

Integrated Reporting and Firm Performance:
A Study of Selected Companies in India

Turkish Online Journal of Qualitative Inquiry (TOJQI)
Volume 12, Issue 7, July 2021: 2860-2868

**Integrated Reporting and Firm Performance:
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Abstract:

With the emergence of integrated reporting (IR) system, it is required to know how this innovative corporate reporting reform will benefit the stakeholders in general and shareholders in particular. The study analyses the impact of capital outcome variables of the IR process on the profitability of twelve Indian companies spreading six different sectors over three years using a panel regression framework. The analysis of data revealed that when all the capitals are taken into consideration, except natural capital, all other capitals like financial capital, human capital, intellectual capital, manufactured capital and social and relationship capital have a positive impact on the profit margin. The manufacturing capital and the intellectual capital are significantly affecting the profit margin. So, the focus should be on these two capitals to increase the accounting performance of the companies. At both individual level and combined level, natural capital is having significant negative impact on the profit margin.

Keywords: Integrated Reporting, Firm Performance, Profit Margin, Capital

1. Introduction:

In 21st century, the traditional financial reporting model has faced many challenges. It has failed to provide relevant information to fulfil the needs of stakeholders. After the global financial crisis of 2007-2008, there has been a change in reporting practices across the world. Sustainability reporting gained importance in the first decade of this century. Another reporting innovation came in the second decade of 21st century in the form of 'Integrated Reporting' (IR). Both financial and non-financial information are integrated in this report to provide a holistic view of the business organisation. It recognises the value, risks and opportunities and focuses on departmental collaborations to give a complete picture of the business. The business model referred in the IR covers a thorough understanding of the value creation process, such as how it creates, preserves, and captures value. This is fundamental to effective managerial decision making.

Realising the need for corporate reporting reform, the International Integrated Reporting Council (IIRC) was established in 2009. It took four years to develop the draft framework which became the base for integrated reporting. The framework provides guidelines and

principles for preparation of IR. The IIRC recognises six distinct but interrelated capitals which are discussed below:

- **Financial capital:** It covers the financial resources obtained through financing, such as equity, debt or grants. It also refers to the funds that are generated through operations or investments.
- **Manufactured capital:** It covers collection of physical, material, and technological objects like equipment, building and other infrastructure. These are used by the organisation for the production of goods or services.
- **Intellectual capital:** It includes intangibles that are based on knowledge which provide competitive advantage over others like patents, software, copyrights, and licenses.
- **Human capital:** It covers human resources and their competencies and capabilities. It includes the skill, knowledge and experience possessed by the employees. This capital influences their productive capacity and earning potential.
- **Social and Relationship capital:** The companies are considered as corporate citizens having social responsibilities. This capital covers the relationships between the organisation and its stakeholders. It provides information relating to collective well-being of the society.
- **Natural capital:** This capital covers all the natural resources like air, water, land, minerals, forests, and biodiversity.

2. Significance of the Study

The core of improving the disclosure requirement is to fulfil the stakeholders' demand for complete information about the organisation. In order to have a competitive edge globally, adoption of IR is highly needed. Integration of sustainability into corporate strategies have gained momentum in both developed and developing nations. Integrated report is not only a tool to attract investors but also to develop trust by reducing information asymmetry between the stakeholders and the company. It is also essential for internal decision making.

IR is a novel reporting practice which aims to eliminate the shortcomings of earlier reporting practices. There are both costs and benefits of adopting IR. It focuses on value creation through the lens of the six 'capitals'. IR has emerged as a valuable solution for the problems of earlier reporting practices. The integrated disclosure shows a complete picture of the business performance. The six 'capitals' of IR complement and compete against each other (Camilleri, 2018).

