International Journal of Research in Finance and Management

P-ISSN: 2617-5754
E-ISSN: 2617-5762
IJRFM 2024; 7(2): 61-69
www.allfinancejournal.com
Received: 18-04-2024
Accepted: 15-05-2024

Dr. Poonam Mahajan
Assistant Professor,
Department of Commerce,
Guru Nanak Dev University
College, Narot Jaimal Singh,
Pathankot, Punjab, India

Gurbinder Singh
Assistant Professor,
Department of Commerce,
SOM, Ajeenkya DY Patil
University, Pune,
Maharashtra, India

Correspondence
Gurbinder Singh
Assistant Professor,
Department of Commerce,
SOM, Ajeenkya DY Patil
University, Pune,
Maharashtra, India

Integrated reporting and firm performance: An Analysis of selected Indian Companies

Dr. Poonam Mahajan and Gurbinder Singh

DOI: https://doi.org/10.33545/26175754.2024.v7.i2a.347

Abstract
Companies are providing the sustainable information to the stakeholders in their annual reports. This information is either a part of Business Responsibility report, Corporate Social Responsibility Report or Sustainability Report. But the information provided in these reports are not in integrated manner. To overcome this limitation, the concept of Integrated Reporting has emerged. Present paper deals with extent of following of International Integrated Reporting Council (IIRC) principles by selected Indian companies. With the help of this paper we have also tried to establish the relationship between quality of Integrated Reporting and financial performance of BSE 30 companies. The results of this study show that there is continuous improvement in the disclosure practices regarding six capitals after the adoption of Integrated Reporting by Indian companies. As regard to relationship between firm performance and Integrated Reporting quality, we did not find any significant relationship between these two variables.

Keywords: Indian Companies, firm performance, integrated reporting quality, sustainable information

Introduction

Globally, the companies are disclosing their information with the help of annual reports. The annual reports contain the financial information regarding the performance of the companies. In the past, the investors are interested only in the financial performance of the company to make their investment decisions. So, the companies were using annual reports to satisfy the demands of shareholders. With the advent of technology and globalization, the 'providers of financial capital' are now also interested in the non-financial information along with the financial information to make more informed and better decisions regarding the investment. The inter-linkage of financial and non-financial information with the value creation process of company is become popular among the investors. Globally, the companies have started to provide the non-financial information with the help of different 'Business Responsibility Reports, Corporate Social Responsibility Reports and Sustainability Reports. These Reports are presented in standalone format to provide non-financial information to the stakeholders. With the introduction of these reports, the users of financial reports are worried that annual reports presented along with various standalone reports do not depicts the real picture of the company because the key and relevant information lost in lengthy disclosure and in compliance of stringent regulatory framework. To overcome this problem, the concept of integrated reporting has been introduced.

Integrated Reporting presents the financial and non-financial information in more integrated manner. Integrated Reporting can be differentiated from traditional reporting due to its temporal approach. Financial reporting is only focused on the results of the current/past year activity, the integrated reporting besides looking the past activities is also a forward looking approach, considering the short, medium & long term goals. This allows the company to anticipate its opportunities as well as aware of its risks (Ana Margardina Caslerio p. 2). In integrated reporting, not only the financial and non-financial information is presented but also how this information contributes to the value creation for different stakeholders is disclosed. In traditional reporting system, only financial information like company equity, earnings, liabilities and financial assets like building, property, land, machinery etc. were specified along with their usage in value creation process.

Organizations are now using integrated reporting to clearly disclose and communicate "how the resources are helping to create the value for businesses", to think holistically about their strategy & plans, make informed decisions and manage key risks to build stakeholder's confidence.

According to IIRC (International Integrated Reporting Council) there are six types of capitals i.e. financial capital, natural capital, human capital, social/relationship capital, intellectual capital and manufactured capital. These capitals are used as inputs to create the value for the company and stakeholders. The Companies operations and outputs helps to increase, decrease or modify these capitals.

