The BESC Journal of Commerce and Management (Print ISSN: 2395-4639, Volume 4, July 2018)
Online issue URL: http://bjcm.bescollege.net/v4n1
Online article URL: http://bjcm.bescollege.net/v4/n1/v4n101.pdf

Corporate Social Responsibility versus Financial Performance: an Indian Banking Perspective

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Abstract
Corporate Social Responsibility (CSR) creates an obligation on the firm to be aware of social values and well being of the society while discharging its core business functions. Socially responsible business practices leads to use of additional financial and non financial resources by the firms. Different experts and researchers have responded to the controversy regarding the impact of CSR performance of the firms on its financial performance and whether resources spent on CSR activities is an investment for reaping future profit or its is an added expenditure on the firm pushing it towards an economically disadvantaged position. In this paper attempt is made to provide a fresh perspective of relationship between Corporate Social Responsibility (CSR) and corporate financial performance (CFP) in Indian banking sector. In this paper unbalanced panel data regression analysis is used to study the bilateral relationship between corporate social responsibility of commercial banks in India and their financial performance. The study reveal a mixed result .CSR has a positive impact on market related performance measure and market related performance measures also have a positive impact on CSR, although the results are not that significant. The total business of banks significantly influences the CSR and is also influenced by CSR activities of banks. But CSR has a negative relationship with accounting based measures of financial performance, the ROA and RONW.

Keywords: *Corporate Social Responsibility (CSR), Corporate Financial Performance (CFP), Commercial Banks, Bilateral relationship, Unbalanced Panel data.*

INTRODUCTION

Corporate social responsibility stems out of morality and ethics. It is based on the ideology that focuses on connection between the firms and the society. The firms being a part of the society are expected to contribute towards the benefit and well being of the society. Banking industry plays an important role in mobilizing funds and forms an important building block of an economy and hence needs to be socially responsible in their behavior and practices. Corporate social responsibility initially was more of a voluntary and philanthropic approach. Increasing global environmental awareness, need for ecological environmental protection and conservation and different social problems initiated by the firms gave rise to the need for socially responsible behavior by the firms. Different business social responsibility guidelines have been issued worldwide that mandates adoption of socially responsible practices by the firms. Socially responsible business practices leads to use of additional financial and non financial resources by the firms which may put the firm in economically and financially disadvantageous position and would drift away from its core "profit and wealth maximization objective for its shareholders" **Vance (1975).**According to **(Aupperle et al., 1985),** socially responsible firms have a competitive disadvantage because they incur costs that fall directly upon the bottom line and reduce profits.Different experts and researcher have expressed their opinion regarding the adoption of corporate social responsibility. Some experts are of view that the ultimate responsibility of the firm is to maximize profit and if this objective is achieved firm will be able to actualize its social responsibility objective. The other view is that socially responsible behavior of firms will put them in a highly advantageous position to achieve its bottom-line. This controversial issue has attracted a large number of researchers to understand the linkage between corporate social responsibility and financial performance .This paper attempts to add on to the issue in regard to the Indian banking industry.

CORPORATE SOCIAL RESPONSIBILITY (CSR)

Firm's socially responsible behavior establishes a link between the corporate and the society. CSR initiatives undertaken by the firms helps to build and strengthen their relationship with multiple stakeholders and different interest groups that extend even beyond customers, suppliers, and competitors to include investors, employees, and members of the board of directors, local communities, regulators, media, and financial markets. **Wood (1991)** stated that 'the basic idea of corporate social responsibility is that business and society are interwoven rather than distinct entities'. **Bowen's (1953)** publication "Social Responsibilities of the Businessman" is considered to be the first book in the modern era to define social responsibility. He recognized the need of the firms to be responsible to the society for its action and decision and defined CSR as "the obligations of business men to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society" **Bowen (1953, p. 6)**.In **1960, Keith Davis** viewed that social responsibility refers to businessman's decisions and actions taken for reasons at least partially beyond the firm's direct economic or technical interest" **(Pp70) . McGuire (1963)** viewed that social responsibility of business is not limited to discharging the legal and economic obligation. **Manne & Wallich (1972)** emphasized upon the voluntary approach by the firms towards corporate social responsibility. The **Committee for Economic Development (CED) in 1971** introduced the "three concentric circle approach" of social responsibilities incorporating both economic and non economic aspects into defining CSR, where the firms are expected to be aware of social values and priorities in delivering the core economic functions and help in resolving major social problems. **Carroll (1979)** opined that social responsibilities of business are the integration of economic, legal, ethical and discretionary activities that a society expects of an organization. According to **McWilliams and Siegel (2001)**, when the firm goes beyond compliance and engages in actions for some social good that is beyond the interests of the firm and required by law is referred to as CSR. The concept of CSR is ever-changing and dynamic and ongoing studies on CSR are opening up new dimensions relating to CSR.

