



Article

Does Corporate Social Responsibility Affect the Financial Performance of the Manufacturing Sector? Evidence from an Emerging Economy

Jacob Cherian ¹, Muhammad Umar ², Phung Anh Thu ³, Thao Nguyen-Trang ^{4,5,*}, Muhammad Safdar Sial ⁶ and Nguyen Vinh Khuong ⁷

- College of Business, Abu Dhabi University, PO Box, Abu Dhabi 59911, UAE; jacob.cherian@adu.ac.ae
- School of Foreign Language, East China Jiaotong University, Nanchang 330013, China; umare_umare@yahoo.com
- Faculty of Finance and Accounting, Nguyen Tat Thanh University, Ho Chi Minh City 700000, Vietnam; pathu@ntt.edu.vn
- Division of Computational Mathematics and Engineering, Institute for Computational Science, Ton Duc Thang University, Ho Chi Minh City 700000, Vietnam
- ⁵ Faculty of Mathematics and Statistics, Ton Duc Thang University, Ho Chi Minh City 700000, Vietnam
- Department of Management Sciences, COMSATS University Islamabad (CUI), Islamabad 44000, Pakistan; safdarsial@comsats.edu.pk
- Faculty of Accounting and Auditing, University of Economics and Law, VNU-HCM, Ho Chi Minh City 700000, Vietnam; khuongnv@uel.edu.vn
- * Correspondence: nguyentrangthao@tdtu.edu.vn

Received: 24 January 2019; Accepted: 20 February 2019; Published: 23 February 2019



Abstract: The present study analyzed the impact of corporate social responsibility (CSR) reporting on the financial performance of Indian companies. It used secondary data from 50 manufacturing companies over the period of fiscal years 2011 to 2017. The results suggested that there exists a significant relationship between the performance of Indian companies and their CSR. The CSR not only improves the firm's social value and reputation but also improves profitability and performance. According to the results, return on assets is significantly determined by corporate governance, customers, products, number of employees, and board size. The customer has a negative impact on return on assets (ROA). The relationship between return on equity and independent variables is the same as the relationship between ROA and independent variables. Corporate governance and product positively impact ROE, but the relationship between customers, number of employees, and board size are negative. Corporate governance and product positively impact return on capital employed (ROCE), but the relationship between customer and the number of employees is negative. Education has positive impact on profit after tax (PAT) and profit before tax (PBT), but the PAT relationship between environments is negative. Corporate governance and product positively impact PBT. In general, we concluded that in India, socially responsible corporations perform better and vice versa.

Keywords: corporate social responsibility; sustainability; financial performance; organizational performance; India

1. Introduction

Corporate social responsibility (CSR) has become an essential component in general business processes which contributes to the achievement of human development goals by offering activities associated with social, economic, and environmental welfare. Many companies perform effectively

in their communities for the environment and their employees, but they do not get the desired appreciation from the community because they do not communicate their CSR activities well. There are several strategic benefits in reporting on companies' social responsibility efforts; for example, industry-level CSR spillovers and own-firm CSR activities are identified as fuel to firm reputation [1].

Today, CSR is viewed as a strategic approach for companies' reputation and competitiveness. Furthermore, CSR can bring benefits in terms of risk management, cost savings, access to capital, customer relationships, human resource management, and innovation capacity. It also encourages more social and environmental responsibility from the corporate sector at a time when the crisis has damaged consumer confidence and the levels of trust in business. At the same time, it shapes the economic, social, and environmental future of the country [2].

Keeping in view the importance of CSR, The Ministry of Corporate Affairs in India enforced the Companies Act, 2013, which has made it mandatory for organizations to spend 2 per cent of their average net profit in the last three years on CSR activities. An adverse and substantial effect on firm valuewas identified from the first announcement of the CSR mandate. This effect is more significant than the 2 per cent spending requirement, suggesting the importance of additional compliance and disclosure costs, thereby implying that the private returns of mandated CSR activity to firms around the threshold are small. The effect seems to be concentrated among firms that are less customer-facing, as indicated by their low advertising expenditures. A subset of large firms (the top 100) found that while firmsthat were initially spending less than 2% increased their CSR activity, firms initially spending more than 2% reduced their CSR expenditures after Section 135 came into effect. These findings bring new evidence on the wide-ranging debates over the consequences of CSR activities and suggest new ways of understanding this important phenomenon [3]. India is one of the top emitters of greenhouse gases and ranked third in terms of CO₂ emissions in the world (Worldbank, 2018). Despite that, India is not subjected to a mandatory emissions reduction target, but due to pressure from developed countries, it has agreed to a mandatory cut in the coming years.

Firms have been forced by community stakeholders to engage in CSR. Many firms have responded to these forces by implementing CSR activities in their business process; however, some have opposed them. Firms that opposed CSR have opted for a compromise between profitability and CSR, which led academic researchers to move their interests to this subject matter, and they have been presenting studies on CSR governance and firm performance; however, the examination of statistical relationships between CSR governance and firm performance is limited [4] and produces inconsistent results. CSR has predominantly been considered a Western phenomenon in terms of standards and systems, which are weak in countries like India. In India, studies have reported a lack of awareness of sustainability [5], and even if there is awareness, firms are not willing to pay premium prices [6]. Extensive research on CSR impacting firm performance has been carried out in developed countries but not many from an Indian perspective and mostly limited to self-reported surveys on CSR barriers [7], policies and practices towards CSR [8], the nature and characteristics of CSR. However, all these studies did not account for financial performance, especially from manufacturing firms. Hence, the present study aimed to examine the impact of both individual and aggregate dimensions of CSR on financial performance.

The main objectives of our study were to identify the antecedent factors of CSR in the manufacturing sector, to examine the impact of individual dimensions of CSR on the financial performance of manufacturing firms, and to examine the impact of the aggregate factor of CSR on the financial performance of manufacturing firms.