In 2010, The Prince of Wales's Accounting for Sustainability Project (A4S) and Global Reporting Initiative (GRI) announced the formation of International Integrated Reporting Council (IIRC), whose stated mission is to create globally accepted integrated reporting framework. IIRC has published the framework in 2013, which acts as a guiding principle to help companies to disclose value for the stakeholders. This framework is a principle based, does not present standardized format for reporting. The companies can prepare the integrated reports according to their choice by following these principles. Globally, there are number of countries which have mandated the integrated reporting. South Africa is the first country which has mandated the integrated reporting followed by other economies such as Denmark, France and UK. There are also some countries like USA, Japan, Germany and some Asian countries are also following the integrated reporting principles on voluntary basis.

In India, regulatory authority SEBI issued a circular dated February 6, 2017 stated that top 500 BSE companies may adopt an Integrated Reporting on voluntary basis from the financial year 2017-18 who compulsorily prepare Business Responsibility Report. The information related to Integrated reporting may be provided in separate annual reports or by incorporating in Management Discussion and Analysis part of the annual reports. The integrated reporting is a relatively new phenomenon in Indian context. Though, some Indian Companies are preparing the annual reports according to the IIRC principles on voluntary basis from annual year 2015-16. The companies like Tata Steel, Wipro, Yes Bank, Reliance Industries are pioneer in preparing the integrated annual reports according to the IIRC principles. But still the adoption rate of integrated reporting by the Indian companies is relatively slow as compared to developed countries.

According to IIRC, the companies have to present the six types of capitals in their annual reports

	Capitals	Definition	Inputs	Outcomes
Economic dimension	Financial	Economic resources to fund the business	• Equity funding • Debt funding • Retained earnings	• Revenue generation • Project funding • Shareholder returns
	Manufactured	Infrastructure that generates income	• Port, terminals and interlinking infrastructure • Road-transportation fleet • Shipping fleet	• Seamless logistics chains, including the capacity to grow exports and provide logistics solutions across the African continent
Social dimension	Intellectual	The knowledge and intellectual property people use to gain a competitive advantage and grow the business	• Globally respected brand • Sound knowledge base • Specialised skills • Proven systems and structures	• Innovative, bespoke offerings to clients • Governed business management
	Human	The knowledge, skills, talents, experience, judgement and wisdom of people that determines the capacity of an organisation to accomplish goals	• Skilled employees • Skills and development training	• Employee safety and well-being • Personal and professional growth • Indirect support of employee dependants
	Social and relationship	The value an organisation builds through engagement and information-sharing with stakeholders to achieve mutual well-being	• Host communities • Engagement structures • Strategic relationships	• Mutually beneficial stakeholder involvement • Engaged workforce • Improved community sustainability
Environmental dimension	Natural	The world's stocks natural ecosystems and assets, including geology, soil, air, water and all forms of life	• Natural resources	• Mitigation of adverse environmental impacts

Source: http://grindrodintegratedreport2017.co.za/images/p35-1.png

Theoretical Framework for the Study

Previous studies conducted on integrated reporting, numbers of theories are used to explain integrated reporting such as Political cost theory, Legitimacy theory, Proprietary cost theory, Agency theory and Stakeholder theory. This study has adopted only two main theories Stakeholder theory, Agency theory to explain integrated reporting and to meet the objectives of this study.

Stakeholder Theory: According to Stakeholder theory, firms will perform activities and operations to fulfill the demand of all stakeholders. The companies not only respond to the demands of financial capital providers but also to the various stakeholders such as government, employees, customers, society and the community at large. Therefore different company's characteristics such as size of the company, Industry, Leverage, Age of the company, ownership status may provide different IR terms and level of disclosure because on the basis of types and number of stakeholders. Stakeholder theory can be used to explain the extent and level of disclosure in the integrated reports of Indian companies as well as different levels of IR between the groups of interest in this study. The concept of integrated reporting not only fulfills the demands of shareholders but also fulfills the information needs of all stakeholders.

Agency Theory: It depicts the relationship between the principal and agent. In the company form of business, the ownership and management is in separate hands which creates the agency conflicts. The integrated reports help to overcome the information asymmetry between the managers and owners of the companies thereby reducing the agency conflicts. The financial and non-financial information is provided to the investors of the companies with the help of Integrated Reports.

Literature Review

There are various studies done which reviewed the relationship between the integrated reporting and firm performance. These studies have tried to establish the relationship between the various corporate characteristics of the firm and the firm performance. A snapshot of these studies is given below in Table 1.