Corporate Social Responsibility in India

Corporate social responsibility in India started in the form of corporate philanthropy. The businessmen established a link with the society by way donation for some social causes, building temples, educational institutions, providing relief in times of crisis such as famine or epidemics. Later on the firms recognized their responsibility towards their owners, managers and employees by providing them medical and housing facilities. Thereafter with the increasing awareness for environmental protection, consumerism and protection of rights of all stakeholders' worldwide and subsequent issue of legislative norms, social responsibility of the corporate gained significance. CSR was formally introduced in India in 2009 with the issue of set of voluntary guidelines on CSR by the Ministry of Corporate Affairs ,that put emphasize on inclusiveness, care for all stakeholders, ethical functioning, respect for workers' rights, sustainability, environment protection and welfare improvement of quality of life of people and all round development of the economy. The transition from voluntary approach of CSR to mandatory approach took place in August 13, 2012 when the Securities Exchange Board of India (SEBI) made it mandatory for the top listed 100 companies, as part of Clause 55 of the Listing Agreement, to disclose their CSR activities in the Business Responsibility Reports as a part of the Annual Reports. Subsequently with the enactment of Section 135 of the Companies Act 2013 CSR spending as well as CSR disclosure was made mandatory for specific types of companies.

Corporate Social Responsibility in India Banking Industry

Banking industry is an important pillar of the financial system that plays a significant role in the development of the economy. Any decisions and actions in the banking industry have an impact on the economy.

Financial inclusion introduced in India in 2005 was the first step of social responsible practices by the banking sector. In December 2007 ,a notice circulated by RBI to all Scheduled Commercial banks in India entitled "Corporate Social Responsibility ,Sustainable Development and Non Financial Reporting –Role of Banks" ,explained the concept of Corporate social responsibility, sustainable development and non-financial reporting and highlighted its growing importance and global initiatives in this regard and suggested integration of economic ,social and environmental concerns in their business operations to achieve sustainable development.

The social issues addressed by banks in India include child welfare, community welfare, education, environment protection, healthcare provision, poverty eradication, rural development, vocational training for youth and women, women empowerment, reducing unemployment problem, girl child protection. Different studies on social responsibility practices by the banks highlighted the core areas of CSR practices by banks and revealed inadequacy of CSR reporting by the banks in India **Chaudhury et al. (2011), Choudhary and Tandon(2013), Sharma(2011)** , **Dastidar (2016)** , **Moharana (2013).**

A comparative analysis of the social performance of selected 12 public and private Indian Banks listed on CNX Bank Index of NSE , revealed no significant difference between the public and private sector banks with regard to corporate social performance though private banks scored more as compared to public banks(**Chadha,et.al 2013).**

Banerjee, et.al. (2014) in their study, observed a positive impact of societal expenditure on the profit of the top–performers and that societal expenditure of banks increased although not significantly post the issue of RBI notice in Dec, 2007 titled "Corporate Social Responsibility, sustainable Development and Non-Financial reporting".

Literature Review

The study on the relationship between corporate social responsibility (CSR) and corporate financial performance (CFP) has gained immense interest of the researcher. A rigorous study would minimize the controversy regarding the impact of CSR performance of the firms on its financial performance and whether resources spent on CSR activities is an investment for reaping future profit or its is an added expenditure on the firm pushing it towards an economically disadvantaged position. A positive impact of socially responsible business practices on the financial performance will encourage a firm to adopt more socially responsible practices while a negative impact on financial performance will dissuade the firm to adopt socially responsible activities. Empirical evidences reveal unilateral as well as bilateral relationship between CSR and CFP, while some studies question the adoption of CSR activities advocating that CSR expenditure puts the firm in economically disadvantaged position.