A study on manufacturing firms is imperative compared to other sectors, since manufacturing firms cause significant damage to the land, water, and air, resulting inmassive pollution in the environment. Furthermore, studies have recommended more in-depth knowledge about the nature of the relationship between CSR and performance regarding factors that influence this relationship, which will not only be of scientific value and relevance but will also contribute to the practice of CSR in the management of organizations [9]. While there is a plethora of research that has attempted to investigate CSR and financial performance in the service industries (Platonova, Asutay [10], to our

knowledge, there have been few studies on CSR and financial performance in the Indian context [11]. The present paper is an essential contribution to the literature of CSR that explores the relationship between CSR and financial performance using secondary data from manufacturing firms rather than relying on perception-based survey studies. Therefore, the present study examines the impact of CSR on financial performance from Indian manufacturing firms.

The rest of the paper is divided into four main sections; Section 2 includes the literature review, theoretical framework, and research hypothesis; Section 3 is the research methodology; Section 4 is the presentation and analysis of results; and Section 5 is the conclusion, with recommendations and suggestions.

2. Literature Review, Theoretical Framework, and Research Hypothesis

CSR has been accentuated in recent years, with calls to address the difference in the national business configuration of developing configurations [12], which led to different expressions of CSR. CSR has been defined as context-specific organizational actions and policies that take into account stakeholder expectations and the triple-bottom-line of economic, social and environmental performance [13]. However, such definitions have been debated by many scholars [14,15]. While other authors had chosen Carroll's pyramid model (1979, 1999) of economic, legal, ethical, and discretionary responsibility (Kolk and Lenfant [16]) which weighed more to legal and economic obligation than philanthropic and ethical responsibility [17,18], others adopted the definition that emphasizes the relationship between the business–society link [19]. This argues that both CSR and economic performance can be synergetic, and thus, social involvement and CSR can be used to enhance the economic viability and the bottom line.

There are many empirical studies that have been conducted on CSR and the financial performance of firms; however, most of them focused on developed countries with a CSR index [20]. CSR offers real opportunities for the governments of middle- and low-income countries to change the terms in which they interact with business [3]. Even though there have been studies on this topic [21], people still have a limited understanding of whether CSR affects the financial performance of firms, with research suggesting a positive (Krishnan [22]), negative (Sandhu and Kapoor [23]) and neutral relationship between CSR and financial performance.

Simionescu and GHERGHINA [24] came up with two types of findings. They found anegative relationship between CSR and accounting-based performance measure of return on sales (ROS), but there was positive relationship between CSR and market-based performance measure of earning per share (EPS). The impact of CSR on other measures of performance was insignificant. In another study, Gherghina and Vintila [25] explored the linkage between CSR and firm value by developing a global index of CSR. They found a positive impact of CSR activities on employees, products, and services, with the exception of the environment. The robustness test just strengthened their findings. Furthermore, a few studies pointed toward a positive impact of CSR on financial performance, but their relations were found to be insignificant [5].

The literature of an Indian study done by Pradhan [26] identified that CSR intensity could influence corporate reputation. Studies on the relationship between CSR and financial performance in India are mainly focused on the banking sectors [27–29] and few on CSR and financial performance [30], but this study examined entrepreneurial commitment and business performance. A lot of work has been done in the context of emerging countries, especially Romania, China, etc. Some of the most relevant studies are discussed below.

Mani, Gunasekaran [31] found a positive relationship between supplier social sustainability practice and supply chain performance mediated by supplier performance. Kao, Yeh [32] used data from China and found that market responds positively to CSR practices by non-SOEs (state-owned enterprises) but neutrally to CSR by SOEs. They concluded that the managerial opportunism hypothesis is supported by SOEs, and the good management hypothesis is supported by non-SOEs in China. They proposed that the relationship between CSR and corporate performance changes

Sustainability **2019**, *11*, 1182 4 of 14

over time. A comprehensive review paper by Ali, Frynas [33] concluded that company size, industry sector, profitability, and corporate governance mechanisms drive the CSR reporting agenda and that the determinants of CSR in the developing and developed world differ. Using data from Romanian companies, Gherghina and Vintila [25] found a positive relationship between charitable contributions, performance, and market value of the Romanian listed companies.

CSR has transcended from merely focusing on social concerns to the constituents in the internal and external environment, known as stakeholders. A firm's survival depends on the sufficient satisfaction of primary stakeholder (Clarkson [34]), including their employees, shareholders, customers, community, and natural environment. If a stakeholder is withdrawn, it would adversely affect the firm's performance. Therefore, effective management of these stakeholders acts as a value driver, while at the same time, lower employee turnover reduces hiring and training costs. In order to sustain the business, firms must identify key stakeholders and design policies and practices to cater to them.

The present section reviews the theories of CSR and subsequently develops the framework and hypothesis to be tested in this paper. In particular, the study examines the relationship between CSR variables and financial performance.

Hypothesis 1. There is a positive relationship between CSR reporting variables and the financial performance of manufacturing firms in India.

Hypothesis 2. All the individual dimensions of CSR reporting variables have an impact on financial performance.

3. Research Methodology

3.1. Sample and Data

This study used secondary data from 50 Indian manufacturing companies over the period of fiscal years from 2011 to 2017. Data were collected from secondary sources, i.e., money control official websites and annual reports of the manufacturing companies to find the CSR activities performed by the different areas of the sector. Please see Table 1 for details.

3.2. Measuresof Financial Performance Indicators

Empirical studies have used different measures of financial performance (FP) to link CSR and FP. Indeed, Griffin and Mahon [35], based on 51 studies, identified 80 financial measures of corporate performance. Amongst them, return on sales (ROS), return on equity (ROE), and return on assets (ROA) [36,37] or market-based measures, such as market value to book value and price to earnings ratio and market return [38], have been used widely. While the latter predicts long-term, the former captures short-term financial performance [39]. In line with these studies, the present study adopted return on assets (ROA); return on equity (ROE); return on capital employed (ROCE); profit before taxation (PBT); market to book value of equity (MTB); leverage (LEV); and turnover (TO) to measure financial performance.

3.3. Measures for CSR Disclosure

CSR is a multidimensional concept [40] accounting for a variety of inputs, such as internal behaviors or processes and outputs. Therefore, measuring CSR disclosure has to take this approach. In this case, studies conducted in manufacturing firms [10] have identified critical factors of sustainability including the community, employees, and environment and governance and examined their impact on financial performance, finding that four components of sustainability have significant but varying effects [41]. Similarly, other studies also used CSR variables such as community, employees, environment and governance, stock return, and product [42,43]. In line with these studies, the present study identified education (EDU); employee benefits expense (EBE); environment (ENV); community (COMM); customer (CUST); products (PROD); and stock return (SR) as components to measure CSR.

