

Female leadership and corporate social responsibility

Does higher share of women in boardrooms of firms translate into higher corporate social responsibility (CSR) spending directed towards sustainability? Using a quasi-natural experiment stemming from the policy mandating women's representation on the board of directors in India, this article documents evidence of female leaders potentially increasing the CSR spending and directing it towards sustainability issues.

Over the past two decades, policymakers across countries have introduced gender diversity initiatives – ranging from voluntary guidelines to mandatory board quotas – to increase female representation in corporate decision-making bodies. Parallel to this development, Corporate Social Responsibility (CSR) has become an important mechanism through which firms engage with stakeholders, address environmental and social externalities, and strengthen long-term sustainability. An expanding body of literature suggests that these two developments are closely linked: gender diversity in boardrooms appears to shape firms' CSR priorities, expenditures, and outcomes.

It is well established that women's participation in public governance changes public good provision (Chattopadhyay and Duflo 2004). We know much less about what women's representation does to policy decisions in private firms. What is true of public governance may not hold in private firms, which are driven by profit-maximising motives. Of particular interest are CSR policies, since they are less likely to influence profitability outcomes and come under the direct influence of the board (See [Board's Role in Corporate Social Purpose](#)).

Given this setting, we study whether women's representation on the boards of firms can change CSR spending using a quasi-experimental setting. While there is now growing evidence that gender-diverse boards are positively correlated with CSR activities, all existing evidence only establishes correlation.



Pavel
Chakraborty
University of
Bath



Tanika
Chakraborty
Indian
Institute of
Management,
Calcutta



Nikita
Sangwan
Indian
Statistical
Institute,
Delhi Centre

Subscribe Now

Sign up to our newsletter to receive new blogs in your inbox

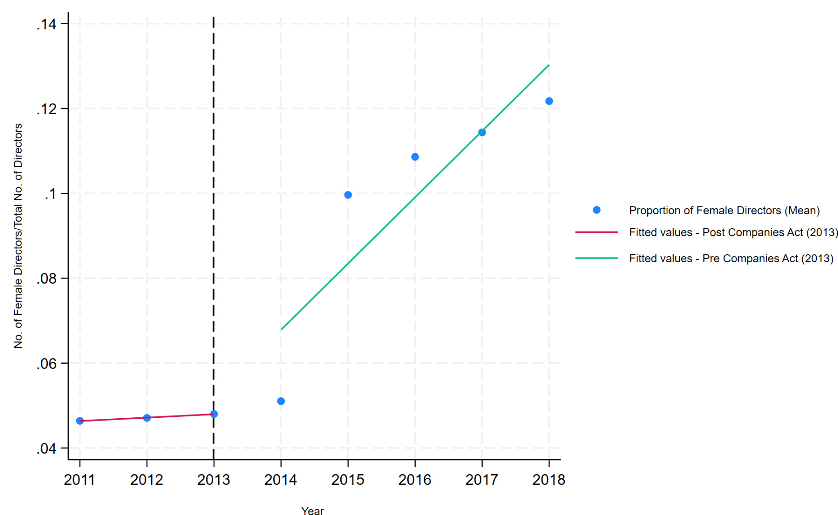
SUBSCRIBE

- ☐ By checking this box, you confirm that you have read and are agreeing to our terms of use regarding the storage of the data submitted through this form.

In India, The Companies Act, 2013 made it mandatory for firms, whether public or private, to appoint at least one woman, either as an executive or a non-executive director, on their boards. This is binding if (a) a firm's securities are listed on any stock exchange; or (b) a firm has a paid-up capital of at least Rs. 1,000 million; or (c) a firm has a turnover of at least Rs. 3,000 million. We analyse the effect of the gender quota law on the share of women directors in boards of firms and, subsequently, on the nature of CSR spending, using data from PROWESS and from Prime database group. The latter provides information on board composition of firms listed on the National Stock Exchange (NSE) in India.

Figure 1 shows the first stage. It plots the trends in the proportion of female board directors before and after the mandate on gender composition of company Boards. Before the policy, an average Indian firm had 4% of directors as women which increased to around 13% after the reform. This increase can come from two margins – extensive margin (firms that did not have female directors before the policy) and intensive margin (firms that already had a female director prior to the policy and further increased their representation) that we explore in Figure 2.

