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great by
deeds, not by
birth"

-Chanakya

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Corporate Social Responsibility and Firm Performance: Indian Evidence

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Abstract

With effect from 1 April 2014, India's new Companies Act 2013 makes it mandatory for certain firms to spend a certain minimum amount on Corporate Social Responsibility (CSR) activities. In this study, the impact of mandatory CSR spending on firm performance is examined based on the data for 1460 firm years for the period 2015 to 2018. It is hypothesized that CSR spending has a positive impact on firm performance measured in terms of ROA and ROE. Logit and Probit models are used to estimate the impact of CSR on performance of firms. Contrary to the expectations, the empirical results show that CSR spending has negative impact on performance (ROA/ROE) subsequent to the CSR spending made mandatory in India. It implies that the mandatory CSR spending targets are at the expense of shareholders returns. The findings are useful to regulators, managers and investors.

Key words: Firm performance, Corporate Social Responsibility; Mandatory CSR, India.

I. Introduction

With effect from April 1, 2014, India's amended new Companies Act 2013 (Ministry of Corporate Affairs [MCA], 2013) makes it mandatory for certain firms, private limited or public limited, listed or unlisted, to spend a certain minimum amount on Corporate Social Responsibility (CSR) activities. Any firm that meets the net profit, networth, or turnover criteria of the Act has to constitute a CSR committee of its Board, consisting of three or more directors, out of which at least one shall be an independent director. The CSR committee thus constituted must formulate and recommend a CSR policy for the firm to the company board.

CSR is widely discussed among academics, firms, regulators and other market participants (Maragolis et al. 2009; Kitzmueller and Shimshack, 2012). By engaging in CSR activities, firms can not only generate favorable stakeholder attitudes and better support behaviors (like purchase of its product, seeking employment, investing in the company). In the long run, it enables firms to build corporate image, strengthen stakeholder-company relationships, and enhance stakeholders' advocacy behaviors. The increasing power of activist organizations and the media has made CSR strategies increasingly relevant and strategies of "doing well by doing good" more relevant in the modern corporate world (Economist, 2005). There is an impressive body of research which examined the relationship between CSR investments and a firm's performance and these have concluded that the relationship is inconclusive (Orlitzky et al. 2003; Mackey et al. 2007). But in the context of developing economies, it is increasingly argued that CSR should embrace not only corporate conduct, social, environmental and human right issues but also the role of business in relation to poverty reduction (Prieto-Carrón et al. 2006).

But many firms in emerging market economies are reticent to undertake CSR expenditures on a voluntary basis. Based on the concerns of economic growth and uneven

distribution of income, many governments and regulators in many countries (like India, Indonesia, Philippines) have taken legislative measures to mandate CSR expenditures. The underlying challenges in emerging market economies are to link the interests of shareholders with the wider goal of the society given the fact that these countries have large segments of the population which is at the “bottom of the pyramid”. Indonesia was the first country which mandated in 2007 that firms operating in natural resources industry create an “obligatory funding” for implementing CSR (Waagstein, 2010). Philippines legislative arm (Congress) in 2013 while approving the CSR Act argued that “...many corporations and other business organizations have very little care for the welfare of the society, community where they operate and the natural environment around them¹” (p.1). Philippines CSR Act 2013 only calls for CSR spending for which they are entitled to “full deductions” for such expenses. India was the first country which passed legislation mandating CSR spending mandatory for its large companies with its amendment of Indian Companies Act 2013. Under mandated CSR expenditure provisions in India, larger Indian firms (which satisfy any of the three criterion like net worth, sales and net profit) are mandated to spend annually 2% of their 3-year average annual net profits on CSR activities and disclose such expenditures in their financial statements and a separate individual CSR report (Dhanesh, 2015, Subramaniam et al 2015, Bansal et al. 2015). Around 59 per cent of Indian firms listed in National Stock Exchange in India come under the mandated CSR expenditure targets (Manchiraju and Rajgopal, 2017).