Table 1: Tabular Literature Review of Studies in Indian and International context

Author (Year)	Country/ Sample size	Objectives	Sample	Research Methodology Tools used
Ana Margarida Casaleiro Coelho (2016) [13]	Global/224	1. What are the characteristics of <IR> reporters 2. Association of <IR> on the perceived market value of those companies	**Data**-secondary source **Source of Data**-IIRC Database **Study Period**-10 years from 2006 to 2015	Descriptive analysis Content analysis Linear Regression Pearson Correlation ANNOVA OLS Regression
Dr. Prashanta Sharma and Mrs. N. Rajyalaxmi	India /10	1. Bring out the difference between financial reporting and integrated reporting 2. Compare the integrated reporting practices of Metair Investment Ltd and Kirloskar Brothers Ltd 3. Analyzing the integrated reporting of BSE30 companies	**Data**-secondary source **Source of Data**-Annual Reports KPMG<IR>Metair Investment Ltd<IR> IIRC Reports GRI reports Journals and Websites **Study Period**-10 years from 2004-05 to 2013-14	Descriptive Statistics Index of Disclosure
Ferdinand Siagian *et al.* (2013) [14]	Indonesia /125	1. Whether corporate governance practices and the quality of reporting are associated with firm value for public companies in Indonesia	**Data**-secondary source **Source of Data**-Annual Reports **Study Period**-2 years from 2003 and 2004	Multivariate regression Correlation analysis
K. Appiagyei *et al.* (2016) [2]	South Africa and Australia/20	1. To study the difference in quality of <IR> between a voluntary and mandatory settings 2. To examine the relationship between <IR> and firm profitability over time from two different regulatory settings	**Data**-secondary source **Source of Data**-Annual Reports **Study Period**-4 years from 2012 to 2015	Content analysis t-test Mann-Whitney U test Univariate regression
Kin-Wai Lee *et al.* (2016) [15]	South Africa	1. To examine the association between integrated reporting and firm performance 2. To examine the association between IR and organizational complexity 3. To examine the association between IR and external financing needs	**Data**-secondary source **Source of Data**-Annual Reports and integrated reports **Study Period**-4 years from 2010 to 2013	Regression Model Univariate correlation Content Analysis
Muttanachai Suttipun (2017) [16]	Thailand/150	1. To investigate the extent and level of integrated reporting in the annual reports of companies listed on the stock exchange of Thailand 2. Are there different levels of Integrated reporting in annual reports of the companies listed in SET between SET100 companies and non SET100 companies and between CSR award companies and non CSR award companies 3. Does the integrated reporting have an effect on the corporate financial performance of the companies listed in SET	**Data**-secondary source **Source of Data**-Annual Reports **Study Period**-4 years from 2012 to 2015	Content Analysis Independent t-test Multiple Regression
Eccles *et al.* (2014) [6]	Global/2000	1. To test the relationship between a company's integrated reporting and quality of management 2. To investigate the relationship between integrated reporting and financial performance	**Data**-secondary source **Source of Data**-Annual Reports **Study Period**-2 years, 2011 and 2012	Regression analysis Content Analysis
Neda Vitezic & Antoniza Petrlic (2018)	Crotia/138	1. To investigate the extent to which IR framework was recognized in Crotian companies 2. To investigate whether a high level of efficiency encourages companies to more accountable socially responsible business	**Data**-secondary source **Source of Data**-Annual Reports Amadeus Bureau VanDjik Database **StudyPeriod**-5 years from 2011 to 2015	Descriptive Statistics T-test Mann-Whitney U test
Wen & Heong (2017) [12]	Malaysia/50	1. To examine current IR adoption using IIRC (2013) framework among Malaysian Public limited companies	**Data**-secondary source **Source of Data**-Annual Reports **Study Period**-4 years from 2012 to 2015	Content Analysis Multiple Regression