3. Review of Related Studies

Goyal, P., Rahman, Z. and Kazmi, A.A. (2013), studied the available literature on the relationship of sustainability performance and performance of the firms. Their review of 101 research articles revealed that there is no universally accepted relationship between sustainability performance and firm performance. Most of the research studies took financial

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performance as a proxy to firm performance. They concluded that further empirical research is required in developing countries to study this relationship. **Lee, K. and Yeo, G. (2016)**, in their analytical research article, examined the relationship of IR with firm valuation. They inferred that IR disclosure is positively associated with the value of the firm. They observed that IR improves the information environment of large companies with high intangible assets and multiple business segments. **Faria, M.J.S. (2016)** examined IR, its evolution, advantages and disadvantages. In order to popularise IR all over the world the limitations should be reduced. The correlation between the reporting elements and their impact on business performance must be stated in the integrated report. And this correlation can be achieved by better management decisions. **Rupley, K. H., Brown, D. and Marshall, S. (2017)** analysed the transition of corporate reporting from corporate social responsibility reporting to integrated reporting. They indicated that integrated reports have little focus on governance and do not provide the information most highly desired by investors. They also found out wide variation in the length of the integrated report of the companies. **Kundu, B. (2017)** examined the application of IR in Indian companies. The content analysis of ten large companies revealed that the companies reported all the aspects of IR and there was no significant difference in their reporting. It was observed that the annual reports become integrated reports if the business responsibility report and social report are added as part of the annual reports. **Casonato, F., Farneti, F. and Dumay, J. (2018)** analysed the effects of integrated reporting on relational capital and organisational reputation. They examined how a bank rocked by a major scandal had attempted to regain its goodwill through integrated reporting. **Abhayawansa, S., Eljido-Ten, E. and Dumay, J. (2019)** studied whether IR is relevant to analysts. They found that analysts had lower awareness level regarding IR, and they do not consider integrated reports to be any more useful than annual report. **Sukhari, A. and Villiers, C.D. (2019)** analysed the change in business model and strategy disclosures after the introduction of IR. For this they analysed the reporting by the companies in two different time frames, i.e., 2008 and 2014 (before and after IR requirements). They found that business models and strategies were disclosed after 2014 as a requirement to publish an integrated report.

4. Objectives of the Study

- To study the importance of IR in corporate reporting.
- To study the impact of six capitals of integrated reporting on the accounting performance of a firm.

The profit before interest and tax has been taken as measure of accounting performance in this article.

5. Hypotheses of the Study

- There is no relationship between IR and firm performance.
- No individual capital significantly influences the firm performance.

6. Population and Sample

The corporate sector of India has been taken into consideration in the study. The data and reports were collected from the selected companies (ICICI Bank, HDFC Bank, Cipla, Sun

Pharma, Indian Oil, HPCL, Wipro, TCS, Tata Steel, Sail, Airtel, Reliance Jio) during these periods for analysis and interpretation. All the data and scores were filled after analysing the reports of different years. Initially, a good scale of 0, 1 and 2 for non-disclosure, partially disclosure and fully disclosure respectively was prepared and assigned the score against each parameter appearing in the annual reports of the sample companies. The interest variables are six capitals such as the financial capital (FINCAP), Manufacturing capital (MANCAP), Intellectual capital (INTCAP), Human Capital (HUMCAP), Social and relationship capital (SORECAP) and Natural Capital (NATCAP). Since the performance is not solely affected by the reporting variables, this study has taken into consideration some of the control variables. The control variables are the extraneous factors whose influence is to be controlled. Ignoring the control variable will not give ideal result. The control variables used in the analysis are sales, leverage, return on capital employed. Performance variable here is the measure of accounting performance. Net operating profit margin is calculated by dividing OPBDIT (operating profit before depreciation interest and tax) by sales, which measures firms' overall operating performance. The analysis of inputs, outputs and outcomes has been undertaken for 3 years, i.e., 2016-17 to 2018-19 for the sample companies.