Sustainability **2019**, 11, 1182 5 of 14

Table 1	Definition	of independe	nt wariablee	denendent	t wariablee	and contro	ol wariablee
Table 1.	Deliminon	or maebenae	nii variabies	. aebenaeni	i variabies.	and contro	n variables.

Variable Name	Variable Abbreviation	Variable Description	Predicted Sign
EDU	Education	CSR that contributes to sustainable development	+
EBE	Employee Benefits Expense	Employee Benefits Expense has taken from the annual report	+
ENV	Environment	Environment Component data cover a company's interactions with the environment at large, including the use of natural resources and a company's impact on the Earth's ecosystems, compliance with environmental regulations	+
СОМ	Community	The Community Component covers the company's commitment and effectiveness within the local, national, and global community in which it does business	+
CUS	Customer	Amount received against Sale of products/Units and Advances from Customers	
PDT	Products	Overall product sales from each fiscal year, which areavailable in the annual report	+
SRT	Stock Return	Stock Market Returns are the returns that the investors generate out of the stock market. This return could be in the form of profit through trading or in the form of dividends given by the company to its shareholders from time-to-time	-
Dependent varia	ables		
ROA	Return on assets	Net profit divided by total assets of the company	
ROE	Return on equity	Net profit divided by total shareholder equity	
MTB	Market to book value	Market capitalization divided by total book value	
ROCE	Return on capital employed	Net operating profit divided by employed capital	
PAT	Profit after tax	Gross profit—operating cost	
PBT	Profit before tax	Total revenue—total expenses—tax expenses	
TURN	Turnover	Net sales divided by total assets	
Control variable	s		
NOE	Number of employees	Number of employees in the company	+
BS	Board Size	Number of directors on a company's Board	+

3.4. Empirical Model

To test the hypotheses constructed above, the following models were constructed with the dependent and independent variables described above:

$$ROA = \alpha + \beta_1 EDU + \beta_2 EBE + \beta_3 ENV + \beta_4 COM + \beta_5 CUS + \beta_6 PDT + \beta_7 SRT + \varepsilon$$

$$ROE = \alpha + \beta_1 EDU + \beta_2 EBE + \beta_3 ENV + \beta_4 COM + \beta_5 CUS + \beta_6 PDT + \beta_7 SRT + \varepsilon$$

$$ROCE = \alpha + \beta_1 EDU + \beta_2 EBE + \beta_3 ENV + \beta_4 COM + \beta_5 CUS + \beta_6 PDT + \beta_7 SRT + \varepsilon$$

$$PBT = \alpha + \beta_1 EDU + \beta_2 EBE + \beta_3 ENV + \beta_4 COM + \beta_5 CUS + \beta_6 PDT + \beta_7 SRT + \varepsilon$$

$$PAT = \alpha + \beta_1 EDU + \beta_2 EBE + \beta_3 ENV + \beta_4 COM + \beta_5 CUS + \beta_6 PDT + \beta_7 SRT + \varepsilon$$

$$(5)$$

$$MTB = \alpha + \beta_1 EDU + \beta_2 EBE + \beta_3 ENV + \beta_4 COM + \beta_5 CUS + \beta_6 PDT + \beta_7 SRT + \varepsilon$$
 (6)

(7)

 $LEV = \alpha + \beta_1 EDU + \beta_2 EBE + \beta_3 ENV + \beta_4 COM + \beta_5 CUS + \beta_6 PDT + \beta_7 SRT + \varepsilon$ (8)

where ROA, ROE ROCE, MTB, PAT, PBT, LEV, and TURN are dependent variables, whereas EDU, EBE, ENV, COM, CUS, PDT, SRT are independent variables. α is intercepted, β is coefficient, and ϵ is error term.

 $TURN = \alpha + \beta_1 EDU + \beta_2 EBE + \beta_3 ENV + \beta_4 COM + \beta_5 CUS + \beta_6 PDT + \beta_7 SRT + \epsilon$

Sustainability **2019**, *11*, 1182 6 of 14

4. Empirical Results

4.1. Descriptive Statistics

This study usedsecondary data from 50 Indian manufacturing companies over the period of fiscal years from 2011 to 2017. A series of analyses such as descriptive statistics, autocorrelation, correlation matrix, and multiple regressions were done using EVIEWS 9.0.

From the descriptive statistics of the variables as shown in Table 2, it was observed that ROE has a higher mean value of 26.74 for the entire sample and ROCE and ROA show a mean value of 19.92 and 11.48. However, leverage has a low mean value of 0.38. Among the independent variables, products and employee benefits expense show the highest mean value of 8.23 and 8.14, respectively, while customer and community show a lower mean value of 5.73 and 4.81, respectively. This indicates that Indian companies need to take strong steps toward sustainability to improve their CSR performance ratings.

-	Mean	Median	Max	Min	SD	Skewness	Kurtosis	Probability
ROA	11.48	8.76	36.11	0.35	8.81	1.17	4.29	0.07
ROCE	19.92	14.23	61.93	4.70	15.73	1.16	3.77	0.11
ROE	26.74	23.19	68.01	6.47	18.20	1.04	3.27	0.19
$\mathbf{L}\mathbf{V}$	0.38	0.40	0.54	0.20	0.11	-0.24	1.86	0.56
MTB	2.83	2.36	6.82	0.91	1.50	1.13	3.86	0.11
NOE	8.36	8.45	9.55	7.36	0.62	-0.08	2.17	0.76
PAT	7.69	7.28	11.16	5.49	1.68	0.78	2.65	0.38
PBT	7.92	7.69	11.35	5.87	1.69	0.72	2.56	0.43
PTD	8.23	8.60	10.23	4.17	1.75	-1.05	3.49	0.17
STR	6.39	6.96	8.25	1.17	1.69	-1.65	5.96	0.00
TUR	8.61	9.24	11.40	3.22	2.71	-1.18	3.14	0.13
COM	4.81	3.28	13.76	1.38	3.74	1.38	3.57	0.05
CUS	5.73	5.73	8.68	1.01	2.12	-0.69	2.85	0.49
EDU	6.31	4.40	17.62	0.19	5.84	0.97	2.45	0.22
EBE	8.14	7.00	16.31	5.66	2.96	1.65	4.86	0.00
ENV	6.57	5.37	16.24	0.19	5.47	0.67	2.01	0.35

Table 2. Descriptive statistics.