		2. To examine the impact of <IR> on financial performance of Public limited companies		
Albetairi *et al.* (2018) [1]	Behrain/5	1. To explore and evaluate evolving trends of <IR> content elements as well as to investigate the compliance of five listed Insurance companies of Bahrain with current <IR> framework 2. Whether content elements have any effect on companies financial performance	**Data**-secondary source **Source of Data**-Annual Reports Bloomberg database Articles journals **Study Period**-4 years from 2012 to 2015	Content Analysis Descriptive Statistics Multilinear Regression Analysis
Cosma *et al.* (2018) [5]	South Africa	1. To study the relationship between Integrated reporting quality and market performance	**Data**-secondary source **Source of Data**-Recognized Reports on the IIRC database **Study Period**-4 years from 2013 to 2016	Event study Sharpe Model
Barth *et al.* (2015) [3]	South Africa/100	1. To examine whether Integrated Report Quality is associated with stock liquidity, firm value, expected future cash flow and cost of capital	**Data**-secondary source **Source of Data**-Integrated annual reports	Correlation Multiple Regression Du Point Analysis Descriptive Statistics

Table 2: Description of various variables used in literature

Author(year)	Dependent variable	Independent variable(proxies)	Control variable	Significant Variables
Ana Margarida Casaleiro Coelho (2016) [13]	Integrated Reporting Proxies-IR Score	Size Proxy-total assets Performance Proxy-ROA Audit Firms Leverage		Size (Positive) Performance (Positive) Audit Firms (Positive) Leverage (Positive)
Ferdinand Siagian *et al.* (2013) [14]	Firm value Proxies-PBV ratio Tobin Q ROA	Corporate governance proxy-CGI score Reporting quality Index Proxy-RQI score Size Proxy-log of total assets Growth Proxy-avg growth of sales Leverage Proxy-Debt to Equity ratio		Corporate governance (Positive) Size (Positive) Growth (Positive) Leverage (Positive) RQI score (Negative)
K. Appiagyei *et al.* (2016) [2]	Firm Performance Proxies EPS Sales growth	Quality of Integrated Reporting Proxy-QIR score	Size Proxy-log of total assets Age Proxy Age since incorporation Industry Regulatory environment	QIR (Positive)
Kin-Wai Lee *et al.* (2016) [15]	Firm performance Proxies Tobin Q	Integrated reporting quality Proxy-IR score Organizational complexity Proxies Board size Outside directors External Finance Proxies Firm size Debt Prior year sales growth Industry		IR score (Positive) Organizational complexity External Finance needs
Muttanachai Suttipun (2017) [16]	Firm performance Proxies Tobin Q	Financial capital reporting Manufactured capital reporting Intellectual capital reporting Human capital reporting Natural capital reporting Social capital reporting	Size Proxy-market capitalization Firm given CSR award	Manufactured capital reporting (Positive) Natural capital reporting (Negative)
Eccles *et al.* (2014) [6]	Firm performance Proxy Return on Invested Capital	Quality of Management Integrated Reporting		Quality of Management(;positive)
Neda Vitezic & Antoniza Petrlic (2018)	Firm performance Proxies ROA, ROE, EBIT, EBITDA, PRMA	Integrated Reporting		Integrated reporting (Positive)
Wen & Heong (2017) [12]	Firm performance Proxies ROA ROE	Eight content elements stated in IR framework Proxy IR score		Governance (Positive) Business model (Positive) Risk & opportunities (Positive) Performance disclosure (Positive)
Albetairi *et al.* (2018) [1]	Firm Performance Proxy ROA	Integrated Content elements Proxy IR score		Business model (positive) Strategy and Resource Allocation(positive) Risk & Opportunities(negative) Disclosure of Financial Performance(negative)
Cosma *et al.* (2018) [5]	Market performance Proxies Average abnormal returns Cumulative Abnormal returns	Integrated quality disclosure Proxy IR awards		IR awards(positive)
Barth *et al.* (2015) [3]	Firm performance Proxy Tobin's Q	Integrated Reporting quality Proxy EY excellence in Integrated reporting awards		Integrated reporting quality(positive)

Need for the study

The integrated reporting has two important components: six capitals and value creation process. In integrated financial reports, the companies disclose the value creation process by interlinking financial and non-financial information in more integrated manner. Globally, the researchers have tried to establish the relationship between the integrated reporting and financial performance of the companies. There are basically two schools of thoughts regarding the impact of integrated reporting on firm performance. One school of thought advocate that integrated reporting negatively affect the financial performance of the company due to increased cost of preparing the integrated reporting, loss of competitive advantage and loss of important information as relevant information is disclosed publicly and lengthy disclosure of information. On the other side, the some researcher's advocates that integrated reporting positively affect the firm performance. This is due to reduced information asymmetry between agents and owners of the companies, optimum and proper utilization of resources such as human resources, natural resources which leads to decreased cost and ultimately increase in profitability. So, it is become imperative to study the impact of integrated reporting on firm performance in Indian context.

