




“Corporate reporting behavior: Factors influencing the adoption of integrated reporting in India”

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CORPORATE REPORTING BEHAVIOR: FACTORS INFLUENCING THE ADOPTION OF INTEGRATED REPORTING IN INDIA

Abstract

Corporations have a responsibility to provide a fair view of their financial state to their stakeholders. To facilitate the reporting process, the IFRS recommends the integrated reporting framework, which firms may adopt voluntarily. This study examines the motivations of management in voluntarily disclosing capitals-related information in annual reports of companies listed on the Nifty Metal Index and their willingness to adopt the IR framework. It also empirically investigates how a company's long-term and short-term goals impact integrated reporting adoption. The Integrated Reporting Capitals Index (IRCIN) was constructed to study the reporting behavior of companies within the specified framework. The reporting patterns within the metal industry are analyzed by employing the fixed effects model. Results highlight the interconnectedness of financial and non-financial capital dimensions in corporate reporting practices, albeit with a strong emphasis on financial capital. The average word count describing the financial capital was high, while the intellectual capital was the lowest. Strategic management evaluated via cash flow from investing activities proved statistically significant at the 5% level. Similarly, short-term goals indicated by profit after tax were found to play a crucial role in encouraging corporations within the Nifty Metal Index to adopt the integrated reporting framework. Conversely, book value per share exhibited a negative coefficient, indicating a historical disconnect with the reporting entities. These insights suggest that the adoption of the integrated reporting framework by management is driven by strategic goals, short-term objectives, and overall company performance.

Keywords

integrated reporting, Nifty Metal Index, financial performance, strategic management, voluntary disclosure

JEL Classification

D22, M41, M48

INTRODUCTION

Through annual reports, companies strive to furnish comprehensive performance-related information to stakeholders, extending it to their plans in both quantitative and qualitative terms. Information on the companies' overall contribution to economic, environmental, and social aspects helps the stakeholders to make informed decisions. As the conventional financial reporting system is found to be inadequate in capturing the overall impact of the contributions on society, companies are moving beyond traditional financial reporting and embracing integrated reporting. Integrated reporting works on the premise of integrated thinking (Dimes et al., 2023), which involves aligning financial and non-financial information holistically, thereby overcoming the limitations of conventional financial reporting and enhancing the relevance and quality of reporting. Integrated reporting (IR) framework adoption in India is voluntary, and with a soft nudge from the regulatory authorities, many companies have resorted to the IR framework. Understanding the drivers behind the adoption of IR by



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steel manufacturing companies, an industry that makes a significant contribution to the Indian economy, can bring regulatory interventions to promote transparent and sustainable reporting practices. Moreover, the insights gained from adopting IR frameworks can guide management strategies and decision-making processes within organizations. Based on this thought, the following research problems are framed to study the motivations and determinants driving the adoption of integrated reporting among steel manufacturing companies listed on the Nifty Metal Index in India:

- a) What dominates the reporting information in the integrated reporting framework?
- b) Are short-term and long-term goals of the companies the drivers of the IR framework?

Integrated reporting provides information about the resources an organization employs and its related outputs, known as “the capitals,” which fluctuate due to the organization’s operations and its interactions with the external environment and other capitals, thus generating value over time. The IR framework comprises six capitals: financial, manufactured, human, intellectual, natural, and social and relationship. These capitals gauge short-, medium-, and long-term performance, aiding the stakeholders in decision-making. Organizations interact with various capitals, each holding varying degrees of significance depending on the organization’s needs (Jensen & Berg, 2012). In the Indian context, regulatory bodies like the Securities and Exchange Board of India (SEBI) has urged the top 500 listed companies to adopt the IR framework.

1. LITERATURE REVIEW AND HYPOTHESES

Integrated reporting adds transparency and accountability in reporting as it covers key elements like performance assessment, strategic communication, risk management, governance disclosure, shareholder value, compliance, stakeholder engagement, brand perception, and investor relations, thereby enhancing stakeholder’s trust and their decision-making abilities (Nistor et al., 2019). As of 2022, over 2500 companies across 70 countries have adopted Integrated Reporting (IFAC, 2022), while it is still in the early stages of adoption and is gaining traction in emerging economies (Navarrete-Oyarce et al., 2022). This trend is likely to significantly affect the transparency of companies’ annual reports. In today’s modern business landscape, the significance of intangibles, such as knowledge, innovation, and adaptability, in financial reporting cannot be overlooked (Guthrie & Petty, 2000). To comprehensively understand the firm’s operations, stakeholders must establish a connection between the intangible and tangible elements and link the inputs with outputs. Integrated reporting not only assists in fulfilling regulatory obligations but also enhances corporate reputation and fosters trust among various stakeholders by dis-