4.2. Pearson's Correlation

Pearson's correlation coefficient was used to investigate the relationship between CSR and a company's profitability in terms of financial performance (ROA, ORE, ROCE, PBT, PAT, leverage, MTB, and turnover). The findings were similar to those of the studies conducted by the authors of [44]. The correlation analysis shows the linearity between the variables, not the strength of association between dependent and independent variables in Table 3. It is evident from the table that education, employee benefits expenses, environment, community, corporate governance, customer, and stock return a share positive and negative relationship with ROA, ORE, ROCE, PBT, PAT, leverage, MTB, and turnover.

4.3. Auto Correlation of Dependent Variables

Table 4 depicts the autocorrelation of dependent variables. The P-value for ROE (P = 0.337), MTB (P = 0.699), and TURN (P = 0.762) indicates that there is a lack of statistically significant serial correlation.

Table 3. Correlation dependent and independent variables.

	ROA	ROE	ROCE	PAT	PBT	LV	MTB	ENV	EBE	EDU	CUS	CG	COM	BS	STR	TURN	PTD	NOE
ROA	1.00																	
ROE	0.67	1.00																
ROCE	0.47	0.15	1.00															
PAT	-0.15	-0.09	-0.07	1.00														
PBT	-0.11	-0.09	-0.05	0.19	1.00													
LV	0.16	0.30	0.30	0.66	0.67	1.00												
MTB	0.28	0.14	0.17	-0.36	-0.31	-0.20	1.00											
ENV	0.21	0.09	0.16	0.47	0.48	0.19	-0.10	1.00										
EBE	-0.29	-0.35	-0.29	0.71	0.71	0.41	-0.31	0.53	1.00									
EDU	0.31	0.26	0.30	0.54	0.54	0.34	-0.09	0.92	0.48	1.00								
CUS	-0.43	-0.42	-0.45	0.23	0.22	0.06	-0.38	0.18	0.40	0.03	1.00							
CG	0.02	0.04	0.04	0.35	0.35	0.45	0.08	0.29	0.22	0.37	0.50	1.00						
COM	-0.37	-0.37	-0.36	0.64	0.63	0.15	-0.35	0.64	0.63	0.45	0.45	0.24	1.00					
BS	-0.07	-0.07	-0.06	0.33	0.34	0.34	-0.01	0.35	0.17	0.40	0.56	0.15	0.33	1.00				
STR	-0.51	-0.42	-0.47	0.27	0.25	0.24	-0.24	0.09	0.54	0.00	0.26	-0.25	0.36	-0.25	1.00			
TURN	-0.07	-0.01	0.01	0.41	0.39	0.28	-0.02	0.25	0.06	0.34	-0.20	0.41	0.44	0.45	-0.19	1.00		
PTD	-0.07	0.08	-0.07	-0.16	-0.19	-0.33	-0.09	0.19	-0.28	0.18	0.45	0.30	0.17	0.46	-0.27	0.01	1.00	
NOE	0.29	0.35	0.30	-0.08	-0.09	-0.24	0.27	0.18	-0.42	0.16	-0.49	-0.07	0.17	-0.01	-0.54	0.53	0.27	1.00

	F-Statistic	Obs*R- Squared	Prob. F(2,12)	Prob. Chi- Square(2)
ROA	2.73	7.819	0.105	0.020 *
ROE	0.571	2.172	0.579	0.337
MTB	0.077	0.148	0.784	0.699
ROCE	3.082	8.484	0.083	0.014 *
LEV	2.779	4.395	0.119	0.036 *
PAT	1.822	5.822	0.203	0.054 *
PBT	1.979	6.201	0.181	0.045 *
TURN	0.078	0.543	0.926	0.762

Table 4. Autocorrelation of dependent variables.

Note: * represents P < 0.1. Null Hypothesis: There is no autocorrelation. Alternative Hypothesis: There is an autocorrelation.

4.4. Multivariate Analysis

To find the relationship between CSR and the financial performance of manufacturing firms, average CSR scores and various proxies of financial performance for five years were taken.

The regression results for the impact of different CSR variables on different proxies of firm profitability and performance are shown in Table 5. The top row of the table mentions the dependent variables, and the leftmost column shows the independent variables. The value in front of every row heading represents the regression coefficient, and the values below all regression coefficients are *P*-values. The lowermostrow mentions the R-square value for every regression model. According to the results, return on assets is significantly determined by corporate governance, customers, products, number of employees, and board size. The customer is a negative impact on ROA. However, EDU, EBE, ENV, COMM, CG, PROD, NOE, BS, and SR do not determine variation in ROA. The value of R-square for this regression is 0.692. This finding for CG does not explain why ROA, MTB, PAT, and TURN are against the previous findings [33]. However, the relationship between ROE, ROCE, LEV, and PBT is in accordance with to findings in most of the literature [33].

The relationship between return on equity and independent variables is the same as the relationship between ROA and independent variables. Corporate governance and product positively impact ROE, but the relationships between customers, number of employees, and board size are negative. However, EDU, EBE, ENV, COMM, CG, and SR do not determine variation in ROE. The value of R-square for this regression is 0.629. Employee betterment expense, environment, and stock returns positively impact MTB, but the relationship between education, community, and customer is negative. However, CG, PROD, number of employees, board size, and SR do not determine variation in MTB. The value of R-square for this regression is 0.716.

Corporate governance and product impact positively ROCE, but the relationship between customer and the number of employees is negative. However, EDU, EBE, ENV, COMM, CG, PROD, number of employees, board size, and SR do not determine variation in ROCE (r = 0.621). Community, corporate governance, and product positively impact LEV, but the relationship between customer and number of employees is negative. However, EDU, EBE, ENV, COMM, CG, PROD, number of employees, board size, and SR do not determine variation in LEV (r = 0.630).