Research Gap

There are numerous studies available on Integrated reporting globally but most of the studies deal on the theoretical underpinnings of integrated reporting. The concept of integrated reporting is a relatively new phenomenon in Indian context. There is no vast literature available regarding integrated reporting in India. The research which is carried on in past mostly deals with the theoretical framework of integrated reporting in India. No researchers have tried to establish the relationship between the integrated reporting and firm performance in Indian context. So, this study tries to overcome this gap by studying the relationship between integrated reporting and financial performance of the Indian companies.

Objectives of the study

The objectives of this study are

1. Study the impact of Integrated Reporting on the financial performance of the companies.
2. Analyzing the Integrated Reporting practices of sample BSE30 companies

Given the advantage associated with the Integrated Reporting, we consider whether the better Integrated Reporting Quality is associated with the better firm performance. The benefit of integrated reporting is long term or short term. It provides better linkage of financial and non-financial information with the value creation process of the company which leads to better performance of the companies. The previous studies done by K. Appiagyei (2017) [2], Wen (2017) [12], shows the positive relationship between the Integrated Reporting and firm performance. So the proceeding discussions and extensive literature on firm performance leads to the following hypothesis:

H1: There is a positive relationship between the Integrated Reporting and firm performance

To study the impact of integrated reporting on financial performance we also take the size as the control variable in our study. The past studies done on the relationship between firm performance and size of the company depicts the positive relationship these variables. This leads to second hypothesis of the study.

H2: There is positive relationship between the Firm performance and size of the company

Research Methodology

Sources of data

This study is based on the secondary data. The secondary data includes the annual reports, integrated reports, International Integrated Reporting Council reports taken from Ace Equity database, journals and websites.

Period of the study

The period of the study is five years ranges from 2014-15 annual years to 2017-18 annual years of BSE30 companies.

Sample of the study

BSE30 companies are taken as population for the study. By applying filtration process the 10 companies which are preparing annual reports according to IIRC principles are randomly selected as sample of the study.

Table 2: Show 'Index of Disclosure'

Financial Capital	
a.	Equity
b.	Financial Liabilities
c.	Earnings
Manufactured Capital	
a.	Building, Equipment and other Tangible Property
b.	Public Infrastructure
Intellectual Capital	
a.	Intellectual Property
b.	Technology & Information System
c.	Research & Development
d.	Organizational Structure
e.	Process, Policies and Procedures
Human Capital	
a.	Employee Competence & Capabilities
b.	Employee Diversity including Gender Equality
c.	Employee Loyalty and Motivation
d.	Human Resource Development
e.	Employee Health & Safety
Social/ Relationship Capital	
a.	Corporate Culture
b.	Relations with Competitors
c.	Relations with Suppliers & Distributors
d.	Relations with other Stakeholders
e.	Brand & Reputation
f.	Shared Norms & Common Values
Natural Capital	
a.	Use of and Impact on Land Resources
b.	Use of and Impact on Air Resources
c.	Use of and Impact on Water Resources
d.	Use of Energy

Source: Eccles and Serafiem (2014) [6]

Scoring of Items

An 'Index of Disclosure' developed by Eccles and Serafiem (2014) [6] is taken as index for the purpose of calculating the IR score of the Indian companies. The scores of 0, 1, and 2 are assigned to the items of disclosure. If item is not disclosed in the annual reports of the company, it is assigned a score of '0'. In case if item is disclosed in the annual reports of the company but it is not elaborated i.e. its link with value creation process is not disclosed then score of '1' is assigned to that item and if item is disclosed in the annual report and also elaborated i.e. its relation with value creation process is also disclosed, then score of '2' is assigned to that item. The unweighted scores are used in study. Unweighted scores contribute to the objectivity and fairness in the scoring system.