cussing the performance of various capitals and sustainability (Hoque, 2017). This also confirms best practices of corporate reporting, emphasizing the importance of transparent communication with various stakeholders (IFAC, 2015). By choosing voluntary disclosure of information, managers can effectively communicate pertinent details like investment opportunities and financing policies (Wen, 2011). Information that is vital in decision-making, when disclosed voluntarily in the annual reports, signals the shareholders that the management is acting in their best interests, leading to increased trust in the company, thereby potentially boosting its valuation (Vitolla et al., 2020).

The existing literature on voluntary disclosure is drawn from various theoretical perspectives, Jensen and Meckling’s (1976) agency theory suggests managers should disseminate specialized information to enhance the firm’s value, reduce capital costs, and alleviate information asymmetry between themselves and shareholders. Scholars of agency theory advocate for expanding the scope of disclosed information and employing it as a strategic tool to convey the overall contribution of firm performance (Omran & El-Galfy, 2014). Another theory that propagates the benefits of voluntary disclosure is the theory of

capital needs. While seeking to meet their capital requirements for expansion, companies strategically utilize voluntary disclosure of information to communicate with investors to make more informed and economically valuable predictions about the company's trajectory. Managers strategically utilize voluntary disclosure to communicate positive outcomes by sharing favorable news and simultaneously demonstrating transparency by disclosing any adverse developments and outlining efforts to address potential future losses. In instances where firms exhibit profitability, managers are inclined to engage in significant voluntary disclosure to signal their financial health, boost investor confidence, and enhance overall financial performance (Albitar et al., 2020). Further, the signaling theory advocates that companies opt to disclose information beyond mandatory requirements to capture investors' attention, diminish information asymmetry with stakeholders, and signal their organizational capabilities (van Zijl et al., 2017). The legitimacy theory provides another insightful explanation for voluntary disclosure; organizations seek to secure social approval for their actions by embracing higher levels of transparency, a concept further supported by the positive reception gained through increased transparency in corporate practices (Campbell et al., 2003; Farooq & Maroun, 2017). Transparency, as achieved through voluntary disclosure, is one of the strategic approaches companies adopt to legitimize their practices and activities, also demonstrating compliance with stakeholders' expectations (Ashforth & Gibbs, 1990).

Each company presents its information in its unique style; however, the importance of detailing certain capitals may vary. Emphasis on specific capitals as per the IR framework underscores their pivotal role in a structured manner of reporting to evaluate organizations' sustainability and performance. In the realm of disclosures of capitals, the significance of materiality and economic consequences has a significant influence (Barth et al., 2017; Cerbone & Maroun, 2020). Providers of financial capital have a predominant influence in integrated reporting, as they wield considerable impact through market pressures (Mähönen, 2020). Financial capital takes priority to ensure the organization's continuity

and sustainability by aligning with other capitals (Anifowose et al., 2020). This indicates the need to navigate trade-off decisions among different capitals (Camilleri, 2017; Almășan et al., 2019), particularly for significant investments in manufactured capital like automation and robotics, which could decrease human capital while increasing financial capital. Consequently, it becomes apparent that positive impacts on one form of capital may entail corresponding negative ramifications for another, exemplifying the nuanced interplay within the complex web of capital dynamics.

Human capital, as defined by Stewart (1997), encompasses the skills, competencies, and abilities of individuals and groups within an organization, which are crucial to quantify in discovering the valuation of the firms. It is a reservoir of employee values manifested in the firm's employees and managers' knowledge, competencies, skills, experiences, abilities, and talents (Brummet et al., 1968). It was found that human capital disclosures are highest in the manufacturing sector (Kamath, 2021). Schwartz (2007) and Sofian et al. (2011) bolster the argument that intellectual capital, when integrated with information from financial statements, provides valuable insights into the market value of firms. Effective intellectual capital management yields many advantages, ranging from increased market value and improved communication to optimized potential utilization and enhanced value creation ability (Farneti et al., 2019). Bontis et al. (2000) investigated the impact of the three integral components of intellectual capital, namely human, structural, and relational, on business performance within the context of Malaysian industries. The results suggest a significant influence of intellectual capital components on business performance and, notably, a complex interrelationship among these components.