6.1. Statistical Techniques used in the Present Study

Since this study examines the relationship between reporting and performance, multivariate regression analysis technique is applied for data analysis. Following regression is estimated using Ordinary Least Square methodology in a panel framework.

$$PBITM = C + \beta_2 \text{LogSales}_{it} + \beta_3 \text{Leverage}_{it} + \beta_4 \text{ROCE}_{it} + \beta_5 \text{FINCAP}_{it} + \xi$$

$$PBITM = C + \beta_2 \text{LogSales}_{it} + \beta_3 \text{Leverage}_{it} + \beta_4 \text{ROCE}_{it} + \beta_5 \text{HUMCAP}_{it} + \xi$$

$$PBITM = C + \beta_2 \text{LogSales}_{it} + \beta_3 \text{Leverage}_{it} + \beta_4 \text{ROCE}_{it} + \beta_5 \text{ITMCAP}_{it} + \xi$$

$$PBITM = C + \beta_2 \text{LogSales}_{it} + \beta_3 \text{Leverage}_{it} + \beta_4 \text{ROCE}_{it} + \beta_5 \text{MANCAP}_{it} + \xi$$

$$PBITM = C + \beta_2 \text{LogSales}_{it} + \beta_3 \text{Leverage}_{it} + \beta_4 \text{ROCE}_{it} + \beta_5 \text{NATCAP}_{it} + \xi$$

$$PBITM = C + \beta_2 \text{LogSales}_{it} + \beta_3 \text{Leverage}_{it} + \beta_4 \text{ROCE}_{it} + \beta_5 \text{SORECAP}_{it} + \xi$$

$$PBITM = C + \beta_2 \text{LogSales}_{it} + \beta_3 \text{Leverage}_{it} + \beta_4 \text{ROCE}_{it} + \beta_5 \text{SORECAP}_{it} \\ + \beta_5 \text{NATCAP}_{it} + \beta_5 \text{MANCAP}_{it} + \beta_5 \text{INTCAP}_{it} + \beta_5 \text{HUMCAP}_{it} \\ + \beta_5 \text{FINCAP}_{it} + \xi$$

Where, i represents the cross-sectional companies and t represents the year. ξ represents the error term. In the first stage we have studied the impact of individual capital and finally we have studied the simultaneous impact of all the six capitals on profit margin.

6.2 Data Analysis and Interpretation

The results of the impact of six capital outcome variables on profit margin are presented and discussed through Table 1 to Table 7

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First, the results of the impact of financial capital on profit margin are presented through Table 1.

Table 1: Impact of Financial Capital on Profit Margin (PBITM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROCE	0.72	0.10	7.00	0.00***
LOG_SALES	-1.43	1.36	-1.05	0.30
DEBTEQUITY_RATIO	-5.34	3.88	-1.38	0.18
FINCAP	0.17	1.38	0.12	0.91
C	18.60	15.71	1.18	0.25

Note: Value of $R^2 = 0.66$.***, ** and * indicate significant at 1%, 5% and 10% level of significance

The results show positive impact of FINCAP on the PBITM of the sample companies. But as the p-value is 0.91, it means FINCAP does not significantly affect the PBITM.

The results of the impact of human capital on profit margin are presented through Table 2.

Table 2: Impact of Human Capital on Profit Margin (PBITM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROCE	0.73	0.10	7.08	0.00***
LOG_SALES	-1.44	1.30	-1.11	0.28
DEBTEQUITY_RATIO	-5.50	3.86	-1.43	0.16
HUMCAP	0.60	0.82	0.73	0.47
C	6.97	21.87	0.32	0.75

Note: Value of $R^2 = 0.67$.***, ** and * indicate significant at 1%, 5% and 10% level of significance

The results show no significant impact of HUMCAP on the PBITM of the sample companies as the p-value is 0.47.

The results of the impact of Intellectual Capital on profit margin are presented through Table 3.

Table 3: Impact of Intellectual Capital on Profit Margin (PBITM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROCE	0.77	0.10	7.39	0.00***
LOG_SALES	-2.62	1.49	-1.76	0.09*
DEBTEQUITY_RATIO	-5.78	3.75	-1.54	0.13
INTCAP	3.84	2.45	1.57	0.13
C	18.92	12.97	1.46	0.15

Note: Value of $R^2 = 0.69$.***, ** and * indicate significant at 1%, 5% and 10% level of significance

The results show no significant impact of INTCAP on the PBITM of the sample companies as the p-value of the INTCAP is 0.13.

The results of the impact of Manufacturing Capital on profit margin are presented through Table 4.