Education has a positive impact on PAT and PBT, but the PAT relationship between environments is negative. Corporate governance and product positively impact PBT. However, EDU, EBE, ENV, COMM, CG, PROD, number of employees, board size, and SR do not determine variation in PAT (r = 0.742) and PBT (r = 0.708). The value of R-square for this regression is PAT (0.742) and PBT (0.742)

The regression analysis using the fixed-effect and random effect model is revealed in Table 6. In the Hausman test, the probability for ROA (P-value = 0.039), MTB (P-value = 0.000), ROCE (P-value = 0.043), LEV (P-value = 0.000), PAT (P-value = 0.031), PBT (P-value = 0.001) and Turn (P-value = 0.011) is greater than 0.05, we cannot reject the null hypothesis; rather, we accept the null hypothesis, meaning that the random effect model is the appropriate model to explain the outcome. Overall, the analyses reveal that there is a significant positive relationship between CSR and financial performance.

Table 5. Results for the impact of corporate social responsibility (CSR) reporting on firm performance.

	ROA (P-Value)	ROE (P-Value)	MTB (P-Value)	ROCE (P-Value)	LEV (<i>P-</i> Value)	PAT (P-Value)	PBT (P-Value)	TURN (P-Value)
EDU	-0.825(0.383)	-2.049(0.402)	-0.478 (0.005 **)	-1.222(0.543)	0.004 (0.816)	0.371 (0.014 *)	0.336 (0.047 *)	0.298 (0.288)
EBE	0.314 (0.722)	0.412 (0.855)	0.337 (0.025 *)	0.293 (0.876)	-0.012(0.495)	0.097 (0.450)	0.079 (0.594)	-0.252(0.444)
ENV	1.610 (0.133)	2.441 (0.364)	0.457 (0.012 *)	2.113 (0.346)	-0.006(0.768)	-0.376 (0.022 *)	-0.317(0.083)	-0.508(0.064)
COMM	-0.297(0.746)	1.814 (0.449)	-0.461 (0.005 **)	1.012 (0.609)	0.041 (0.040 *)	0.249 (0.077)	0.197 (0.216)	0.855 (0.033 *)
CG	1.821 (0.124)	8.131 (0.013 *)	0.056 (0.751)	5.985 (0.025 *)	0.086 (0.002 **)	0.323 (0.064)	0.415 (0.045 *)	-0.150(0.667)
CUST	-3.910 (0.019 *)	-14.34 (0.002 **)	-0.616 (0.019 *)	-1.099 (0.007 **)	-0.087 (0.011 *)	0.320 (0.162)	0.379 (0.154)	-1.112(0.146)
PROD	2.103 (0.168)	10.627 (0.013 *)	0.241 (0.308)	6.859 (0.045 *)	0.059 (0.046 *)	-0.301(0.174)	-0.328(0.201)	-0.242(0.636)
SR	-3.312(0.063)	-6.178(0.167)	0.477 (0.018 *)	-5.949(0.113)	-0.002(0.940)	-0.021(0.930)	0.037 * (0.849)	-0.117(0.757)
NOE	-8.254 (0.117)	-29.22 (0.038 *)	1.297 (0.118)	-22.26 (0.055 *)	-0.272 (0.017 *)	0.539 (0.465)	0.719 (0.404)	-0.584(0.785)
BS	-2.073(0.203)	-8.328 (0.052 *)	0.368 (0.154)	-6.624(0.067)	-0.082 (0.022 *)	-0.412(0.086)	-0.507(0.073)	0.782 (0.113)
CONS	103.958 (0.0623)	292.552 (0.043)	-14.7(0.090)	242.276 (0.045)	2.599 (0.026)	3.137 (0.681)	1.699 (0.847)	14.888 (0.472)
R ²	0.692	0.629	0.716	0.621	0.630	0.742	0.708	0.927

Note: **, * represents P < 0.05, P < 0.1.

Table 6. Regression results for the impact of CSR reporting on firm performance (Fixed Effect (FE) and Random Effect RE).

	ROA		RC	ÞΕ	M	ГВ	RO	CE	LE	EV	PA	AΤ	PI	3T	TU	RN
	FE	RE	FE	RE	FE	RE	FE	RE	FE	RE	FE	RE	FE	RE	FE	RE
EDU	0.43	0.252	0.66	-1.002	-0.434	-0.068	-0.076	-0.297	-0.023	-0.025	0.057	0.19	0.035	0.17	-0.002	0.318
EBE	0.443	0.658	0.172	1.633	-0.083	0.034	0.101	0.419	-0.003	0.005	-0.239	-0.054	-0.296	-0.17	-0.105	-0.274
ENV	-3.695	-0.218	24.228	0.89	-2.416	-0.03	5.95	0.07	0.201	0.057	-0.333	-0.232	-0.355	-0.238	0.245	-0.354
COMM	4.549	-0.29	-22.236	-1.676	1.364	-0.13	-4.631	-0.13	-0.197	-0.054	0.064	0.183	0.005	0.167	-0.074	0.618
CG	-5.855	-0.698	26.428	1.087	-3.252	-0.121	5.26	-1.124	0.197	0.037	-0.449	-0.073	-0.501	-0.163	-0.08	0.250
CUST	2.948	-0.562	-15.92	-4.549	1.795	0.097	-4.512	-0.854	-0.912	-0.082	0.158	0.222	0.038	0.175	-0.069	-0.486
PROD	10.219	-0.822	-96.342	2.336	9.804	-0.18	-27.887	-1.501	-0.648	-0.026	0.413	-0.157	0.247	-0.231	-0.268	-0.188
SR	-8.44	-5.193	-8.098	-3.993	-0.976	-0.739	-9.851	-9.410	0.115	0.09	-0.359	-0.293	-0.22	-0.35	0.369	-0.087
CONS	19.576	59.972	643.257	47.642	-34.755	11.099	272.366	113.986	4.022	0.177	14.413	10.367	17.516	14.084	11.36	10.208
R-Square	0.998	0.637	0.998	0.352	0.999	0.351	0.999	0.852	0.999	0.75	0.999	0.29	0.999	0.42	0.999	0.435
Hausmar	n Test															
Chi-Sq.	1.0	24	11	10	00	20	15	01	105	. 70	17	00	26	22	-	27
Statistic	16	.24	11.	48	98.	28	15.	.91	105	5.73	16.	.89	26	.23	7	27
Chi-Sq.	,	2	0			,	c	,				2		2		2
d.f.			8		8		8	5	3	3	8		8		8	
Prob.	0.0	139	0.17	' 58	0.00	0 **	0.0	43	0.0	000	0.031		0.001		0.011	

Bold-Significant. Null Hypothesis: Random effect is appropriate. Alternative Hypothesis: The fixed effect is appropriate. ** represents P < 0.05.