Social capital, the network of relationships and interactions among people and organizations, facilitates cooperation, trust, and reciprocity. Research studies on the adoption of integrated reporting with a focus on intellectual, human, and social capital indicate its role in enhancing legitimacy through the cultivation of trust, reputation, and social capital (Farneti et al., 2019; Camilleri,

2017). Dilling and Caykoylu (2019) examined the quality of integrated reports (IRQ), such as capitals, content elements, readability, and materiality and points out that there is a significant scope for enhancement of the reporting quality globally. Malola and Maroun (2019) indicate that in South Africa, as integrated reporting evolves, the influence of external factors diminishes in shaping the quality of reporting while internal processes become increasingly significant. An analysis of reporting practices adopted by companies engaged in the Belt and Road initiative revealed a notable influence on the quality of accounting information for companies operating in key industries associated with the initiative (Xu & Hu, 2023).

The literature review suggests that numerous studies on integrated reporting globally have been inclined toward studying the management theories that drive companies to disclose information voluntarily to their shareholders and the interplay between different capitals in the IR framework. There is a unanimous voice regarding the importance of the IR framework. However, there exists a research gap in the studies determining the company's specific goals that motivate managers to adopt the IR framework in India; it is more than just an academic void; it holds practical implications for the company's and its investors' well-being. Against this background, the study of the IR framework and the drivers of the management to report in this format are paramount. This study extends the current knowledge in the field of integrated reporting by empirically investigating the impact of a company's long-term and short-term goals on its adoption of integrated reporting. It also analyzes the management motivations behind this adoption and the voluntary disclosure of information related to the six capitals. The information of six capitals is analyzed to identify the reporting behavior. The hypotheses designed to scrutinize the behavior of the management in reporting within the IR framework are as follows:

H01: There is no significant relationship between firm performance and the tendency to report in the IR framework.

H02: Firms' strategic plans have no significant effect on the tendency to report in the IR framework.

2. METHODOLOGY

The paper explores the adoption of the integrated reporting (IR) framework within the Nifty Metal Index comprising 15 companies, of which seven have embraced the IR framework. However, only five companies were selected for analysis as they have been consistent in reporting within the IR framework from 2019 to 2020. Data from 2020 to 2023 sourced from integrated annual reports of companies and the Money Control website were analyzed. In accordance with the IR framework, the information in integrated annual reports is categorized under six capitals. Each company describes the capitals as per the IR framework using metrics aligned with their reporting methodologies to quantify the inputs and outputs delineating the organizational performance. The Integrated Reporting Capitals Index (IRCIN) was constructed through content analysis utilizing the frequency of words method. Words related to each capital were extracted from the annual reports and grouped accordingly. These words were then tallied to determine their frequency within each capital section. By meticulously counting each word's appearance, their frequencies were combined to create IRCIN. The index also reflects the growth in integrated thinking relative to the base year.

Using a fixed effects model on a balanced panel dataset, the study aims to elucidate the impact of strategic management on companies adopting the integrated reporting framework. The fixed effects model addresses entity-specific variations and incorporates unobserved heterogeneity like location, size, technology, customer base, etc., which may correlate with independent variables. By controlling these unobserved factors through entity-specific fixed effects, the model aims to provide a more precise estimation of the impact of independent variables, such as profit after tax (PAT), book value per share (BVPS), and net cash flow from investing activities (NCFFIA) on the dependent variable IRCIN (Integrated Reporting Capitals Index).

The book value per share as a metric is employed to assess the intrinsic value of a company's equity. The book value per share provides insights into the net asset value attributable to each share of common stock. It is used as a proxy for the company's

past actions and is the net worth of assets reported by the firm (Fama & French, 1992).

PAT reflects the culmination of various operational activities, strategic decisions, and external factors influencing a company's financial performance, making it a comprehensive metric to provide insights into its short-term and long-term performance aspects by assessing its ability to generate sustainable earnings over time. The PAT as a metric is widely employed and discussed for evaluating financial performance (Venugopala Rao et al., 2023). This variable is considered as a proxy for representing the achievement of the firm's short-term goal.

NCFPIA serves as a proxy for long-term goals when combined with other financial metrics and qualitative factors (Fama, 1990; Schwert, 1990). Substantial investments in acquisitions, joint ventures, and research and development initiatives aimed at long-term strategic goals, like market expansion, product diversification, or technological innovation, may signify large outflows in NCFPIA. It also provides significant signals about the growth of the firm. Conversely, the positive cash flows can also provide information on sustainability and commitment to repay long-term obligations. Integrated reporting quality is related to the realized future cash flows depicting the investment efficiency (Barth et al., 2017).