The mandated CSR expenditure targets in India is best described as “comply or explain” model where if a company is not in a position to spend the prescribed amount on CSR, the board is required to disclose it and give reasons for its non-compliance. The mandatory CSR regime has created “quagmire” situations for Indian firms. The issue has become high profile public issue with Mr. Ratan Tata owner of the biggest Indian conglomerate comparing mandatory CSR to “another tax on business” (Economist, 2017). Economist (2017) called mandatory CSR in India “coerced do-goodery” and critics of mandated CSR expenditure targets in India argue that these mandated CSR expenditure represent corporate costs which undermine their competitive positions in the industry/country. Critics also point out that making CSR activities mandatory is essentially an exercise in outsourcing government social responsibility to the private sector to cover up for the government failure to address social problems. The extant literature has shown that CSR spending can be costly and also they can compete for firms’ limited financial resources and the empirical findings regarding the impact of CSR on firms’ financials are mixed (Margolis et al 2009). In the Indian context, the initial studies shows that it varied by size- for large companies, making CSR spending mandatory did not elicit the forecasted increase in CSR expenditure while non-mandatory companies reduced their level of CSR expenditures (Mukherjee, 2016). The study by Manchiraju and Rajgopal (2017) shows the mandatory CSR expenditure law in 2013 caused a significant drop in the stock price of firms forced to spend money on CSR. The availability of data of meeting mandatory CSR targets in India since 2014 provides an opportunity to examine whether meeting compulsory CSR targets positively/ adversely affected profitability of firms. This enables us to dig deep into the behavior of firms in terms of CSR expenditure and its impact of it on the financial performance parameters.

¹ See http://www.congress.gov.ph/legisdocs/basic_16/HB00306.pdf (Accessed on November 18, 2018).

Among the emerging market economies, India represents an interesting case study. It is one of the fastest growing economy and fifth largest economy of the world (with GDP of around \$ 2 trillion) which has attracted substantial global portfolio allocation. First, philanthropic orientation of Indian firms has its roots in history; most of the prominent family owned enterprises undertook community development expenditures as part of their corporate conduct. Secondly, the fruits of rapid growth are unevenly distributed - it is home to the largest number of people living in absolute poverty and the gap between have and have-nots has increased. Thirdly, India's corporate institutional structure has peculiar features. In contrast to dominant institutional ownership in the United States, India is dominated by concentrated ownership from family-owned enterprises (Khanna and Palepu, 2005) and promoter driven firms (like Tatas, Infosys etc.) who dominate the market. Most of the family owned and promoter driven firms in India dominate minority shareholders and occupy a lead role in decision making and often influence the decisions of the board. Most of the firms in India is 'family centered' style of management' and has voluntarily spent considerable amount of money on CSR activities (mostly on community development) while others have done so only when mandated by regulators. Increasingly, firms in India use CSR not only as a tool of philanthropy but also to boost their bottom line. For e.g., Godrej, a consumer group, offers three-month training courses for beauticians around the country hoping to boost the demand for cosmetic products. Similarly, Ashok Leyland, a truck maker, provides free driving lessons helping to fill the shortage of truck drivers (Economist, 2017). Fourthly, India has become the first country to legally mandate expenditures (2 per cent of net income) on CSR with effect from 2014². We explore this issue further by examining in the Indian context the relationship between mandatory CSR expenditure targets and performance subsequent to the mandatory disclosure using recent data (last 4 years i.e., 2015-2018) of 365 firms (which are mandated to CSR expenditure targets) and which account for 88 per cent of market capitalization of firms in India. Our empirical results show that mandatory CSR expenditure in India has negative impact on performance (ROA/ROE) subsequent to the CSR expenditure mandate which shows that mandatory CSR expenditure targets are at the expense of shareholders.

The rest of the paper is schematized as follows: section II provides an overview of the literature and hypothesis for empirical investigation. Section III describes the data and methodology for estimation. Section IV presents the empirical results and Section V summarizes the conclusions of the study.

II. Review of Literature

There is an impressive body of research which examined the relationship between CSR and its relationship with firm size/age, profitability, corporate governance mechanisms, earnings quality, earnings management (Mackey et al. 2007). The debate on this topic was sparked when Friedman (1970) declared in his well know New York Times essay that the sole responsibility of the firm is to increase its profits. The "shareholder expense" view of Friedman (1970) is based on the argument that CSR activities is a manifestation of "moral hazard" towards the shareholder

² The Companies Act, 2013 requires firms which are publicly listed to spend in India at least 2 per cent of their net profits, averaged over the three preceding financial years on CSR. The mandate is applicable to those firms with a net worth of Rs. 4,500 crores or more or turnover of Rs.1,000 cores or more or net profit of Rs. 5 cores of more during any financial year.