Table 4: Impact of Manufacturing Capital on Profit Margin (PBITM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROCE	0.72	0.11	6.53	0.00***
LOG_SALES	-1.39	1.38	-1.01	0.32
DEBTEQUITY_RATIO	-5.35	3.92	-1.37	0.18
MANCAP	-0.06	2.49	-0.02	0.98
C	20.01	23.24	0.86	0.40

Note: Value of $R^2 = 0.66$.***, ** and * indicate significant at 1%, 5% and 10% level of significance

The results show negative relation of MANCAP on the PBITM of the sample companies and the p-value of the MANCAP coefficient is also not significant.

The results of the impact of Natural Capital on profit margin are presented through Table 5.

Table 5: Impact of Natural Capital on Profit Margin (PBITM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROCE	0.55	0.13	4.06	0.00***
LOG_SALES	-2.28	1.33	-1.71	0.10
DEBTEQUITY_RATIO	-7.35	3.84	-1.92	0.06*
NATCAP	-3.72	2.00	-1.86	0.07*
C	49.45	20.51	2.41	0.02

Note: Value of $R^2 = 0.70$.***, ** and * indicate significant at 1%, 5% and 10% level of significance

The results show that at 10% level of significance, NATCAP affect negatively the PBITM of the sample companies.

The results of the impact of Social and Relationship Capital on profit margin are presented through Table 6.

Table 6: Impact of Social and Relationship Capital on Profit Margin (PBITM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROCE	0.74	0.12	6.03	0.00***
LOG_SALES	-1.43	1.31	-1.09	0.28
DEBTEQUITY_RATIO	-5.17	3.90	-1.33	0.19
SORECAP	0.30	0.85	0.36	0.72
C	14.08	20.42	0.69	0.50

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Note: Value of $R^2 = 0.66$. *, ** and * indicate significant at 1%, 5% and 10% level of significance.**

The results show positive impact of SORECAP on the PBITM of the sample companies. But the impact is not significant as the p-value of the SORECAP coefficient is 0.72.

Finally, the impact of all six capitals and Profit Margin are studied and presented through table 7.

Table 7: Impact all six-capital outcome of IR on Profit Margin (PBITM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROCE	0.76	0.17	4.58	0.00***
LOG_SALES	-4.63	1.69	-2.73	0.01**
DEBTEQUITY_RATIO	-7.23	3.77	-1.92	0.07*
SORECAP	1.05	0.94	1.11	0.28
NATCAP	-4.96	2.06	-2.41	0.02**
MANCAP	5.21	2.91	1.79	0.09*
INTCAP	6.86	2.96	2.32	0.03**
HUMCAP	0.34	0.83	0.41	0.69
FINCAP	2.05	1.51	1.35	0.19
C	-19.38	39.41	-0.49	0.63

Note: Value of $R^2 = 0.76$. *, ** and * indicate significant at 1%, 5% and 10% level of significance.**

As evident from the results of the impact of all six-capitals taken together presented through Table 7, all capital (FINCAP, HUMCAP, INTCAP, MANCAP, SORECAP) except NATCAP impact the PBITM positively. The impact of NATCAP is negative at 5 % level of significance (as p-value of NATCAP coefficient is 0.02). MANCAP and INTCAP are affecting the PBITM significantly at 10% and 5% level of significance, respectively. The p value of MANCAP is 0.09 (<0.10) and the p value of INTCAP is 0.03 (<0.05). Attempt has been made in this article to examine the hypothesis that there is no relationship between IR and accounting performance and no individual capital significantly influences the accounting performance. Various statistical analysis has been carried out and it is found that the impact of natural capital was significantly negative.

7. Recommendations

- The management of the companies should work on improving the financial and human capital dimension of integrated reporting so that their benefit could be reflected on the financial performance of the company. The management should also look into the aspect of natural capital of the integrated reporting process to avoid its negative impact.
- To win the confidence of the stakeholders and be of their use, IR must be understandable, coherent, reliable and comparable which will satiate the information needs of the stakeholders.

- There is also need for harmonization of IR principles and standards prescribed by the IIRC and several regulatory bodies across the globe.
- SEBI should formulate guidelines based on the best practices of various companies. Regulation is necessary to improve the quality of IR.
- As IR is believed to bring transformation in a company, the pressure groups, policy makers, academic fraternity and industry professionals must play their role and enrich the integrated reporting. The professional bodies like ICAI and various ministries dealing with corporate affairs should play a proactive role in standardising corporate disclosures which will help the stakeholders of business. Therefore, further research could explore and reinforce the significance of IR.