Unilateral relationship reveal positive impact of CSR activities on CFP **(Belkaoui 1976, Graves & Waddock 2000, McGuire, Sundgren & Schneeweis 1988, Waddock & Graves 1997)** or negative impact of CSR activities on CFP **(Wright & Ferris 1997, Friedman (1970),Cerdeiro & Sarkis(1997)**. On the other hand improved CFP may lead to increased adoption of CSR activities by the firms **(McGuire, Sundgren & Schneeweis 1988, Waddock & Graves 1997),** or fall in CFP will have a negative impact on CSR activities.

Bilateral Relationship provides that increased CSR activities contribute positively towards CFP resulting in more CSR activities thus forming a virtuous cycle. Conversely increased CSR activities may have a negative impact on CFP which results in reduced CSR activities forming a vicious cycle of CSR.

Moskowitz (1972) identified a positive impact of CSR on the rate of return of the common stock of socially responsible firms and viewed that socially responsible firms contribute towards increased rate of return to the shareholders on their stock.

The study by **McWilliams and Siegel (2001)** reveal a neutral result that, in equilibrium, firms that engage in CSR will earn the same rate of profit as firms that do not engage in CSR i.e. CSR has no impact on profitability of firm.

A questionnaire based study on 300 Indian stakeholders by **Singh and Pachar (2012)** to identify the relationship between CSR and financial performance ,revealed positive impact of social responsibility on firms performance and they were of view that socially responsible organization can easily attract , retain investors and business partners and can reduce financial risk.

A multiple regression analysis conducted by **Mwangi, et. al .(2013)** on 14 companies listed in the manufacturing, construction and allied sector of the Nairobi Securities Exchange reveals an insignificant positive relationship between corporate social responsibility practice and financial performance.

An empirical analysis of relationship between CSR and CFP in case of Greek listed companies by **Karagiorgos (2010)** reveal that there is a positive correlation among stock returns and CSR performance in Greek companies.

Govindarajan and Dr.Amilan (2013) in an empirical study on 12 companies selected from Oil and Gas industry listed in the BSE 200 Index and ranked by Karmayog (an NGO, which measures the CSR activities of the Indian companies in India) revealed a positive significant impact of CSR initiatives on financial performance and stock market performances.

The multiple regression analysis on impact of CSR on corporate financial performance in case of Jordanian banking companies, by **Weshah.et.al (2012)** reveal significant relationship between the levels of bank CSR and the bank's (CFP).

The relationship study between CSR and corporate financial performance on 101 companies listed on the New York Securities Exchange (NYSE) by **Fauzi (2009)**, using regression analysis reveal that corporate social responsibility/performance (CSP) has no effect on financial performance (CFP). Conversely in a study, **Flammer (2013)** pointed out that adopting a CSR-related proposal leads to superior financial performance.

Sarkar.et.al. (2015) in their study on CSR behavior of top 500 listed Indian corporates over a period of nine years, 2003-2011 revealed positive influence of CSR activities on price to book (PB) and price to earnings (PE) ratio and opined that CSR activities may lead to temporary reduction in short term accounting profit, but may create market value in the long run.

Research Gap

A number of studies revealed the status of CSR implementation in Indian corporate sector and in different parts of the world. But only a few studies were made in respect of CSR implementation in the Indian Banking sector. While a lot of research has already been done to understand the relationship between CSR and corporate financial performance in western world, it remains relatively under researched area in India. This paper intends to fill this gap in literature and provide a fresh perspective of relationship between CSR and corporate financial performance in Indian banking sector.

Objectives of Study

This paper seeks to understand the relationship between corporate social responsibility and financial performance of the public sector and private sector commercial banks in India.

This is a bilateral relationship study of CSR activities and financial performance of the public sector and private sector commercial banks in India.

Hypothesis 1: CSR activities of public and private sector commercial banks significantly influence its financial performance.

Hypothesis 2: Financial performance of public and private sector commercial banks significantly contribute towards corporate social responsibility.

In the first instance CSR performance is treated as an independent variable and factors determining financial performance are treated as dependent variables.

In the second instance financial performance is treated as an independent variable, corporate social performance is treated as dependent variables.

Data Collection

The study is based on secondary data .Data is mostly collected from concerned Banks Annual Report, websites and data provided by Reserve Bank of India in its reports.