Through this approach, the study endeavors to mitigate potential omitted variable bias and offer nuanced insights into the factors influencing integrated reporting adoption within the metal industry.

The equation is modeled as

$$IRCIN_{it} + \beta_0 + \beta_1 BVPS_{it} + \beta_2 PAT_{it} + \beta_3 NCFPIA_{it} + \alpha_i + \varepsilon_{it}, \quad (1)$$

$IRCIN_{it}$ (Integrated Reporting Capital Index), measures the inclination to report in IR framework, representing the dependent variable for entity i at time t , $BVPS_{it}$ (Book Value per Share), PAT_{it} (Profit after Tax), and $NCFPIA_{it}$ (Net Cash flow from Investing Activities) denote the independent variables for entity i at time t respectively. β_0 , β_1 , β_2 , and β_3 are coefficients, α_i

represents the entity-specific fixed effect for entity i , capturing time-invariant characteristics of each entity that affect the dependent variable. ε_{it} is the error term that represents unobserved factors and random error in this model.

On inclusion of α_i , it controls for time-invariant heterogeneity across entities, allowing for the estimation of the effects of time-varying independent variables $BVPS_{it}$, PAT_{it} , and $NCFPIA_{it}$ on the dependent variable $IRCIN_{it}$ while mitigating potential omitted variable bias.

3. RESULTS

To gauge the inclination of statement preparers toward a specific capital, the average word count of each capital is examined (Table 1).

Financial capital has a prominent focus, with a substantial average word count of 344.8, suggesting the emphasis laid by the companies on financial aspects, including financial strategies, performance, investments, and other related topics in its reporting behavior.

The attention given to manufactured capital is noteworthy, as evidenced by its second-ranking position, with an average word count of 199.85. Within the manufacturing sector, detailed information on the topics related to physical assets, infrastructure, and production capabilities underscore its significance in corporate reporting.

Natural capital describes the aspects related to environmental and natural resources having a substantial average word count of 72.2. It also includes discussions on sustainability, environmental impact, and conservation efforts. Sustainability in this sector needs attention as this also relates to the mining sector and restoring of the environment finds a relatively important place in the order of ranking of the capitals.

Social and relationship capital has a notable average word count of 61.65. This suggests a considerable focus on topics related to social responsibility, community engagement, and relationship-building with stakeholders and the community at large.

Table 1. Combined average word count of capitals 2020–2023

Capitals	Financial Capital	Manufactured Capital	Natural Capital	Social and Relationship Capital	Human Capital	Intellectual Capital
Average words	344.8	199.85	72.2	61.65	40.15	25.95

Human capital registers a moderate average word count of 40.15, encompassing topics on workforce development, employee engagement, and human resource management. Surprisingly, it is positioned at the penultimate rank, which otherwise deserves greater attention, considering that capacity building remains at the crux of any business operations.

Intellectual capital holds a relatively lower average word count of 25.95, placing it at the bottom of the ranking order. This suggests a comparatively less detailed exploration of topics concerning intellectual property, innovation, and knowledge assets compared to other capitals.

Table 2 presents descriptive statistics delineating the characteristics of the IRCIN, BVPS, PAT, and NCFPIA variables. The mean value indicates a substantial 70% growth in IRCIN from the base year, 2019–2020. The mean of the BVPS stands at Rs.251 with a median of Rs.149.7; the substantial difference indicates a diverse range of firm sizes and capitalization within the index. Similarly, the mean of NCFPIA is at Rs.5913 crores, which differs from the median of Rs.4164 crores, reflecting the average cash investments across the selected companies; a similar deviation is observed in PAT, suggesting diversity within the cohort studied. The skewness and kurtosis coefficients reveal right-skewed distributions, while the Jarque-Bera exhibits significant deviation from normality for

PAT and BVPS, pointing out that the distribution of these variables is non-normal. It is a common feature that financial time series data often deviate from a normal distribution due to various factors, such as market volatility, underlying economic conditions, and cyclical movements in the industry.

The analysis of the relationship between the descriptions of all six capitals and IRCIN, as presented in Table 3, reveals a strong positive correlation between IRCIN and financial capital, as well as manufactured capital indicating a strong alignment in the language used to portray these capitals. Furthermore, a moderate positive correlation with social, human, and natural capitals indicates a modest relation between these constructs. However, intellectual capital exhibits a weak relationship at 0.03, implying a contrasting narrative in portraying these capitals relative to corporate governance theory.