(owner) and represents a “donation” from shareholders to stakeholders. On the other hand, the “stakeholder value maximization” view have argued that firms have a duty to society that goes well beyond simply maximization of the wealth of equity holders and firms have a social role along with their commercial interests” (Freeman, 1984). In the modern world, firms are responsible for the interests of all stakeholders and society at large. A way to resolve this conflict is to ensure that socially responsible behavior improves the firm’s present value of cash flows (Mackey et al. 2007). Drucker (1984) suggested that firms should ensure that social responsibilities also become business opportunities. Such strategically motivated CSR activities are referred to in the literature as “doing well is doing good”. Studies have also found that CSR activities provide a number of benefits to a firm’s stakeholders including increase employee morale, better firm reputation and more harmonious growth (Servaes and Tamayo, 2013). Dhaliwal et al. (2011) argue that voluntary disclosure of CSR activities attracts institutional investors and analysts and reduces the firm’s cost of capital.

The empirical evidence regarding the relationship between CSR and financial performance is divergent. There are evidences which show positive relationship between CSR and financial performance (De Velde et al, 2005; Orlitzky et al. 2003; Wu 2006; Gregory et al. 2014). On the other hand, some studies find significant negative relationship between CSR and financial performance (Griffin and Mahon, 1997; Wright and Ferris, 1997; Brammer et al. 2006). There are also few studies which show no significant relationship between CSR and profitability (McWilliams and Siegal, 2000; Moore, 2001; Siefert et al. 2003, 2004; Soana, 2011). Given the divergent results, there is a need for further research in this area especially in the context of emerging market economies where there is an attempt to mandate CSR spending by government/regulators. In theory, the application of mandatory CSR should act as a complement to voluntary CSR. However there is an immense risk of such mandatory CSR would make them defensive and discourage them from embracing that responsibility and end of the process (Waagstein, 2011).

In India most of the studies relate to nature of CSR reporting and its measurement³ (Singh & Ahuja, 1983; Vasal, 1995; Murthy and Abeysekera, 2008; Kansal et al. 2014; Prasad et al. 2017). Most of these studies examine CSR disclosures, patterns and trends in India. Latterman et al. (2009) undertook a comparative study of 68 largest multinational firms in China and India from the Forbes list and found that Indian firms communicate more CSR primarily due to more ‘rule-based’ as opposed to ‘relation-based’ governance environment. Study by Mishra et al. (2010) is perhaps the most comprehensive in the Indian context. Using a sample of firms based on using perceptual data on CSR and non-financial data from CEO’s of Indian firms for six stakeholder groups, supplemented by financial data of these firms, the study finds that stock-listed firms show responsible business practices compared with non-listed firms. The study by Kansal et al. (2014) finds in the Indian context that corporate size and industry category are found to correlate with corporate social disclosures. Prasad et al. (2017) find that CSR disclosures during 2011-12 and 2014-15 have increased over time and the quality of disclosure is largely descriptive. The study also finds that CSR disclosure varies positively with industry, size, age and foreign customers and negatively with leverage. But the recent study by Manchiraju and Rajgopal (2017) and Mukherjee et al. (2018) examined the effects of mandatory CSR

³ For a review of studies relating to CSR disclosure in developed and developing countries, see Ali et al. (2017).

expenditure in India. Manchiraju and Rajgopal (2017) show the mandatory CSR expenditure of affected (mandated) firms compared with unaffected firms saw a significant drop in abnormal returns for various events associated with implementation of mandatory CSR in India. Mukherjee et al. (2018), on the other hand, looks at the behavior of firms' pre and post mandatory CSR in India and found that mandatory CSR legislation affected adversely the profitability of firms. Our study is different from Manchiraju and Rajgopal (2017) and Mukherjee et al. (2018) in the sense we examine the impacts of CSR mandate on CSR-mandated firms who met the CSR threshold criteria (called CSR firms) and those who did not meet the CSR targets (non-CSR firms) on their profitability's using data for 2015 to 2018. We posit that mandatory CSR expenditure targets lead to change in firm behavior and would lead to a decrease in firm financial performance.

III. Research Methodology

Database

The study is based on the Centre for Monitoring Indian Economy's Prowess database. Prowess database has information on CSR targets for each listed company in India since 2014 (those firms with a net worth of Rs. 4,500 crores or more or turnover of Rs.1,000 cores or more or net profit of Rs. 5 cores of more during any financial year). In other words, the dataset covers firms in India for which CSR targets are mandated (the treatment group) and this group consists of firms which met or exceeded the targets (Socially responsible firms) or were not able to meet the targets (socially irresponsible firms). The related financial data are also sourced from Prowess database.