Methodology

Initially the dataset included all 39 commercial banks in India, 21 public and 18 private sector commercial banks (excluding their Associates and subsidiaries).Subsequently the banks that are not listed on stock exchange before April 2016 were excluded from the sample. Hence the final sample consists of 36 commercial banks in India. This is an annual study covering a period of 15years; starting from 2002-03 to 2016-17.The study uses unbalanced panel data (As some banks under study came into operation post 2002-03 and also were enlisted in stock exchange post 2002-03).

In this study both the historical accounting and market based measures are used as a proxy of financial performance. The historical accounting based measures used are return on asset (ROA), return on net worth (RONW) and log of total business(LGBUS)-where total business is the summation of total advances and total deposits, and market based measure used are price earnings ratio (PER) and price to book value (PBKV).

Table 1 Description of variables

Variables	Definition and computational formula	Symbols
Accounting Based Measure		
Return on assets ratio	Computed by dividing net income by total assets.	**ROA**
Return on equity ratio	Computed by dividing net income by shareholder's equity.	**ROE**
Log of Total Business	Log of Total Business (Total business computed by adding total Deposits and total Advances)	**LGBUS**
Market Based Measure		
Price/earnings ratio	Computed by dividing the market price per share by the earnings per share.	**PER**
Price/book value ratio	Computed by dividing the market value of equity by the book value of equity.	**PBKV**
CSR	Computed CSR score	**CSR**

The Corporate social responsibility (CSR) is measured by CSR scores. CSR score is obtained by content analysis of CSR activities undertaken by banks as reported in its annual report. A score of "1" is assigned for each CSR activities undertaken by banks. The total score is obtained by adding the scores .In this study an activity is considered as a socially responsible activity if it conforms the CSR activities as per recommendation of Schedule VII Section 135 of Companies Act 2013, amended vide notification dated 27th February 2014 and amended vide notification dated 6th August 2014 and 24th October 2014. (Table 2)

Table 2. CSR practices recommended by Companies Act 2013

Recommended areas of CSR practices by the Companies Act 2013
1.Eradicating hunger, poverty and malnutrition, promoting preventive health care and sanitation including contribution to the Swach Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water:
2. Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly, and the differently abled and livelihood enhancement projects;
3.Promoting gender equality, empowering women, setting up homes and hostels for women and orphans; setting up old age homes, day care centres and such other facilities for senior citizens and measures for reducing inequalities faced by socially and economically backward groups;
4.Ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water"including contribution to the Clean Ganga Fund setup by the Central Government for rejuvenation of river Ganga;
5. Protection of national heritage, art and culture including restoration of buildings and sites of historical importance and works of art; setting up public libraries; promotion and development of traditional arts and handicrafts:
6. Measures for the benefit of armed forces veterans, war widows and their dependents;
7. Training to promote rural sports, nationally recognised sports, paralympic sports and Olympic sports;
8. Contribution to the Prime Minister's National Relief Fund or any other fund set up by the Central Government for socio-economic development and relief and welfare of the Scheduled Castes, the Scheduled Tribes, other backward classes, minorities and women;
9. Contributions or funds provided to technology incubators located within academic institutions which are approved by the Central Government
10. Rural development projects.
11. Slum area development

Panel Data Analysis

The panel data regression model is used to analyze the impact of corporate social responsibility (CSR) on financial performance.

Simple panel data regression model of the following form is used.

$$Y_{it} = \alpha + \beta' X_{it} + u_{it}, \; i = 1, 2, ..., N \; ; t = 1, 2, ..., T , \qquad (1)$$

Where i denote the 36 banks included in the study and t denotes the time series dimension, which is from 2003 to 2017.

Y_{it} is a dependent variable, α is a scalable, β is a [Kx1] vector of the regression coefficient, X_{it} is an observation on the *i*th individual in *t*th time period on K explanatory variables, u_{it} is an error component of the model, which is usually either a one-way form or a two-way form. Most of the panel data applications utilise a one-way error component models for the disturbances. It is of the form:

$u_{it} = \mu_i + \nu_{it}$, where μ_i denotes the unobservable individual-specific, time-invariant effect and ν_{it} denotes the remaining disturbances (Baltagi, 2005).

The above model (1) can be divided as either fixed effects model or random effects model based on the terms of error component of the model that can be assumed as a fixed constant or as having random variation.