8. Conclusion

The present study revealed that when all the capitals are taken into consideration, except natural capital, all other capitals like financial capital, human capital, intellectual capital, manufacturing capital and social and relationship capital have a positive impact on the profit margin. The manufacturing capital and the intellectual capital are significantly affecting PBITM. So, the focus should be on these two capitals to increase the accounting performance of the companies. At both individual level and combined level, natural capital is having significant negative impact on the profit margin.

It can be inferred that this innovative reporting called IR brings greater transparency by linking both financial and non financial performance in a single report and provides more information to the stakeholders. The regulators should come forward to formulate guidelines for this new corporate reporting reform. A comprehensive study of the best IR practices can be undertaken for this purpose. This study suffers from the limitation of low sample size. It is expected that the IR will emerge as the fertile ground for many path breaking research studies in future.

References:

- [1]. Abhayawansa, S., Eljido-Ten, E. and Dumay, J. (2019). A practice theoretical analysis of the irrelevance of integrated reporting to mainstream sell side analyst. *Accounting and Finance*, 59, 1615-1647.
- [2]. Bal, R.K. and Bal, T. (2019). A study on corporate integrated reporting. *Indian Accounting Review*, 23, 1-15.
- [3]. Bal, T. (2018). Integrated reporting: literature review and its practices in India and abroad. *Sruti Management Review*, 11, 48-54.
- [4]. Bal, T. and Dhal, S.K. (2019). Integrated Reporting for Corporate Sustainability: An exploratory study. *The Orissa Journal of Commerce*, 40, 42-50.
- [5]. Bal, T. and Dhal, S.K. (2020). Integrated Reporting: It's impact on value creation. *International Journal of Recent Technology and Engineering*, 9, 225-229.
- [6]. Camilleri, M.A. (2018). Theoretical insight on integrated reporting. The inclusion of non-financial capitals in corporate disclosure. *Corporate Communications: An International Journal*, 23, 1-22. DOI 10.1108/CCIJ-01-2018-0016
- [7]. Casonato, F., Farneti, F. and Dumay, J. (2018). Social capital and integrated reporting losing legitimacy when reporting talk is not supported by actions. *Journal of Intellectual Capital*, 20, 144-164.
- [8]. Eccles, R.G. and Serafeim, G. (2014). Corporate and integrated reporting: a functional perspective. (<https://www.researchgate.net>)(<https://ssrn.com/abstract=2388716>)

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- [9]. Eswaran.S and Singh.S(2006), “Marketing Research, Concepts, Practices and Cases”, Oxford University Press, New Delhi, 314 – 410.
- [10]. Faria, M.J.S. (2016). A new form of reporting for companies: The integrated reporting. *International Journal of Management and Economics Invention*, 2, 1081-1091.
- [11]. Fuhrmann, S. (2020). A multi-theoretical approach on drivers of integrated reporting-unit firm-level and country-level associations. *Meditari Accounting Research*, 28, 168-205.
- [12]. Goyal, P., Rahman, Z. and Kazmi, A.A. (2013). Corporate sustainability performance and firm performance research: Literature review and future research agenda. *Management Decision*, 51, 361-379.
- [13]. Kundu, B.(2017). Application of IR in Indian corporate scenario. *Prestige international Journal of Management & IT sanchayan*, 6, 99-110
- [14]. Lee, K. and Yeo, G. (2016). The association between integrated reporting and firm valuation. *Review of Quantitative Finance and Accounting*, 47, 1221-1250.
- [15]. Rupley, K. H., Brown, D. and Marshall, S.(2017). Evolution of corporate reporting: from stand-alone corporate social responsibility reporting to integrated reporting. *Research in Accounting Regulation*. 29, 172-176.
- [16]. Sukhari, A. and Villiers, C.D. (2018). The influence of integrated reporting on business model and strategy disclosures. *Australian Accounting Review*, 1-18