Analysis of data

For analyzing the disclosure practices of the Indian companies, an 'Index of Disclosure' developed by Eccles and Serafiem (2014) [6] taken for this study. This 'Index of Disclosure' has been constructed by taking into consideration of six capitals i.e. financial capital, manufactured capital, intellectual capital, human capital, social capital and natural capital. This classification has been made by keeping in view the aspects to be disclosed under integrated reporting. This 'Index of Disclosure' has 25 sub items under it. Following table shows the Index of Disclosure used in this study. This index is used during the quantification and analysis of data:-

Tools for the study

The panel regression is used to study the impact of integrated reporting on the financial performance of the companies. The variables used in the study are IR score as an independent variable, company size as a control variable and firm performance as a dependent variable. The proxies used for these variables are given below:-

Variables	Proxies
Integrated Reporting Quality	IR Score
Firm Performance	ROA
Firm Size	Log of Total Assets

Table 3: Item-wise disclosure of six capitals

Items/Years	13-14	14-15	15-16	16-17	17-18	Mean	S.D.
Financial capital	60/60 (100)	60/60 (100)	60/60 (100)	60/60 (100)	60/60 (100)	100	0
Manufactured capital	20/40 (50)	20/40 (50)	20/40 (50)	20/40 (50)	20/40 (50)	50	0
Intellectual Capital	45/100 (45)	37/100 (37)	64/100 (64)	78/100 (78)	90/100 (90)	62.80	22.1
Human Capital	34/100 (34)	37/100 (37)	57/100 (57)	80/100 (80)	98/100 (98)	61.20	27.6
Social Capital	40/120 (33.33)	44/120 (36.67)	68/120 (56.67)	82/120 (68.33)	96/120 (80)	55	20.6
Natural capital	29/80 (36.25)	31/80 (38.75)	46/80 (57.50)	58/80 (72.50)	74/80 (92.50)	23.62	23.6

Findings of the study

Item-wise disclosure

Item wise disclosure shows the item wise disclosure of six capitals by the Indian companies. This disclosure is used to determine which capital among the six capitals more disclosed to other capitals. For these tools of Mean and Standard deviation is used.

The capital which has highest mean disclosure depicts that particular capital is more frequently disclosed as compared to other capitals. Standard deviation shows the variation in disclosure practices of the companies. Lower Standard deviation means that particular capital has more consistent disclosure in the integrated annual reports of the companies. The item wise disclosure of the six capitals of the companies is given below:-

The six capitals and there 25 sub items are taken for the purpose of analysis of item wise disclosure. For each disclosure the percentage of disclosure of that item is obtained by dividing the total score obtained by the companies regarding particular year dividing by total disclosure score applicable for that year.

Descriptive statistics of the study shows that 100% disclosure regarding the financial capital and 0 Standard Deviation which means that there is no variation regarding financial capital during the study period. 100% disclosure of financial capital may be attributed to the mandatory restrictions on the companies to disclose the financial capital of the companies to the stakeholders with the help of annual reports.

Intellectual capital has the second highest Mean score during the study period which means that Intellectual capital has the second highest disclosure in the integrated reports by the Indian companies. Human capital has the 3rd highest Mean score during the study period followed by Social capital, manufactured capital and Natural capital respectively. Among these 6 capitals excluding financial capital and manufactured capital which are mandatory in nature, Social capital has lowest Standard deviation which depicts that there is consistency in disclosure of Social capital by the Indian companies during the study period.

By analyzing the percentage of disclosure during the study period, it is revealed that there is increasing trend of disclosure practices of all the capitals in the annual reports of the companies. Highest improvement is regarding Human capital followed by the Natural capital.

So after analyzing the results of the study it can be concluded that there is upward trend in the disclosure of six capitals after the adoption of IIRC principles by the Indian Companies.

Company wise disclosure

Company wise disclosure depicts that which company has the highest disclosure regarding the IR practices during the study period. The company wise disclosure has been calculated from the IR score obtained by the companies during the study period. IR score is total score obtained by the company regarding the 'Index of Disclosure' during the particular year. The following table depicts the company wise disclosure of items over a period of 5 years.