With regard to **Hypothesis 1:** CSR activities of public and private sector commercial banks significantly influence its financial performance;there are five models; every model contains CSR as an independent variable and financial performance as dependent variable. The five models are as follows:

Model 1: ROA= $\beta_0 + \beta_1$CSR +e_{it}

Model 2: ROE= $\beta_0 + \beta_1$CSR+ e_{it}

Model 3: PER= $\beta_0 + \beta_1$CSR+ e_{it}

Model 4: PBKV= $\beta_0 + \beta_1$CSR+ e_{it}

Model 5: LGBUS= $\beta_0 + \beta_1$CSR+ e_{it}

We hypothesise the following:

$H1_0$: CSR has a significant impact on Financial Performance.

$H1_1$: CSR has a no significant impact on Financial Performance.

With regard to **Hypothesis 2:** Financial performance of public and private sector commercial banks significantly contributes towards corporate social responsibility; we hypothesise the following:

$H2_0$: Financial Performance significantly influences CSR.

$H2_1$: Financial Performance does not influence CSR.

The model contains financial performance indicator as independent variable and corporate social responsibility as dependent variable.

Model 6: CSR= $\beta_0 + \beta_1$ROA+ β_2 ROE + β_3PER + β_4 PBKV+ ß$_5$ LGBUS+ e_{it}

The analysis is executed using statistical software package EVIEWS 7 version.

Analysis and Findings

Descriptive Statistics

Table 1. Descriptive Statistics

	ROA	RONW	PER	PBKV	LGBUS	CSR
Mean	1.108153	13.40401	10.56899	1.805129	11.53897	26.81970
Median	0.965000	14.66000	7.490000	1.050000	11.62715	13.50000
Maximum	73.76000	45.53000	197.9000	211.0000	15.11625	2670.000
Minimum	-2.040000	-66.51000	-19.00000	-0.070000	4.362621	0.000000

Std. Dev.	3.574058	11.73143	13.62565	9.436958	1.394448	119.4669
Skewness	17.11836	-1.915427	6.641807	21.73033	-0.458557	20.32840
Kurtosis	330.6091	10.63045	79.68781	482.0003	3.746298	447.4099
Jarque-Bera	2423164.	1628.082	126954.6	4848295.	31.28160	4464350.
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	593.9700	7184.550	5316.200	907.9800	6196.426	14429.00
Sum Sq. Dev.	6834.031	73630.20	93200.53	44706.20	1042.244	7664242.
Observations	536	536	503	503	537	538

Table 3 shows the descriptive statistics of all the variables used in the study. The mean value of corporate social responsibility (CSR) is 28.29622 with a very high standard deviation of 123.4154.The mean values of ROA, RONW, PER, PBKV,LGBUS is 1.108153, 13.40401, 10.56899, 1.805129 and 11.53897 respectively and their standard deviation are 3.574058, 11.73143, 13.62565, 9.436958 and 1.394448 respectively .

Correlation Analysis

Table 2 Correlation matrix

	ROA	RONW	PER	PBKV	LGBUS	CSR
ROA	1.000000					
RONW	0.840672	1.000000				
PER	0.106382	-0.011438	1.000000			
PBKV	0.041085	0.001332	0.141365	1.000000		
LGBUS	-0.153616	-0.117218	-0.121211	0.050434	1.000000	
CSR	-0.026590	-0.019411	0.035558	0.030763	0.233692	1.000000

Table 4, the correlation matrix presents the association among all the variables in the study. The corporate social responsibility has a positive correlation with the variables – PER, PBKV and LGBUS. While CSR has a negative correlation with ROA and RONW.CSR has a high correlation with LGBUS (23.3%).

Panel Data Regression Analysis

In this study fixed effect model and random effect model is used.