4.5. Discussion of Results

Previous studies and theoretical bases support the positive relationship between CSR and firm performance [25,45–49]. Branco and Rodrigues [50] declared that accompany can develop sustainably, creating a competitive advantage through the strict implementation of CSR-based actions. In addition, these actions cannot be imitated quickly by direct competitors in the market segment. The investigation of Gherghina and Vintila [25] was based on a research sample that included listed firms in Romania. Research results confirmed positive results between CSR and firm performance variables. The study employed two proxies that represent CSR as a CSR global index and CSR sub-indices.

Simionescu and GHERGHINA [24] focused on a sample of listed companies on Bombay Stock Exchange (BSE) in the period of 2008–2011. The research results indicated a mixed relationship between CSR and firm performance. Specifically, the study suggested that there is a negative relationship between CSR and ROS and a positive relationship between CSR and EPS. Variables representing firm performance were used based on accounting earnings variables and market-based company value variables. On the other hand, using the same research model but sample research data from 40 listed companies in Pakistan, the research results did not find a statistically significant relationship between CSR and firm performance [51]. Sayed, Malik [51] based their research on agency theory that CSR activities are a cost and may impact firm performance in the future, but they do not do so at the present time.

The company's reputation is maintained by CSR activities, demonstrating a long-term commitment to the interests of stakeholders. Because company outcomes accomplish the stakeholders' intentions, the company may have the resources to promote CSR, building confidence in the public, commencing to enhance company value over time. CSR activities can help to retain and attract extremely qualified employees [52], preferring social benefits (McGuire and Sundgren [53], Houston and Johnson [54]), encouraging the spirit of dedication and long-term commitment of corporate employees [55,56]. Mani, Gunasekaran [31] noted that the impact of supplier social sustainability practices is reflected in aspects of CSR as labor rights, safety and health, social responsibility, diversity, and product responsibilities. With the research sample collected through the survey method, the research conclusions confirmed the positive impact of supplier social sustainability practices on the performance of the supply chain.

On the other view of CSR, the influence of charitable and corporate giving activities on firm performance are estimated by Tobin Q and ROE. The research outcomes reveal a positive correlation between charitable contributions and corporate giving activities and firm performance of Romanian listed companies [57]. The moderating role has a significant impact on CSR and firm performance relationships. Specifically, the examination of the impact of state-owned enterprises (SOE) and non-SOEs in China listed firms explicates the influence of ownership and agency costs [58]. Nevertheless, research has determined that the long-term relationship between CSR and firm performance is connected with the long-term benefits generated by CSR operations [48,58].

5. Conclusions, Recommendations, and Suggestions

The aim of this study was to analyze the impact of CSR reporting on the performance of Indian manufacturing firms. It used data from 50 firms over the 2011–2017 period. The results of multivariate regression suggested that there exists a significant relationship between CSR reporting and firm performance. The study findings are consistent with those of previous studies (e.g., Yang et al., 2010). According to the results, many CSR factors affect firms' performance measured by ROA, ROE, MTB, leverage, PTA, PBT, and turnover. Interestingly, the CSR activities of employee benefit expense had a positive impact on firm performance compared to other activities such as the environment, education, and community. Furthermore, customer-focused CSR activities showed a negative effect on firm performance. The results of the study have revealed that companies have a tendency to focus on some areas of community development, including the environment and education, as these are the

serious challenges faced by Indian communities. Apart from CSR, effective corporate governance and products have a significant positive effect on the performance of Indian firms.

Research results are consistent with most previous studies. Jo and Harjoto [58] argued that CSR activities in company internal affairs (employee diversity, firm relationship with its employees) enhance firm value more than other CSR activities. Furthermore, Zeng [59] affirmed that the higher acompany's CSR rankings, the more likely it is to enhance market value. As per the results, companies should spend more on CSR activities in general and on employee benefits expense in particular, as CSR expense leads to higher profitability and better performance. CSR investment should be spent on employee benefits expense because employee benefits can impact their motivation, which results in higher productivity and performance. Furthermore, the emotional bond of an employee with their organizations can reduce absenteeism and turnover and improves productivity. Lack of implementation of CSR is due to poor monitoring, unclear policies, bureaucracy, and complicated tax systems. Indian companies should also engage in CSR beyond passive philanthropy. Organizations should focus on a wider role in society beyond focusing on quality products at reasonable rates. Therefore, it was concluded that CSR has a positive impact on the financial performance of Indian manufacturing firms.

This finding would increase the awareness among manufacturing firms which do not adopt a long-term CSR policy due to a provable link with profitability. The present findings should encourage Indian companies to engage in CSR activities focusing on stakeholder relations. The current study was conducted in manufacturing firms; however, future studies should focus on other non-manufacturing firms in a wide range of sectors. The study did not account for the specific sectors, but future studies can perhaps look into this perspective within the manufacturing sector.

Author Contributions: Conceptualization, J.C.; Formal analysis, J.C., M.U., P.A.T., T.N.T., M.S.S., and N.V.K.; Writing—original draft, J.C.; Writing—review and editing, M.U., P.A.T., T.N.T., M.S.S., and N.V.K.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