We started data collection from Nifty 500 companies and we were successful in collecting 365 out of 500 companies for which CSR targets and compliance data for the period 2015 to 2018 were available. For the estimation period data relates to 1460 firm years. These 365 companies account for 80 to 85 per cent of the market capitalization of NSE Nifty companies for the period 2015 to 2018 and hence covers slightly over four-fifth coverage of companies in the sample could be considered well-represented of the overall population. Most of the firms in the sample are from manufacturing sector (around 50 per cent), followed by financial sector (14 per cent), information and communication (8.5 per cent) (See Appendix 2).

Econometric Models

In the literature especially in the US context, there are a number of measures of CSR in the literature include CSR ratings (e.g., Kinder, Lydenberg, Domini Research and Analytics ratings [KLD]); environmental responsibility (e.g., reduction of harmful emissions); and the existence of a code of ethics or measures of charitable giving. Our study uses CSR spending information in broad themes as identified by the KLD as a measure of a firm's CSR engagement. The Companies Act 2013 mandates that 2% of average net profits from the past 3 years to be spent on CSR activities in the areas of community relations, environment, energy, and product.

The present study will use a CSR spending ratio, which is the amount spent by a firm on CSR activities divided by the amount required to be spent by a firm as per the Companies Act 2013. A ratio of 1 or greater than 1 implies that the firm spent adequate amount or more than

required by law and a ratio less than 1 implies that the firm spent less than required. Socially responsible firms are defined in terms of the ratio equal to 1 and or greater than 1. Socially irresponsible firms are defined in terms of the ratio less than 1. Nearly 56.7 per cent of the firms in the sample was classified as socially responsible firms and nearly 43.3 per cent of the firms were classified as socially irresponsible firms. Logit and probit models are used to estimate the impact of CSR on performance of firms, viz.,

$$CSR\ Firms_{it} = \beta_0 + \beta_1 SIZE_{it} + \beta_2 LEV_{it} + \beta_3 Age_{it} + \beta_4 Performance_{it} + \varepsilon_{it} \quad (1)$$

$\beta_1 > 0, \beta_2 < 0, \beta_3 > 0, \beta_4 < 0.$

Where CSR Firms (value of 1 for socially responsible firms, 0 for socially irresponsible firms), SIZE (proxied by market capitalization), LEV is leverage (Total liabilities to total assets), Performance is measure by ROA is return on assets (Net income to total Assets) and ROE (Net income to Total Equity). In equation (1), the control variables are Size, Leverage, Age and the independent variable is ROA/ROE (See Appendix 1).

IV: Results and Analysis

This section presents the empirical results. Table 1 presents the descriptive statistics of variables used in the investigation. The mean value of the CSR firms is 0.5671 which means that nearly 57 per cent of the sample firms are classified as CSR firms and the remaining 43 per cent are Non-CSR firms. The average age of the firms is 42 years with a median age of 34 years. The average market capitalization (proxy for size) is around Rs.255,335 million with the median substantially lower (Rs. 72,605 million). The average leverage of firms in the sample is 0.4987 with the median (0.4935) slightly lower which shows the leverage of firms is not substantial. The average return on assets (ROA) is around 0.1553 and the average return on equity is around 0.1556.

Table 2 presents the correlation matrix of variables used in the study for the period 2015-2018. The correlation coefficient among the variables is generally low except among performance variables (ROA, ROE), size variables (market capitalization, total assets and revenue). The correlation coefficient between CSR firms (CSRF) and performance variables (ROA and ROE) is generally negative. There is positive correlation between CSR firms (CSRF) and size variables (market capitalization, total assets and revenue). There is also a positive correlation between CSR firms and age of firms. There is negative relation between CSR firms and leverage of firms. Leverage is also negatively correlated with performance variables.

Table 3 reports the results of logit and probit regressions of equation (1) for financial performance (profitability) variables ROA and ROE. The age of the firm is positively related to CSR performance variable (CSRFirms) and is statistically significant (at 1 per cent level) in both logit and probit versions of the model. The ROA version of the equation (1) shows that CSR performance variable is negatively related to financial performance both in logit and probit models. Similarly, in the ROE version of the model also it is inversely related with CSR firms and statistically significant at 1 per cent level. The negative relation between CSR firms and profitability variables (ROA and ROE) shows that mandated CSR expenditures in India adversely affects profitability of firms in India. The size of the firms as proxied by market

capitalization is positively related to CSR firms. Leverage variable is not statistically significant. The fit of the equations (logit and probit) are good given the nature of the data and LR Chi Squared statistics which is a joint test of the significance of independent variable is also statistically significant.