Table 3. Panel least Square Analysis (Hypothesis 1)

	Dependent variables				
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**
	ROA	**RONW**	**PER**	**PBKV**	**LGBUS**
Constant	1.115918	13.52422	10.46115	1.729365	11.51519
t-stat (P-value)	7.319208 (0.0000)	27.92872 (0.0000)	18.61273 (0.0000)	4.013785 (0.0001)	293.2679 (0.0000)
CSR	-0.000288	-0.004465	0.003811	0.002678	0.000885
t- stat (P-value)	-0.207122 0.8360	-1.009548 0.3132	0.766879 0.4435	0.702817 0.4825	2.465457 0.0140
R^2	0.145250	0.199713	0.255270	0.087619	0.626776
Adj R^2	0.083585	0.141977	0.197737	0.017134	0.599904
F-stat (P- value)	2.355462 (0.000026)	3.459065 (0.000000)	4.436946 (0.000000)	1.243093 (0.162149)	23.32441 (0.000000)
Durbin Watson stat	1.432225	0.754950	2.209828	1.161196	0.222198

Table 5 presents the panel least squares analysis for hypothesis 1. The table presents the coefficient value of the constant and the independent variable CSR with corresponding value of t-statistic and p-value. In the table the R^2 value represents variation in the dependent variables ROA, ROE, PER, PBKV and LGBUS caused by independent variable CSR. The F value with corresponding significant probability value at 5 % level of significance; indicate that the value of R^2 is statistically significant for all models except for model 4 and that the independent variable is good predictors of the dependent variable. The result of the analysis is as follows:

Model 1: ROA= 1.115918-0.000288 CSR

Model 2: RONW=13.52422-0.004465 CSR

Model 3: PER= 10.46115+ 0.003811 CSR

Model 4: PBKV= 1.729365+ 0.002678 CSR

Model 5: LGBUS=11.51519+0.000885 CSR

Table 4 Panel EGLS Cross Section Random Effect Analysis(Hypothesis 1)

	Dependent variables				
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**
	ROA	**RONW**	**PER**	**PBKV**	**LGBUS**

Constant	1.119359	13.51890	10.40768	1.727601	11.50946
t-stat **(P-value)**	4.752351 0.0000	15.05163 0.0000	8.757182 0.0000	3.548017 0.0004	69.72783 0.0000
CSR	-0.000422	-0.003550	0.003840	0.002423	0.001010
t- stat **(P-value)**	-0.318835 0.7500	-0.831880 0.4058	0.793289 0.4280	0.697430 0.4859	2.832013 0.0048
R^2	0.000191	0.001295	0.001260	0.000973	0.014573
Adj R^2	-0.001682	-0.000575	-0.000734	-0.001021	0.012731
F-stat **(P- value)**	0.101856 0.749738	0.692613 0.405649	0.631944 0.427019	0.487874 0.485201	7.911686 0.005092
Durbin Watson stat	1.341146	0.704840	2.064072	1.082993	0.211904

Table 6 presents the panel EGLS cross section random effect analysis for hypothesis 1. The table presents the coefficient value of the constant and the independent variable CSR with corresponding value of t-statistic and p-value. In this study F statistic greater than 1 and significant at $p<=0.01$ which indicates significance of the model in predicting the outcome variable. The result of the analysis is as follows:

Model 1: ROA= 1.119359 -0.000422 CSR

Model 2: RONW=13.51890-0.003550 CSR

Model3: PER= 10.40768+0.003840 CSR

Model 4: PBKV= 1.727601 +0.002423 CSR

Model 5: LGBUS= 11.50946 +0.001010 CSR

Analysing appropriateness model

Table 5 Hausman Test Summary (Hypothesis 1)

	Chi-Sq. Statistic	Chi-Sq. d.f	Prob.
Model 1	0.093923	1	0.7592
Model 2	0.618234	1	0.4317
Model 3	0.000638	1	0.9798
Model 4	0.026509	1	0.8707
Model 5	8.504700	1	0.0035

Hausman test is used to ensure selection of appropriate panel data technique. **Table 7** presents the result of Hausman test; the chi-square statistic and corresponding probability value for each model. In the study the p-value of 0.7592, 0.4317, 0.9798 and0.8707 for model 1, model 2 and model 3 and 4 respectively suggest appropriateness of random effect model , while p-value of 0.0035 in case of model 5 suggest fixed effect model is appropriate.

