate social performance and firm financial performance?. *Journal of Business Ethics*, 33(2), 167–180. https://doi.org/10.1023/A:1017516826427
- Pistoni, A., Songini, L., & Bavagnoli, F. (2018). Integrated reporting quality: An empirical analysis. *Corporate Social Responsibility and Environmental Management*, 25(4), 489–507. https://doi.org/10.1002/csr.1474
- Rahman, M. M., Sobhan, R., & Islam, M. S. (2020). The impact of intellectual capital disclosure on firm performance: Empirical evidence from pharmaceutical and chemical industry of Bangladesh. *Journal of Asian Finance, Economics and Business*, 7(2), 119–129. https://doi.org/10.13106/jafeb.2020.vol7.no2.119
- Ringle, C. M., Wende, S., & Becker, J. M. (2022). SmartPLS 4. Oststeinbek: SmartPLS
- Robertson, F., & Samy, M. (2015). Factors Affecting the Diffusion of Integrated Reporting-a UK FTSE 100 Perspective. Sustainability Accounting, Management and Policy Journal, 6(2), 190–223. http://dx.doi. org/10.1108/SAMPJ-07-2014-0044
- Roman, A. G., Mocanu, M., & Hoinaru, R. (2019). Disclosure style and its determinants in integrated reports. Sustainability, 11(7). https://doi.org/10.3390/su11071960

- Ting, P. H. (2021). Do large firms just talk corporate social responsibility? The evidence from CSR report disclosure. Finance Research Letters, 38(C). https://doi.org/10.1016/j.frl.2020.101476
- Uyar, A., & Kiliç, M. (2012). Value relevance of voluntary disclosure: evidence from Turkish firms. *Journal of Intellectual Capital*, 13(3), 363–376. https://doi.org/10.1108/14691931211248918
- Zhou, S., Simnett, R., & Green, W. (2017). Does Integrated Reporting Matter to the Capital Market?. *Abacus*, 53(1), 94–132. https://doi.org/10.1111/abac.12104

APPENDIX 1

Constituents of IRQ

- A. Organizational Overview and External Environment
 - 1. Core Purpose, Vision or Values
 - 2. Organisational Profile and Operating structure
 - 3. Principal Activities and Markets
 - 4. Market Environment and Outlook
 - 5. Position within the value chain
 - 6. Key financial and non-financial metrics
 - 7. External environment
 - 8. Legitimate needs and interests of stakeholders
 - 9. Macro and micro economic conditions such as economic stability, globalization and industry trends
 - 10. Market forces
 - 11. Technological Changes
 - 12. Approach to social issues
 - 13. Approach to environmental issues
 - 14. Legislative and regulatory environment
 - 15. Political environment

B. Governance

- 16. Organization's leadership structure
- 17. Key Committees and Oversight
- 18. Company's Philosophy on Corporate Governance
- 19. How the organisation's purpose, vision or values are reflected in the use and effects on six capitals
- 20. Governance practice to promote innovation
- 21. Best corporate governance practices over and above SEBI's LODR
- 22. Core skills & expertise available with the board
- 23. Link between remuneration and incentives to value creation

C. Business Model

- 24. Explicit identification of the key elements of the business model
- 25. A simple diagram highlighting key elements, supported by a clear explanation of the relevance of those elements to the organisation
- 26. Narrative flow that is logical given in the particular circumstances of the organisation
- 27. Approach to engagement of Internal and External Stakeholders
- 28. Connection to strategy, risks and opportunities

D. Risks and Opportunities

- 29. Specific sources of risks and opportunities
- 30. Assessment of likely risks and opportunities
- 31. Steps taken to mitigate risks

E. Strategy and Resource Allocation

- 32. Organization's medium and long-term objectives
- 33. Strategic Advantages
- 34. Resource allocation plans
- 35. Measurement of achievements and target outcomes in the short, medium- and long-term run
- 36. Linkage between organisational strategy, risk management and targets
- 37. Competitive strengths

F. Performance

- 38. Quantitative indicators (KPIs) connecting targets, risks & opportunities
- 39. Both positive and negative effects on the all capitals
- 40. Key stakeholder relationships and its response
- 41. Connection between past and present performance
- 42. KPIs combining financial performance with other capitals is it not the same as that of second?
- 43. Significant impact of regulations on performance

G. Outlook

- 44. Challenges and uncertainties in pursuing objectives & strategy
- 45. Potential response to challenges & uncertainties
- 46. Potential implications for business & future performance
- 47. Factors of capitals and its their potential effects on the ability to create value

H. Basis of preparation & presentation

- 48. Summary of materiality determination process
- 49. Description of reporting boundary & its determination
- 50 Frameworks & methods used to evaluate material matters

Source: Compiled by Authors based on IIRC Framework