Further scrutiny of the relationship between the dependent variable, IRCIN, and the firm-specific factors presented in Table 4 unveils a correlation of approximately -0.183 between IRCIN and BVPS. This negative correlation implies a weak inverse relationship between IRCIN and BVPS; as book value increases, the inclination to report in the IRCIN decreases slightly, and vice versa. Conversely, the correlation coefficient between IRCIN and PAT is approximately 0.537 , indicating

Table 2. Descriptive statistics

Statistic	IRCIN	BVPS	NCFPIA	PAT
Mean	170.0226	251.5470	-5913.696	8956.843
Median	169.0516	149.7750	-4164.500	7759.840
Maximum	283.7027	958.8700	6562.000	41100.16
Minimum	100.0000	30.61000	-19586.00	-4743.000
Std. Dev.	53.88120	249.3240	7362.845	10358.19
Skewness	0.251883	1.630996	-0.389084	1.575188
Kurtosis	2.361266	4.540079	2.158856	5.742546
Jarque-Bera	0.551468	10.84370	1.094225	14.53869
Probability	0.759015	0.004419	0.578618	0.000697
Sum	3400.451	5030.940	-118273.9	179136.9
Sum Sq. Dev.	55160.49	1181087.	1.03E+09	2.04E+09
Observations	20	20	20	20

Table 3. Correlation of six capitals and IRCIN

Variable and Capitals	IRCIN	Financial Capital	Human Capital	Intellectual Capital	Manufactured Capital	Natural Capital	Social and Relationship Capital
IRCIN	1.000000	0.711214	0.394798	0.030964	0.538923	0.356853	0.463475
Financial Capital	0.711214	1.000000	0.418125	-0.212527	0.765414	-0.132750	0.167747
Human Capital	0.394798	0.418125	1.000000	0.721509	0.183504	-0.054106	0.534041
Intellectual Capital	0.030964	-0.212527	0.721509	1.000000	-0.313411	0.038782	0.585310
Manufactured Capital	0.538923	0.765414	0.183504	-0.313411	1.000000	-0.074276	0.000590
Natural Capital	0.356853	-0.132750	-0.054106	0.038782	-0.074276	1.000000	-0.253960
Social and Relationship Capital	0.463475	0.167747	0.534041	0.585310	0.000590	-0.253960	1.000000

a relatively strong positive relationship. Likewise, the correlation coefficient between IRCIN and NCFPIA is approximately 0.13, suggesting a moderate positive relationship.

Table 4. Correlation of dependent and independent variables

Variables	IRCIN	BVPS	NCFPIA	PAT
IRCIN	1.000000	-0.183471	0.132465	0.537999
BVPS	-0.183471	1.000000	-0.302352	0.407362
NCFPIA	0.132465	-0.302352	1.000000	-0.130675
PAT	0.537999	0.407362	-0.130675	1.000000

Table 5 presents the results of regression. The coefficient of book value per share (BVPS) is negative (-0.1837), indicating that higher book values correspond to a decreased propensity to describe the capitals outlined in the IR framework, suggesting that the performance resulting from the past strategies may not strongly drive management to report on all capitals. In contrast, the coefficient for net cash flow from investing activities (NCFPIA) is positive 0.007 and significant, implying that a higher net cash flow from investing activities corresponds to an increased word count in IRCIN descriptions. It indicates that companies with greater long-term investment activities tend to provide more detailed descriptions in their integrated reporting, reflecting a strategic focus on long-term goals. Similarly, the positive and statistically significant coefficient for profit after tax (PAT) suggests that higher levels of profitability are associated with more elaborate descriptions of capitals within the IR framework. Every unit increase in PAT, which describes the short-term goals and performance of the firm, corresponds to a 0.003-word increase in IRCIN.

Table 5. Fixed effects model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BVPS	-0.183794	0.052238	-3.518396	0.0042
NCFPIA	0.007531	0.002617	2.877634	0.0139
PAT	0.003931	0.000962	4.088172	0.0015
C	225.5776	24.53117	9.195553	0.0000
R-squared	0.740837			

With an *R*-squared value of around 74%, the model demonstrates that the independent variables explain a substantial proportion of the variation in IRCIN, hence rejecting H01 and H02. This indicates that the firm-specific variables, such as NCFPIA, PAT, and BVPS, which are a proxy to the long-term goals and short-term goals, significantly influence IRCIN; however, BVPS deviates slightly from the expected behavior as per the theory.