Table 4: Company wise disclosure of six capitals

Company/Years	13-14	14-15	15-16	16-17	17-18	Mean	S.D.
Tata Steel	19	21	42	44	44	34	11.16
Reliance Ind.	24	25	48	46	46	37.80	12.17
Mahindra & Mahindra	26	26	26	46	46	34	10.95
Tata Motors	23	23	22	42	44	30.80	11.16
Bharti Airtel	19	21	22	22	42	25.20	9.47
HDFC	17	17	17	18	36	21	8.39
HUL	25	27	27	26	46	30.20	8.87
Vedanta	25	25	23	46	46	33	11.89
Yes Bank	24	23	42	42	44	38	10.95
Wipro	26	26	46	46	46	35	10.53
Grand Mean	23.40	22.80	29.50	37.80	44		

By analyzing the results of the companies according to Mean disclosure score, Wipro has the highest Mean score during the study period which depicts that Wipro is more following IIRC principles regarding preparing the integrated reports as compared to other companies followed by the Reliance Industries. HDFC has the lowest Mean score among the sample companies along with lowest Standard deviation which depicts the there is consistency in preparing the annual reports prepared by the HDFC.
If we analyze the year wise Mean score of the companies it is revealed that there is upward trend in Mean score of the companies by 2017-18 has the highest Mean IR score which depicts there is continues improvement in the disclosure practices of Indian companies during the study period.

Regression analysis
Firm value=Integrated reporting score + log of total assets

$$ROA = \beta_0 + \beta_1 IR\ score + \beta_2 logsize$$

In our hypothesis we predict that firm value is positively associated with the integrated reporting quality. In our panel regression model, we measure firm value using Return on Assets (ROA). We regress ROA on IR score while controlling for variables that may affect the firm value.
Size is taken as control variable under this study. The reason for taking the size as the control variable because the previous studies done on relationship between size and firm performance shows the positive relationship. For firm size we use the log of total assets of the companies as proxy and set the null hypothesis that firm size will positively affect the financial performance of the company. The results of panel regression are given below:-

Dependent Variable: ROA
Method: Panel EGLS (Cross-section random effects)
Date: 12/23/18 Time: 11:54
Sample: 2014 2018
Periods included: 5
Cross-sections included: 10
Total panel (balanced) observations: 50
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	72.90330	20.92256	3.484436	0.0011
IR	0.081140	0.049684	1.633107	0.1091
LOG01	-5.934363	1.864042	-3.183599	0.0026

Effects Specification

	S.D.	Rho
Cross-section random	8.243671	0.8735
Idiosyncratic random	3.137767	0.1265

Weighted Statistics

R-squared	0.184040	Mean dependent var	1.220661
Adjusted R-squared	0.149318	S.D. dependent var	3.333238
S.E. of regression	3.074326	Sum squared resid	444.2197
F-statistic	5.300420	Durbin-Watson stat	1.941716
Prob(F-statistic)	0.008399		

Unweighted Statistics

R-squared	0.427550	Mean dependent var	7.274157
Sum squared resid	2847.135	Durbin-Watson stat	0.302953

By analyzing the results of our study we found that there is positive relationship between the IR score and ROA but the relationship is not significant. So the null hypothesis under this study is rejected. Integrated reporting quality does not affect the performance of the Indian companies during the study period. The results of this study are consistent with the prior study done by Wright & Ferris (1997) & Eccles (2014) [6]. The possible explanation of no significant relationship between IR quality and financial performance can be attributed to the integrated reporting is a relatively new management practice in Indian context and all of companies following the IIRC principles only from few years. Also, the cost preparing the integrated reports seems to overshadowing the benefits attached with the integrated reporting in India. The time lag between implementing integrated reporting and getting the benefits from it of superior non-financial performance. We should also consider that we use only proxies for the financial performance and integrated reporting disclosure, which may not fully capture the benefits attached with the integrated reporting.

The value of Adjusted R is 14% which shows that 14% variation in firm performance is due to the variables considered in our study and remaining variation is due to some error term or other variables which are not the part of our current study, so it remains interesting for future research which are other variables that are affecting the firm performance besides the integrated reporting.

On the other side, our control variable (firm size) shows the significant negative relationship with the firm performance during our study period, which means the size, is negatively affecting the financial performance of the companies. Our results are consistent with the Amato & Burson (2007) and Ammar *et al.* (2003). The possible explanation of this negative relationship can be attributed to the diseconomies of scale attached with the big size companies, more stringent legal restrictions imposed on big size companies and increased cost of production with the increasing the size of the companies which negatively affect the performance of the companies during the study period.