V. Conclusions:

The present study examines the impact of CSR spending on firm performance which requires firms to meet certain thresholds (like turnover, net worth, profit) to spend 2 per cent of their profits averaged over the past three years on CSR spending. These CSR spending are in the nature of “comply or explain” model. Existing literature have shown using event study methodology that announcement effect of CSR spending on abnormal returns of these firms is negative. It is observed that how financial performance of these firms which met or exceeded the targets (Socially responsible firms) or not able to meet the targets (socially irresponsible firms) differ based on the data for 1460 firm years for the period 2015 to 2018 in the Indian context. The empirical analysis shows that their financial performance was negatively impacted because of these mandated CSR spending targets. The study shows that in the absence any tax benefit for mandated CSR expenditures, these CSR expenditure assume the role of “charity” from shareholders to stakeholders without any “financial benefits”. One of the limitations of the present study is that the analysis does not analyse the social-welfare implications of the mandatory CSR rule. The findings are useful to regulators, managers and investors.

References

- Ali, W., Frynas, J.G., & Mahmood, Z. (2017). Determinants of corporate social responsibility (CSR) disclosure in developed and developing countries: A literature review. *Corporate Social Responsibility and Environmental Management*, 24(4), 273-294.
- Ariram B & Puranik, R. (2004). A review of corporate social responsibility in India, *Development*, 47(3), 93-100.
- Atkins, B. (2006), Is corporate social responsibility responsible?, *Forbes.com*, November 28.
- Aushbaug, H., Collins, D.W. & LaFond, R. (2004). Corporate Governance and the cost of equity capital, Working Paper, University of Wisconsin-Madison. (<https://pdfs.semanticscholar.org/c19d/d84f45de6564a86246b657910803303d7424.pdf>)
- Bae, K. H., Kang, J.K., & Kim, J.M (2002). Tunneling or value added? Evidence from mergers by Korean business groups. *The Journal of Finance*, 57(6), 2695–740.
- Bae, K. H., & Jeong, S. W. (2007). The value- relevance of earnings and book value, ownership structure, and business group affiliation: Evidence from Korean business groups. *Journal of Business Finance & Accounting*., 34(5- 6), 740-766.
- Bansal, P. (2005). Evolving sustainability: A longitudinal study of corporate sustainable development. *Strategic Management Journal*, 26(3), 197-218.
- Berle, B & Means, G. (1932). *The modern corporation and private property*, New York: NY: MacMillan.
- Bertrand, M, Mehta, P & Mulianathan, S (2002). Fretting out Tunneling: An application to Indian business groups. *The Quarterly Journal of Economics*, 117(1), 121-148.
- Bozzolan, S, Fabrizi, M, Mallin, C.A & Michelon, G. (2015) Corporate social responsibility and earnings quality: International evidence. *The International Journal of Accounting*, 50(4), 361-396.
- Brammer, S., Brooks, S & Pavelin, S. (2006) Corporate social performance and stock returns: UK Evidence from disaggregate measures, *Financial Management*, 35(3), 97-116.
- Burgstahler, D. C.; Hail, L & Leuz, C (2006). The importance of reporting incentives: Earnings management in European private and public firms, *Accounting Review*, 81(5), 983-1016.
- Calegari, M.F., Chotigeat, T., & Harjoto, M.A. (2010). Corporate social responsibility and earnings reporting. *Journal of Current Research in Global Business*, 13(20), 1-14.

- Chih, H.L., Shen C.H., & Kang, F.C. (2008). Corporate social responsibility, investor protection, and earnings management: Some international evidence. *Journal of Business Ethics*, 79(1-2), 179-198.
- Cheng, Q., & Warfield, T.D. (2005), Earning incentives and earnings management. *The Accounting Review*, 80(2), 441-476.
- Cohen, D.A & Zarowin, P. (2010), Accrual-based and real earnings management activities around seasoned equity offerings. *Journal of Accounting and Economics*, 50(1), 2-19.
- De Velde E.V., Vermier, W & Corten, F. (2005), Finance and accounting: Corporate social responsibility and financial performance, *Corporate Governance*, 5(3), 129-137.
- Dhaliwal, D.S., Li, O.S., Tsang, A., & Yang, Y.G. (2011), Voluntary nonfinancial disclosure and cost of equity capital: The initiation of corporate social responsibility reporting, *The Accounting Review*, 86(1), 59-100.
- Drucker, P.E. (1984), The new meaning of corporate social responsibility, *California Management Review*, 26(2), 55-63.
- Economist (2005). The good company- Special Report, January 20.
- Economist (2017). Donate, or else : Indian firms make the best of coerced do-goodery, November 16.
- Edmans, A, (2011). Does the stock market fully value Intangibles? Employee satisfaction and equity prices, *Journal of Financial Economics*, 101(3), 621-640.
- Fama, E.F and Jensen, M. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301-326.
- Freeman, R.E. (1984) *Strategic management" A stakeholder approach*, Boston: Pittman-Ballinger.
- Friedman, M. (1970), The social responsibility of business is to increase its profits. *New York Times Magazine*, 32(13), 122-126.
- Gabrielsen, G, Gramlich, J & Plenborg, T. (2002), Managerial ownership, information content of earnings and discretionary accruals in a non-US setting?, *Journal of Business, Finance & Accounting*, 29(7-8), 967-988.
- Gopalan, R., Nanda, V., & Seru, A (2007), Affiliated firms and financial support: Evidence from Indian business groups, *Journal of Financial Economics*, 86(3), 759-795.