4. DISCUSSION

The results of the average word count indicate that descriptions of financial capital received the highest average word count among the six capitals, followed by manufactured capital, natural capital, social and relationship capital, human capital, and intellectual capital. This hierarchical distribution can be attributed to the capital-intensive nature of the industry, particularly within the manufacturing sector, where emphasis on these capitals seems pertinent. However, the lower ranking attributed to intellectual capital, a domain often associated with

long-term strategic considerations, suggests a potential oversight in recognizing its significance within the analyzed context. By analyzing the relationship between the descriptions of all six capitals and the Integrated Reporting Capitals Index, valuable insights are provided into interconnectedness and divergent perspectives of corporate reporting practices, elucidating the nuanced relationship between financial and non-financial capital dimensions within organizational discourse. Further investigation into the correlation between the dependent variable, Integrated Reporting Capitals Index (IRCIN), and firm-specific factors reveals a positive correlation, indicating a relatively strong positive relationship between PAT and IRCIN, suggesting that higher profitability is associated with higher IRCIN and could be predictive in nature. The positive correlation, albeit weaker, implies that net cash flow from investing activities is related to the content describing the capitals as per the IR framework. This highlights the importance of maintaining healthy cash in-

vestments, which could potentially enhance the IRCIN. Profit after tax (PAT) and book value per share (BVPS) have a significant influence in driving accounting professionals to adopt communication in line with the International Integrated Reporting Council (IIRC). BVPS exhibited an inverse relationship with IRCIN, which is statistically significant. This means that the book value has a notable impact on how capitals are portrayed in company disclosures. These findings resonate with Baboukardos and Rimmel's (2016) study on companies listed on the Johannesburg Stock Exchange (JSE). The positive and statistically significant coefficient of profit after tax (PAT) underscores a notable relationship between PAT and IRCIN. This finding aligns with Cho (2023) who emphasized the impact of financial performance indicators like PAT on integrated reporting practices. Higher profits after tax often signify a company's financial health and success, showcasing its ability to generate sustainable returns and distribute resources across different forms of capitals.

CONCLUSION

This study explores the nuanced relationship between financial and non-financial metrics reported as per the integrated reporting (IR) framework, with a focus on companies within the Nifty Metal Index in India. It investigates the motivations behind management's voluntary disclosure of capitals-related information in annual reports and their willingness to embrace the IR framework. Additionally, it aims to uncover the factors influencing their reporting behavior, particularly examining the influence of the company's long-term and short-term goals on its adoption of integrated reporting.

The content analysis highlights a preference for financial and manufactured capitals over intangible capitals. Results from the fixed effects model show compelling relationships between the Integrated Reporting Capitals Index and firm-specific factors. A positive coefficient in net cash flow from investing activities indicates a significant association, suggesting that strategic investments influence companies' reporting as per the IR framework. Additionally, profitability demonstrates a positive association with detailed IR disclosures, emphasizing the interplay between short-term financial goals and long-term strategic considerations in the process of qualitative expression of capitals within corporate reporting. Conversely, the negative coefficient associated with book value per share suggests that companies with higher asset values in their books may be less inclined to provide detailed descriptions of capitals as outlined by the IR framework. This implies that despite higher book values per share, companies may not effectively convey their overall performance, future prospects, and value creation to stakeholders through integrated reporting. These insights indicate that strategic goals, short-term goals, and company performance drive management to adopt the IR framework. However, they may need to reevaluate their communication of historical values through integrated reporting practices to better harmonize financial and non-financial disclosure with sustainability initiatives.