Conclusion

Integrated Report is intended to demonstrate the integration of financial performance with other aspects of other organizational performance towards reaching organization's vision. Integrated reporting provides the holistic picture of the company regarding how the financial and non-financial aspects of the companies' combined together can create the value for all the stakeholders. Present paper deals with the progress of Indian companies in adoption of Integrated Reporting according to the IIRC principles. By analyzing the descriptive statistics of Indian companies we found that there is continuous improvement in disclosure of six capitals by the Indian companies after the adoption of Integrated Reporting concept. Wipro has more mean disclosure score as compared to other BSE30 companies taken in our study. If we compare the Item wise disclosure of six capitals, Intellectual capital has the highest mean score as compared to other capitals. To study the relationship between Quality of Integrated Reporting and firm performance, we run the panel regression model and found that there is no significant relationship between the Quality of Integrated Reporting and performance of Indian companies.

Limitations of the Study

1. The sample size of the study is small. Study done on bigger sample size may have different results.
2. Another concern is the impact of only two variables on financial performance is studied. There may be some other variables which impact the financial performance of the companies.
3. The time period taken in this study is only 5 years. The study done by taking longer time period can have different results.
4. The findings of this study are based only on one country and may not be generalized to other jurisdictions.
5. The proxy used for financial performance in this study is ROA. However, there are several other proxies such as ROE, EBIT, ROI, and EPS which can be used as proxies for financial performance.

References

1. Albetairi HTA, Kukreja G, Hamdan A. Integrated Reporting and Financial Performance: Empirical Evidences from Bahraini Listed Insurance Companies. Accounting and Finance Research. 2018;7(3):102. DOI: 10.5430/afr.v7n3p102.
2. Appiagyei K, Djajadikerta H, Xiang E. Integrated Reporting and Firm Performance: A Research Framework. In: ECU Business Doctoral and Emerging Scholars Colloquium 2016; c2016 Dec. p. 123.
3. Barth ME, Cahan SF, Chen L, Venter ER. The economic consequences associated with integrated report quality: early evidence from a mandatory setting. University of Pretoria, unpublished working paper; c2016.
4. Coelho CMA. Towards the existence of integrated reporting: an international perspective [Doctoral dissertation]. ISCTE Business School, Instituto Universitário de Lisboa; c2016.
5. Cosma S, Soana GM, Venturelli A. Does the market reward integrate reporting quality? Academic Journals. 2018;12(4):78-91. DOI: 10.5897/JAERD2018.0980.
6. Churet C, Eccles RG. Integrated reporting, quality of management, and financial performance. Journal of Applied Corporate Finance. 2014;26(1):56-64. DOI: 10.1111/jacf.12054.
7. Dube V. The association between integrated reporting and company financial performance: a graphical time-series approach [Doctoral dissertation]. University of Pretoria.
8. Sharma P, Rajyalaxmi N. Integrated reporting in India: an analysis of selected companies. Indian Journal of Accounting. 2015;47(1):24-35.
9. Siagian F, Siregar SV, Rahadian Y. Corporate governance, reporting quality, and firm value: evidence from Indonesia. Journal of Accounting in Emerging Economies. 2013;3(1):4-20. DOI: 10.1108/20421161311288829.
10. Suttipun M. The effect of integrated reporting on corporate financial performance: Evidence from Thailand. Corporate Ownership & Control. 2017;15(1):133-42. DOI: 10.22495/cocv15i1c1p8.

11. Vitezić N, Petrlić A. Integrated Reporting-Concept and Impact on Performance of Croatian Companies. Journal of Accounting and Management. 2018;8(1):71-82.
12. Wen LP, Yap Kiew Heong A. Integrated Reporting and Financial Performance: Evidence from Malaysia. Management & Accounting Review. 2017;16(2):123-38. DOI: 10.24191/mar.v16i2.705.
13. Coelho AMC. Towards the existence of integrated reporting: an international perspective (Master's thesis); c2016.
14. Siagian F, Siregar SV, Rahadian Y. Corporate governance, reporting quality, and firm value: evidence from Indonesia. Journal of accounting in emerging economies. 2013 Feb 22;3(1):4-20.
15. Lee KW, Yeo GH. The association between integrated reporting and firm valuation. Review of Quantitative Finance and Accounting. 2016 Nov;47:1221-50.
16. Suttipun M. The effect of integrated reporting on corporate financial performance: Evidence from Thailand. Corporate Ownership and Control. 2017;15(1):133-42.