Hypothesis 2: When corporate social responsibility is the dependent variable:

Model 6: $CSR_{it} = \beta_0 + \beta_1 ROA_{it} + \beta_2 ROE_{it} + \beta_3 PER_{it} + \beta_4 PBKV_{it} + ß_5 LGBUS_{it} + e_{it}$

Table 6 Panel least square analysis(CSR dependent variable)

Variable	Coefficient	t- statistic	p- value
C	-128.1538	-1.619659	0.1060
ROA	3.043978	0.138046	0.8903
RONW	-0.238076	-0.195363	0.8452
PER	0.296207	0.683738	0.4945
PBKV	0.270417	0.478144	0.6328
LGBUS	13.21442	2.008820	0.0451
R-squared			0.221767
Adjusted R-squared			0.154387
F-statistic			3.291310
Prob(F-statistic)			0.000000
Durbin-Watson stat			2.196516

Table 8 presents the panel least squares analysis for hypothesis 2. The table presents the coefficient value of the constant and the independent variables with corresponding value of t-statistic and p-value. In the table the R^2 value represents variation in the dependent variable CSR caused by independent variables ROA, ROE, PER, PBKV and LGBUS. The F value with corresponding significant probability value at 5 % level of significance; indicate that the value of R^2 is statistically significant and that the independent variables are good predictors of the dependent variable. The result of the analysis is as follows:

Model6:

CSR=-128.1538 +3.043978 ROA-0.238076 RONW+0.296207 PER +0.270417PBKV+13.21442LGBUS

Table 7 Panel EGLS Cross Section Random Effect Analysis (CSR dependent variable)

Variable	Coefficient	t- statistic	p- value
C	-184.9259	-3.061836	0.0023

ROA	-0.567518	-0.031693	0.9747
RONW	0.089452	0.087527	0.9303
PER	0.384712	0.934183	0.3507
PBKV	0.220492	0.395584	0.6926
LGBUS	17.88369	3.624281	0.0003
R-squared	0.029138		
Adjusted R-squared	0.019371		
F-statistic	2.983254		
Prob(F-statistic)	0.011528		
Durbin-Watson stat	2.053792		

Table 9 presents the panel EGLS cross section random effect analysis for hypothesis 2. The table presents the coefficient value of the constant and the independent variables ROA, ROE, PER, PBKV and LGBUS with corresponding value of t-statistic and p-value. In this study F statistic greater than 1 and significant at $p<=0.01$ which indicates significance of the model in predicting the outcome variable. The result of the analysis is as follows:

Model6:

CSR=-184.9259-0.567518ROA+0.089452RONW+0.384712PER +0.220492PBKV+17.88369LGBUS

Analysing appropriateness model

Table 10 Hausman Test Summary for hypothesis2

	Chi-Sq. Statistic	**Chi-Sq. d.f**	**Prob.**
Cross-section random	3.767139	5	0.5834

Hausman test is used to ensure selection of appropriate panel data technique. **Table 10** presents the result of Hausman test; the chi-square statistic and corresponding probability value. In the study the p-value of 0.5834 suggest appropriateness of random affect model.

Overall Analysis

The overall empirical results reveal positive coefficient of CSR for PER, PBKV and LGBUS, thus indicating a positive relationship between corporate social responsibility and corporate financial performance. But the result is statistically significant only in case of Model 5. However CSR has a negative impact on ROA and RONW although the result is not statistically significant. This suggests that CSR has a positive impact on market related performance measure and total business of the banks. On the other hand financial performance measured by RONW, PER, PBKV and LGBUS have a positive impact on CSR, while ROA has a negative impact on CSR, although the results are not statistically significant.

Conclusion

The study reveal a mixed result .CSR has a positive impact on market related performance measure and market related performance measures also have a positive impact on CSR, although the results are not that significant. The total business of banks measured by the log of total deposit and total advances significantly influences the CSR and is also influenced by CSR activities of banks. Corporate social responsibility in Indian banking industry is in embryonic stage. There is an inadequacy with regard to socially responsible practices by the banks and its reporting of such practices. Lack of reliable measure of CSR for evaluating the social responsibility practices for banks in India acts as a constraint. In this study CSR measure is defined in terms of number of CSR activities which is inadequate because the amount of expenditure on CSR is also very important the data regarding which is unfortunately scantily available.

Limitation

The present study is not free from certain undesirable factors. The panel data analysis was conducted on a relatively small number of sample -36 commercial banks of India and period of study was 15 years. This is a small data set to establish a clear cut relation between CSR and CFP.

Suggestion for future research

This study reveals mixed result on the relationship between CSR and financial performance in Indian banking industry. Hence more empirical works are required to add further to the existing perception on the impact of corporate social responsibility. The researchers are required to explore more extensively other measures of CSR to analyse its relation to financial performance.

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