- Gregory, A., Tharyna, R & Whittaker, J. (2014), Corporate social responsibility and firm value: Disaggregating the effects on cash flow, risk and growth, *Journal of Business Ethics*, 124(4), 633-657.
- Griffin, J.J., & Mahon, J.F. (1997), The corporate social performance and corporate financial performance debate: Twenty five years of incomparable research, *Business and Society*, 36(1), 5-31.
- Hemingway, C., & MacLagan, P. (2004), Managers' personal values as drivers of corporate social responsibility, *Journal of Business Ethics*, 50(1), 33-44.
- Hong, Y., & Andersen, M.L. (2011), The relationship between corporate social responsibility and earnings management. *Journal of Business Ethics*, 104(4), 461-471.
- Jensen, M. C., & Meckling, W. H. (1976), Theory of the firm: Managerial behavior, agency costs and ownership structure, *Journal of Financial Economics*, 3(4), 305-360.
- Jiaporn, P., Miller, G.A., Yoon, S.S., & Kim, Y.S. (2008). Is earnings management or beneficial? An agency theory perspective. *International Review of Financial Analysis*. 17(3), 622-634.
- Jones, T. (1995). Instrumental stakeholder theory: A synthesis of ethics and economics. *The Academy of Management Review*., 20(2), 404-437.
- Kansal, M., Joshi, M., & Batra, G.S. (2014), Determinants of corporate social responsibility disclosures: Evidence from India. *Advances in Accounting, incorporating Advances in International Accounting*, 30(1), 217-229.
- Khanna, T., & Palepu, K. (2000), Is Group Affiliation Profitable in Emerging Markets? An analysis of Diversified Indian Business Groups. *The Journal of Finance*, 55(2), 867-891.
- Khanna, T and Palepu, K.G. (2005), 'The Evolution of Concentrated Ownership in India: Broad Patterns and a History of the Indian Software Industry,' in *A History of Corporate Governance Around the World: Family Business Groups to Professional Managers*, (Eds.) Morck, R.K, University of Chicago Press.
- Kothari, S., Leone, A. & Wasley, C., (2005), Performance matched discretionary accrual measures, *Journal of Accounting and Economics*, 39 (1), 163-197.
- Kim, Y., Park, M.S., & Wier, B., (2012), Is earnings quality associated with corporate social responsibility? *The Accounting Review*. 87(3), 761-796.
- Latterman, C., Fetscherin, M, Alon, I, Li, S., & Schneider. (2009), CSR communication intensity in Chinese and Indian multinational companies. *Corporate Governance: An International Review*, 17(4), 426-442.