AUTHOR CONTRIBUTIONS

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REFERENCES

- Albitar, K., Hussainey, K., Kolade, N., & Gerged, A.M. (2020). ESG disclosure and firm performance before and after IR: The moderating role of governance mechanisms. *International Journal of Accounting & Information Management*, 28(3), 429-444. <https://doi.org/10.1108/IJAIM-09-2019-0108>
- Almășan, A., Circa, C., Dumitru, M., Gușe, R. G., & Măngiuc, D. M. (2019). Effects of integrated reporting on corporate disclosure practices regarding the capitals and performance. *Amfiteatru Economic*, 21(52), 572-589. <https://doi.org/10.24818/EA/2019/52/572>
- Anifowose, M., Abang, S., & Zakari, M. A. (2020). Integrated capitals reporting and companies' sustainable value: Evidence from the Asian continent. *Asian Review of Accounting*, 28(4), 567-589. <https://doi.org/10.1108/ARA-10-2019-0184>
- Ashforth, B. E., & Gibbs, B. W. (1990). The double-edge of organizational legitimation. *Organization Science*, 1(2), 177-194. <https://doi.org/10.1287/orsc.1.2.177>
- Baboukardos, D., & Rimmel, G. (2016). Value relevance of accounting information under an integrated reporting approach: A research note. *Journal of Accounting & Public Policy*, 35(4), 437-452. <https://doi.org/10.1016/j.jaccpubpol.2016.04.004>
- 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. <https://doi.org/10.1016/j.aos.2017.08.005>
- Bontis, N., Chua Chong Keow, W., & Richardson, S. (2000). Intellectual capital and business performance in Malaysian industries. *Journal of Intellectual Capital*, 1(1), 85-100. <https://doi.org/10.1108/14691930010324188>
- Brummet, R. L., Flamholtz, E. G., & Pyle, W. C. (1968). Human resource measurement – A challenge for accountants. *The Accounting Review*, 43(2), 217-224. Retrieved from <http://www.jstor.org/stable/243757>
- Camilleri, M. A. (2017). The integrated reporting of financial, social and sustainability capitals: A critical review and appraisal. *International Journal of Sustainable Society*, 9(4), 311-326. <https://doi.org/10.1504/IJS-SOC.2017.10011100>
- Campbell, D., Craven, B., & Shrive, P. (2003). Voluntary social reporting in three FTSE sectors: A comment on perception and legitimacy. *Accounting, Auditing & Accountability Journal*, 16(4), 558-581. <https://doi.org/10.1108/09513570310492308>
- Cerbone, D., & Maroun, W. (2020). Materiality in an integrated reporting setting: Insights using an institutional logics framework. *The British Accounting Review*, 52(3), Article 100876. <https://doi.org/10.1016/j.bar.2019.100876>
- Cho, H. Ch. (2023). Financial and non-financial disclosure. As a future shareholder, would you pay? If so, how much more or less? In A. Zicari & T. Gamble (Eds.), *Responsible Finance and Accounting* (1st ed.). Routledge. <https://doi.org/10.4324/9781003317333>
- Dilling, P. F. A., & Caykoylu, S. (2019). Determinants of companies that disclose high-quality integrated reports. *Sustainability*, 11(13), Article 3744. <https://doi.org/10.3390/su11133744>
- Dimes, R., De Villiers, Ch., & Chen, L. (2023). How integrated thinking can be detected in management disclosures in annual reports: Insights from a large-scale text-analysis approach. *Journal of Management Accounting Research*, 35(3), 75-99. <https://doi.org/10.2308/JMAR-2022-082>
- Fama, E. F. (1990). Stock returns, expected returns and real activity. *Journal of Finance*, 45(4), 1089-1108. <https://doi.org/10.2307/2328716>
- Fama, E. F., & French, K. R. (1992). The cross-section of expected stock returns. *The Journal of Finance*, 47(2), 427-465. <https://doi.org/10.1111/j.1540-6261.1992.tb04398.x>
- Farneti, F., Casonato, F., Montecalvo, M., & de Villiers, C. (2019). The influence of integrated report-