References

- 1. Lloyd-Smith, P.; An, H. Are corporate social responsibility and advertising complements or substitutes in producing firm reputation? *Appl. Econ.* **2018**, *51*, 2275–2288. [CrossRef]
- 2. D'amato, A.; Henderson, S.; Florence, S. *Corporate Social Responsibility and Sustainable Business*; A Guide to Leadership Tasks and Functions; Center for Creative Leadership: Greensboro, NC, USA, 2009.
- 3. Dharmapala, D.; Khanna, V. The impact of mandated corporate social responsibility: Evidence from India's Companies Act of 2013. *Int. Rev. Law Econ.* **2018**, *56*, 92–104. [CrossRef]
- 4. Nkemjika, O.M.; Nkechi, O. Corporate Social Responsibilities and Firm Performance: A Comparative study of Banking and Non-Bank Sector in Nigeria. *Int. J. Manag. Excell.* **2017**, *8*, 946–955. [CrossRef]
- 5. Das, L.; Bhunia, A. The Impact of CSR on Firms' Financial Performance—A Literature Review. *Am. J. Bus. Econ. Manag.* **2016**, *4*, 66.
- 6. Datta, S.K. Pro-environmental concern influencing green buying: A study on Indian consumers. *Int. J. Bus. Manag.* **2011**, *6*, 124.
- 7. Goyal, P.; Kumar, D. Modeling the CSR barriers in manufacturing industries. *Benchmarking Int. J.* **2017**, 24, 1871–1890. [CrossRef]
- 8. Agnihotri, A.; Bhattacharya, S. Communicating CSR practices—Role of internationalization of emerging market firms. *J. Mark. Commun.* **2016**. [CrossRef]
- 9. Famiyeh, S. Corporate social responsibility and firm's performance: Empirical evidence. *Soc. Responsib. J.* **2017**, *13*, 390–406. [CrossRef]
- 10. Platonova, E.; Asutay, M.; Dixon, R.; Mohammad, S. The impact of corporate social responsibility disclosure on financial performance: Evidence from the GCC Islamic banking sector. *J. Bus. Ethics* **2018**, *151*, 451–471. [CrossRef]
- 11. Abdullah, N.; Hadi, N.U.; Dana, L.-P. The nexus between entrepreneur skills and successful business: A decompositional analysis. *Int. J. Entrep. Small Bus.* **2018**, *34*, 249–265. [CrossRef]

12. Okoye, A. Exploring the relationship between corporate social responsibility, law and development in an African context: Should government be responsible for ensuring corporate responsibility? *Int. J. Law Manag.* **2012**, *54*, 364–378. [CrossRef]

- 13. Aguinis, H.; Glavas, A. What we know and don't know about corporate social responsibility: A review and research agenda. *J. Manag.* **2012**, *38*, 932–968. [CrossRef]
- 14. Moon, J.; Shen, X. CSR in China research: Salience, focus and nature. *J. Bus. Ethics* **2010**, *94*, 613–629. [CrossRef]
- 15. Gautam, R.; Singh, A. Corporate social responsibility practices in India: A study of top 500 companies. *Glob. Bus. Manag. Res. Int. J.* **2010**, *2*, 41–56.
- 16. Kolk, A.; Lenfant, F. MNC reporting on CSR and conflict in Central Africa. *J. Bus. Ethics* **2010**, *93*, 241–255. [CrossRef]
- 17. Nejati, M.; Ghasemi, S. Corporate social responsibility in Iran from the perspective of employees. *Soc. Responsib. J.* **2012**, *8*, 578–588. [CrossRef]
- 18. Oh, W.Y.; Chang, Y.K.; Martynov, A. The effect of ownership structure on corporate social responsibility: Empirical evidence from Korea. *J. Bus. Ethics* **2011**, *104*, 283–297. [CrossRef]
- 19. Tang, Z.; Hull, C.E.; Rothenberg, S. How corporate social responsibility engagement strategy moderates the CSR–financial performance relationship. *J. Manag. Stud.* **2012**, *49*, 1274–1303. [CrossRef]
- 20. Mansaray, A.P.; Yuanyuan, L.; Brima, S. The Impact of Corporate Social Responsibility Disclosure on Financial Performance of Firms in Africa. *Int. J. Econ. Financ. Issues* **2017**, *7*, 137–146.
- 21. Garcia-Castro, R.; Ariño, M.A.; Canela, M.A. Does social performance really lead to financial performance? Accounting for endogeneity. *J. Bus. Ethics* **2010**, *92*, 107–126. [CrossRef]
- 22. Krishnan, N. Does Institutional Ownership Affect Corporate Social Performance-A Study Of Select BSE Listed Companies. *DYPDBM Int. Bus. Manag. Res. J.* **2012**, *12*, 68.
- 23. Sandhu, H.; Kapoor, S. Corporate social responsibility and financial performance: Exploring the relationship. *Manag. Labour Stud.* **2005**, *30*, 211–223. [CrossRef]
- 24. Simionescu, L.N.; Gherghina, A.C. Corporate social responsibility and corporate performance: Empirical evidence from a panel of the Bucharest Stock Exchange listed companies. *Manag. Mark.* **2014**, *9*, 4.
- 25. Gherghina, S.C.; Vintila, G. Exploring the impact of corporate social responsibility policies on firm value: The case of listed companies in Romania. *Econ. Sociol.* **2016**, *9*, 23. [CrossRef] [PubMed]
- 26. Pradhan, S. Impact of corporate social responsibility intensity on corporate reputation and financial performance of Indian firms. *Bus. Theory Pract.* **2016**, *17*, 371. [CrossRef]
- 27. Chaudhury, S.K.; Das, S.K.; Sahoo, P.K. Practices of corporate social responsibility (CSR) in banking sector in India: An assessment. *Res. J. Econ. Bus. ICT* **2012**, *4*.
- 28. Singh, N.; Srivastava, R.; Rastogi, R. CSR practices & CSR reporting in Indian Banking Sector. *Int. J. Sci. Res. Publ.* **2013**, *3*, 1–8.
- 29. Simon-Sanchez, J.; Schulte, C.; Bras, J.M.; Sharma, M.; Gibbs, J.R.; Berg, D.; Paisan-Ruiz, C.; Lichtner, P.; Scholz, S.W.; Hernandez, D.G.; et al. Genome-wide association study reveals genetic risk underlying Parkinson's disease. *Nat. Genet.* **2009**, *41*, 1308–1312. [CrossRef] [PubMed]
- 30. Singh, M.P.; Chakraborty, A.; Roy, M. Entrepreneurial commitment, organizational sustainability and business performance of manufacturing MSMEs: Evidence from India. *Int. J. Appl. Bus. Econ. Res* **2016**, *14*, 4615–4631.
- 31. Mani, V.; Gunasekaran, A.; Delgado, C. Enhancing supply chain performance through supplier social sustainability: An emerging economy perspective. *Int. J. Prod. Econ.* **2018**, *195*, 259–272. [CrossRef]
- 32. Kao, E.H.; Yeh, C.-C.; Wang, L.-H.; Fung, H.-G. The relationship between CSR and performance: Evidence in China. *Pac.-Basin Financ. J.* **2018**, *51*, 155–170. [CrossRef]
- 33. Ali, W.; Frynas, J.G.; Mahmood, Z. Determinants of corporate social responsibility (CSR) disclosure in developed and developing countries: A literature review. *Corp. Soc. Responsib. Environ. Manag.* **2017**, 24, 273–294. [CrossRef]
- 34. Clarkson, M.E. A stakeholder framework for analyzing and evaluating corporate social performance. *Acad. Manag. Rev.* **1995**, *20*, 92–117. [CrossRef]
- 35. Griffin, J.J.; Mahon, J.F. The corporate social performance and corporate financial performance debate: Twenty-five years of incomparable research. *Bus. Soc.* **1997**, *36*, 5–31. [CrossRef]