- Mackey, A., Mackey, T.B., & Barney, J.B. (2007), Corporate social responsibility and firm performance: Investor preferences and corporate strategies. *The Academy of Management Review*, 32(3), 817-835.
- Manchiraju, H & Rajgopal, S. (2017), Does corporate social responsibility (CSR) create shareholder value? Evidence from the Indian Companies Act 2013, *Journal of Accounting Research*, 55(5), 1257-1300.
- Matsumoto, D.A. (2002), Management incentive to avoid negative earnings surprises. *Accounting Review*, 77(3), 483-514.
- Margolis, J.D., Effenbein, H.A., & Walsh, J.P. (2009). Does it pay to be good and does it matter? A meta-analysis of the relationship between corporate social and financial performance, Working Paper, Cambridge, MA: Harvard University.
- McWilliams, A., & Siegel, D. (2000), Research notes and communications- Corporate social responsibility and financial performance: Correlation or misspecification, *Strategic Management Journal*, 21(5), 603-609.
- Mishra, S., & Suar, D. (2010), Does corporate social responsibility influence firm performance of Indian companies?. *Journal of Business Ethics*, 95(4), 571-601.
- Moore, G.M. (2001), Corporate social performance: An investigation in the UK supermarket industry, *Journal of Business Ethics*, 34(3): 299-315.
- Mukherjee, A & Bird, R. (2016), Analysis of mandatory CSR expenditure in India: A survey. *International Journal of Corporate Governance*, 7(1), 32-59.
- Mukherjee, A., Bird, R. (2018), Mandatory corporate social responsibility: The Indian experience, *Journal of Contemporary Accounting & Economics*, 14(3), 254-265.
- Murthy, V. & Abeysekera, I. (2008), Corporate social reporting practices of top Indian software firms. *The Australian Accounting Business & Finance Journal*, 2(1), 36-59.
- Orlitzky, M., Schmidt, F.L & Rynes, S.L., (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies*. 24(3), 403-441.
- Prahalad, C.K. (2005) The fortune at the bottom of the pyramid: eradicating poverty through profits, New Jersey, Wharton School.
- Prasad, M., Mishra, T., & Kalro, A.D. (2017), Environmental disclosure by Indian companies: An empirical study, *Environment, Development and Sustainability*, 19(5), 1999-2022.

- Prieto-Carrón, M., Lund-Thomsen, P., Chan, A., Muro, A., & Bhushan, C. (2006), Critical Perspectives on CSR and development: what we know, what we don't know and what we need to know, *International Affairs*, 82(5), 977-987.
- Prior, D., Surroca, J., & Tribó, J.A. (2008), Are socially responsible managers really ethical? Exploring the relationship between earnings management and corporate social responsibility. *Corporate Governance: An International Review*, 16(3), 160-177.
- Sarkar, J and Sarkar, S., (2015).Corporate social responsibility in India- An effort to bridge the welfare gap, *Review of Market Integration*, 7(1), 1-36.
- Sanan, N.K. (2018). Influence of board characteristics on CSR: A study of Indian firms, *International Journal of Corporate Governance*, 9(3), 300-315.
- Seifert, B., Marris, S.A.& Bartkaus, B.R. (2003), Comparing big givers and small givers: Financial correlates of company philanthropy, *Journal of Business Ethics*, 45(3): 195-211.
- Servaes, H, & Tamayo, A., (2013), The impact of corporate social responsibility on firm value: The role of customer awareness. *Management Science*, 59(5), 1045-1061.
- Singh, D., & Ahuja, J. (1983). Corporate social reporting in India. *International Journal of Accounting*, 18(2), 151-169.
- Trébucq, S., & Russ, R. (2005). The case of earnings and stakeholder management: Towards an integrated theory of managerial behaviour. In *Working paper*, Université Montesquieu Bordeaux IV.
- Vasal, V. (1995). A spatio-temporal analysis on social reporting by companies-Evidence from Indian public sector. *Journal of Accounting and Finance*, 2, 256-269.
- Warfield, T, Wild, J., & Wild, K. (1995), Managerial ownership, accounting choices and informativeness of earnings, *Journal of Accounting and Economics*, 20(1), 61-91.
- Wright, P & Ferris, S. (1997), Agency Conflict and corporate strategy: The effect of disinvestment on corporate value, *Strategic Management Journal*, 18(1), 77-83.
- Wu, M.L. (2006), Corporate social performance, corporate financial performance and firm size: A meta analysis', *Journal of American Academy of Business*, 8(1), 163171.

Appendix 1: List of Variables used in the study

Variables		Description
Total Assets	A	Total assets
Age	AGE	Age of firms in number of years
Revenue	REV	Revenue (Sales) in Rupees Millions
Net Income	NI	Net Income in Rupees Millions
Market Capitalization	MC	Total market Capitalization at the end of each financial year
Return on Assets	ROA	Net Income/Total Assets
Return on Equity	ROE	Net income/Total Equity
Leverage	LEV	(Total Liabilities- Total Equity)/Total Assets
CSR Firms	CSRF	Firms meeting and exceeding CSR regulatory targets are assigned a value of 1 and 0 otherwise.