- ing and stakeholder information needs on the disclosure of social information in a state-owned enterprise. *Meditari Accountancy Research*, 27(4), 556-579. <https://doi.org/10.1108/ME-DAR-01-2019-0436>
18. Farooq, M. B., & Maroun, W. (2017). Why organizations voluntarily report-institutional theory and institutional work. In Ch. Villiers & W. Maroun (Eds.), *Sustainability accounting and integrated reporting* (1st ed., pp. 36-48). Routledge. <https://doi.org/10.4324/9781315108032-4>
 19. Guthrie, J., & Petty, R. (2000). Intellectual capital: Australian annual reporting practices. *Journal of Intellectual Capital*, 1(3), 241-251. <https://doi.org/10.1108/14691930010350800>
 20. Hoque, M. E. (2017). Why company should adopt integrated reporting? *International Journal of Economics and Financial Issues*, 7(1), 241-248. Retrieved from <https://dergipark.org.tr/tr/download/article-file/364169>
 21. International Federation of Accountants (IFAC). (2015). *Materiality in <IR>: Guidance for the preparation of integrated reports*. Retrieved from https://integratedreporting.ifrs.org/wp-content/uploads/2015/11/1315_MaterialityinIR_Doc_4a_Interactive.pdf
 22. International Federation of Accountants (IFAC). (2022, September 27). *The growing momentum for integrated reporting: Part 1*. Retrieved from <https://integratedreporting.ifrs.org/news/the-growing-momentum-for-integrated-reporting-part-1/>
 23. Jensen, J. C., & Berg, N. (2012). Determinants of traditional sustainability reporting versus integrated reporting. An institutionalist approach. *Business Strategy and the Environment*, 21(5), 299-316. <https://doi.org/10.1002/bse.740>
 24. 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. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
 25. Kamath, G. B. (2021). Corporate governance and intellectual capital disclosure. *International Journal of Learning and Intellectual Capital*, 18(4), 365-398. <https://doi.org/10.1504/IJLIC.2021.118412>
 26. Mähönen, J. (2020). Integrated reporting and sustainable corporate governance from European perspective. *Accounting, Economics, and Law: A Convivium*, 10(2), Article 20180048. <https://doi.org/10.1515/ael-2018-0048>
 27. Malola, A., & Maroun, W. (2019). The measurement and potential drivers of integrated report quality: Evidence from a pioneer in integrated reporting. *South African Journal of Accounting Research*, 33(2), 114-144. <https://doi.org/10.1080/10291954.2019.1647937>
 28. Navarrete-Oyarce, J., Moraga-Flores, H., Gallegos Mardones, J. A., & Gallizo, J. L. (2022). Why integrated reporting? Insights from early adoption in an emerging economy. *Sustainability*, 14(3), Article 1695. <https://doi.org/10.3390/su14031695>
 29. Nistor, C. S., Stefanescu, C. A., Oprisor, T., & Crisan, A. R. (2019). Approaching public sector transparency through an integrated reporting benchmark. *Journal of Financial Reporting and Accounting*, 17(2), 249-270. <https://doi.org/10.1108/JFRA-06-2017-0048>
 30. Omran, M. A., & El-Galfy, A. M. (2014). Theoretical perspectives on corporate disclosure: A critical evaluation and literature survey. *Asian Review of Accounting*, 22(3), 257-286. <https://doi.org/10.1108/ARA-01-2014-0013>
 31. Schwartz, S. H. (2007). Basic human values: theory, methods, and application. *Risorsa Uomo*, 2007(2), 261-283. Retrieved from https://www.francoangeli.it/Riviste/Scheda_Rivista.aspx?idArticolo=30705
 32. Schwert, G. W. (1990). Stock returns and real activity: A century of evidence. *Journal of Finance*, 45(4), 1237-1257. <https://doi.org/10.2307/2328722>
 33. Sofian, S., Rasid, S. Z., & Mehri, M. (2011). Effect of conservatism of intellectual capital (ex ante) and conservatism of earnings (ex post) on relevance of earnings. *Australian Journal of Basic and Applied Sciences*, 5(9), 1837-1840. Retrieved from <https://ajbasweb.com/old/ajbas/2011/September-2011/1837-1840.pdf>
 34. Stewart, T. A. (1997). *Intellectual capital: The new wealth of the organization*. New York: Doubleday Currency.
 35. van Zijl, W., Wöstmann, C., & Maroun, W. (2017). Strategy disclosures by listed financial services companies: Signalling theory, legitimacy theory and South African integrated reporting practices. *South African Journal of Business Management*, 48(3), 73-85. <https://doi.org/10.4102/sajbm.v48i3.37>
 36. Venugopala Rao, K.P., Ibrahim, F., & Tadi, M. S. (2023). Value relevance of financial information: A comparative study of pre-and post-implementation of Indian accounting standards. *Investment Management and Financial Innovations*, 20(1), 68-76. [https://doi.org/10.21511/imfi.20\(1\).2023.07](https://doi.org/10.21511/imfi.20(1).2023.07)
 37. Vitolla, F., Raimo, N., & Rubino, M. (2020). Board characteristics and integrated reporting quality: An agency theory perspective. *Corporate Social Responsibility Environmental Management*, 27(2), 1152-1163. <https://doi.org/10.1002/csr.1879>
 38. Wen, X. (2011). Voluntary disclosure and investment. *Contemporary Accounting Research*, 30(2), 677-696. <https://doi.org/10.1111/j.1911-3846.2012.01169.x>
 39. Xu, Ch., & Hu, J. (2023). Does China's Belt and Road Initiative improve financial reporting quality? *Finance Research Letters*, 58, Article 104628. <https://doi.org/10.1016/j.frl.2023.104628>