36. Simpson, W.G.; Kohers, T. The link between corporate social and financial performance: Evidence from the banking industry. *J. Bus. Ethics* **2002**, *35*, 97–109. [CrossRef]

- 37. McWilliams, A.; Siegel, D. Corporate social responsibility and financial performance: Correlation or misspecification? *Strateg. Manag. J.* **2000**, *21*, 603–609. [CrossRef]
- 38. Freedman, M.; Jaggi, B. An analysis of the impact of corporate pollution disclosures included in annual financial statements on investors' decisions. *Adv. Public Interest Account.* **1986**, *1*, 193–212.
- 39. Gentry, R.J.; Shen, W. The relationship between accounting and market measures of firm financial performance: How strong is it? *J. Manag. Issues* **2010**, *22*, 514–530.
- 40. Waddock, S.A.; Graves, S.B. The corporate social performance-financial performance link. *Strateg. Manag. J.* **1997**, *18*, 303–319. [CrossRef]
- 41. Aggarwal, P. Impact of sustainability performance of company on its financial performance: A study of listed Indian companies. *Glob. J. Manag. Bus. Res.* **2013**, *13*, 11.
- 42. Eccles, R.G.; Ioannou, I.; Serafeim, G. The impact of corporate sustainability on organizational processes and performance. *Manag. Sci.* **2014**, *60*, 2835–2857. [CrossRef]
- 43. Bushee, B.J.; Noe, C.F. Corporate disclosure practices, institutional investors, and stock return volatility. *J. Account. Res.* **2000**, *38*, 171–202. [CrossRef]
- 44. Mwangi, C.I.; Jerotich, O.J. The relationship between corporate social responsibility practices and financial performance of firms in the manufacturing, construction and allied sector of the Nairobi Securities Exchange. *Int. J. Bus. Humanit. Technol.* **2013**, *3*, 81–90.
- 45. Agyemang, O.S.; Ansong, A. Corporate social responsibility and firm performance of Ghanaian SMEs: Mediating role of access to capital and firm reputation. *J. Glob. Responsib.* **2017**, *8*, 47–62. [CrossRef]
- 46. Amini, C.; Dal Bianco, S. Corporate social responsibility and Latin American firm performance. *Corp. Gov. Int. J. Bus. Soc.* **2017**, *17*, 403–445. [CrossRef]
- 47. Feng, M.; Wang, X.; Kreuze, J.G. Corporate social responsibility and firm financial performance: Comparison analyses across industries and CSR categories. *Am. J. Bus.* **2017**, *32*, 106–133. [CrossRef]
- 48. Sial, M.S.; Chunmei, Z.; Khan, T.; Nguyen, V.K. Corporate social responsibility, firm performance and the moderating effect of earnings management in Chinese firms. *Asia-Pac. J. Bus. Adm.* **2018**, *10*, 184–199. [CrossRef]
- 49. Sial, M.S.; Zheng, C.; Cherian, J.; Gulzar, M.; Thu, P.A.; Khan, T.; Khuong, N.V. Does Corporate Social Responsibility Mediate the Relation between Boardroom Gender Diversity and Firm Performance of Chinese Listed Companies? *Sustainability* **2018**, *10*, 3591. [CrossRef]
- 50. Branco, M.C.; Rodrigues, L.L. Corporate social responsibility and resource-based perspectives. *J. Bus. Ethics* **2006**, *69*, 111–132.
- 51. Sayed, S.; Malik, I.R.; Ahmed, M.; Ali, M. Does Corporate Social Responsibility Improve the Firm's Financial Performance: A Theoretical Perspective of Agency and Stakeholder Theory by Financial Sector of Pakistan. *J. Contemp. Manag. Sci.* **2017**, *3*, 137–156.
- 52. Grow, B.; Hamm, S.; Lee, L. The debate over doing good. Bus. Week 2005, 3947, 76.
- 53. McGuire, J.B.; Sundgren, A.; Schneeweis, T. Corporate social responsibility and firm financial performance. *Acad. Manag. J.* **1988**, *31*, 854–872.
- 54. Houston, M.B.; Johnson, S.A. Buyer-supplier contracts versus joint ventures: Determinants and consequences of transaction structure. *J. Mark. Res.* **2000**, *37*, 1–15. [CrossRef]
- 55. Godfrey, P.C. The relationship between corporate philanthropy and shareholder wealth: A risk management perspective. *Acad. Manag. Rev.* **2005**, *30*, 777–798. [CrossRef]
- 56. Yu, Y.; Choi, Y. Corporate social responsibility and firm performance through the mediating effect of organizational trust in Chinese firms. *Chin. Manag. Stud.* **2014**, *8*, 577–592. [CrossRef]
- 57. Hategan, C.-D.; Curea-Pitorac, R.-I. Testing the correlations between corporate giving, performance and company value. *Sustainability* **2017**, *9*, 1210. [CrossRef]

58. Jo, H.; Harjoto, M.A. Corporate governance and firm value: The impact of corporate social responsibility. *J. Bus. Ethics* **2011**, *103*, 351–383. [CrossRef]

59. Zeng, T. Corporate social responsibility, tax aggressiveness, and firm market value. *Account. Perspect.* **2016**, 15, 7–30. [CrossRef]



© 2019 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).