Appendix 2: Industry-wise Distribution of Firms used in the Study

Industry Code	Industry Name	Percentage Distribution
1	Agriculture, forestry and fishing	5.75
2	Mining and quarrying	0.82
3	Manufacturing	50.14
5	Water supply; sewerage, waste management and remediation activities	2.47
6	Construction	7.40
7	Wholesale and retail trade	4.66
8	Transportation and storage	3.56
9	Accommodation and Food service activities	0.82
10	Information and communication	8.49
11	Financial and insurance activities	14.25
13	Professional, scientific and technical activities	0.55
14	Administrative and support service activities	0.55
17 & 18	Others	0.55
	Total (N=365)	100

Table 1: Descriptive Statistics of Variables used in the Study: 2015-2018

The table presents descriptive statistics of variables used in the study. See Appendix 1 for description of the variables.

Variables	Mean	Median	Standard Deviation	Co-efficient of Variation	Minimum	Maximum
CSR Firms (CSRF)	0.5671	1.0000	0.4956	0.8740	0	1
Age	42	34	23.9690	0.5698	3	123
Total Assets (Rs. Million)	366289	45814	1663718	4.5421	2236	345
Revenue (Rs. Million)	97348	23073	351380	3.6095	3235	5130167
Market Capitalization (Rs. Million)	255335	72605	559535	2.1914	3121	5591596
Leverage	0.4987	0.4935	0.2264	0.4579	0.0025	1.0117
Return on Assets (ROA)	0.1553	0.1303	0.1004	0.6473	-0.2149	0.8223
Return on Equity (ROE)	0.1556	14.7000	0.1622	1.0428	-0.1372	1.3136

Table 2. Correlation Matrix of Variables Used in the Study: 2015-2018.

This table presents estimates of Karl Pearson Correlation Coefficient of variables used in the empirical analysis.

Variables	CSR	Total Assets	Sales	Market Capitalization	Leverage	Return on Assets (ROA)	Return on Equity (ROE)	Age
CSR Firms	1.0000	0.0223	0.0840	0.0242	-0.0063	-0.0760	-0.0840	0.0801
Total Assets	0.0223	1.0000	0.1441	0.4322	0.2535	-0.1292	-0.0878	0.0479
Sales	0.0840	0.1441	1.0000	0.4391	0.0407	-0.0044	0.0294	0.0857
Market Capitalization	0.0242	0.4322	0.5440	1.0000	-0.0132	0.1441	0.1443	0.0740
Leverage	-0.0063	0.2535	0.0407	0.4391	1.0000	-0.3910	-0.1718	0.0380
Return on Assets (ROA)	-0.0760	-0.1292	-0.0044	0.1441	-0.3910	1.0000	0.7803	-0.0441
Return on Equity (ROE)	-0.0803	-0.0866	0.0294	0.1443	-0.1718	0.7803	1.0000	-0.0259
Age	0.0801	0.0479	0.0857	0.0740	0.0380	-0.0441	-0.0259	1.0000

Table 3: Determinants of CSR Spending Ratio of Firms in India: 2015-2018.

This table presents the results of the logit and probit regression models using CSR Spending as the dependent variables and performance (ROA and ROE) as independent variables followed by other firm specific control variables (Size, Leverage etc.).

Variables	Hypothesized Signs	Dependent Variable			
		CSR Firms			
		Logit	Probit	Logit	Probit
Constant	+/-	-0.7097 (0.51118)	-0.4529 (0.3177)	-0.9909 (0.5108)*	0.6221 (0.3176)*
Age of the Firm	+	0.0046 (0.0023)**	0.0028 (0.0014)*	0.0047 (0.0023)**	0.0029 (0.0014)**
ROA	+/-	-2.5455 (-0.6143)***	-1.5754 (0.3743)***		
ROE	+/-			-0.0136 (0.0036)***	-0.0085 (0.0022)***
Log(Market Capitalization)	+	0.1041 (0.0424)***	0.0658 (0.0263)**	0.0999 (0.0424)**	0.0627 (0.0262)**
Leverage	-	0.0738 (0.2731)	0.0505 (0.1688)	0.3172 (0.2623)	0.2000 (0.1613)
Industry Dummies		Yes	Yes	Yes	Yes
Diagnostics					
N		1,460	1,460	1,460	1,460
Pseudo R ²		0.0253	0.0254	0.0238	0.0239
LR Chi ²		50.66988***	50.0012***	47.64***	47.81***
No of cases correctly predicted (%)		59.8	59.7	59.6	59.6

Note: 1. Figures in brackets are standard errors.

2. ***, **, * indicate statistical significance at 1%, 5% and 10 % respectively.

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