Figure 1. Proportion of female directors (% of total number of directors)



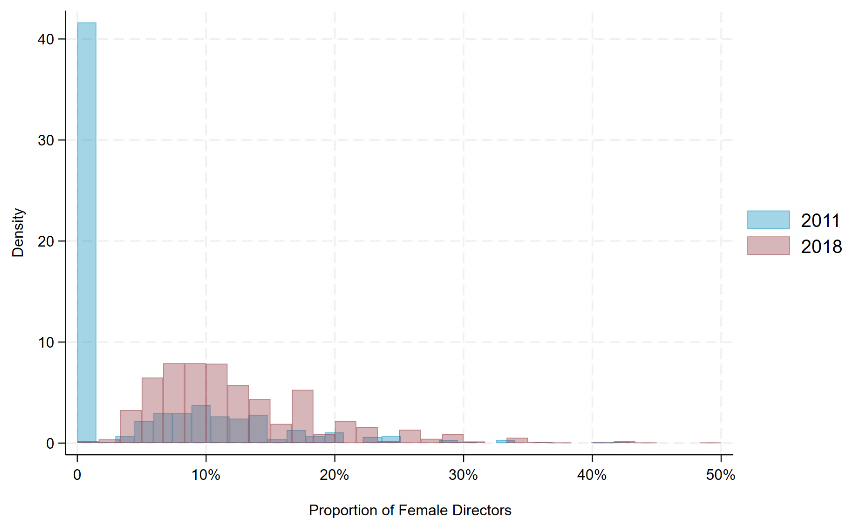
Related



Notes: (i) The graph plots the proportion of female directors in total number of directors in a firm. (ii) Firms cover both manufacturing and services sector in India.

Figure 2 shows that a large part of this increase in female directors is driven by increase in extensive margin, that is, firms with zero female directors appointed new female directors. In particular, more than 40% of firms had no female directors, which dropped to almost zero by 2018.

Figure 2. Distribution of share of female directors (% of total number of directors)



Notes: (i) The graph plots the distribution of the share of female directors in total number of directors in a firm for two different periods of time, one before the women board quota mandate (2011) and one after (2018). (ii) Firms cover both manufacturing and services sector in India.

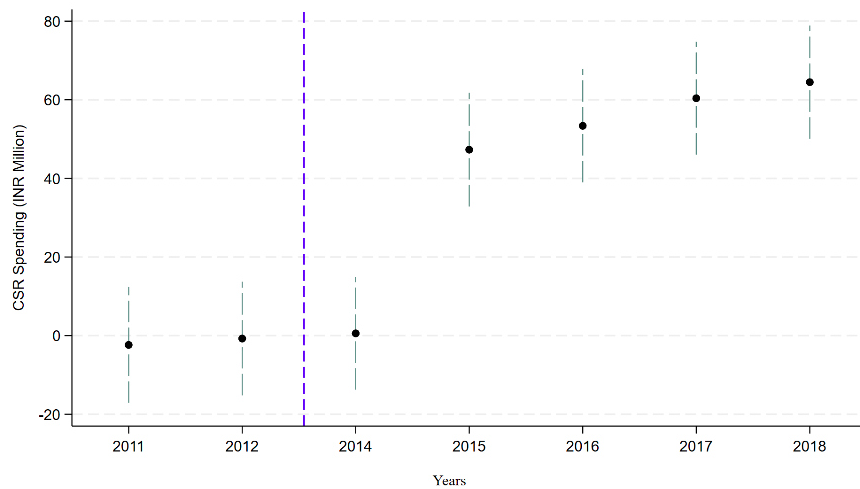
Gender composition of boards and CSR spending

Several theoretical mechanisms can possibly explain why female representation in boardrooms may differentially influence CSR expenditure and participation. First, stakeholder theory suggests that women directors tend to adopt a broader stakeholder orientation, and may allocate more resources toward socially beneficial activities and long-term sustainability investments (Cook and Glass 2018). Second, women strengthen board monitoring and accountability and this may lead firms to undertake more substantive CSR initiatives rather than symbolic compliance exercises (Jensen and Meckling 1976). Third, behavioural explanations emphasise differences in leadership styles and risk preferences. Female executives and directors are frequently associated with longer-term strategic thinking, higher ethical sensitivity, and stronger preferences for risk mitigation (Byrnes *et al.* 1999). Because CSR investments often generate returns over longer horizons – through reputation building, stakeholder trust, and regulatory preparedness – women leaders may support sustained CSR expenditures.

The empirical literature, on average, shows a positive association between women's representation in a firm and CSR outcomes. A meta-analysis by [Endrikat *et al.* \(2021\)](#) finds a robust positive relationship between female board participation and the integration of social and environmental considerations into corporate strategy. Studies also identify governance channels through which women in boardrooms can affect the undertaking of CSR activities. [Nwude and Nwude \(2021\)](#) for Nigeria and [Oino and Liu \(2022\)](#) for China argue that female directors strengthen ethical governance and monitoring quality, increasing board attention to socially responsible activities. Similarly, [Ben-Amar *et al.* \(2017\)](#) document that gender-diverse boards improve environmental disclosure practices and increase corporate responsiveness to sustainability concerns. However, all of these studies only exhibit conditional correlation and not causation. Using the board quota law enacted by India in 2013, we provide the first evidence of the causal effect of women's participation in decision-making bodies of a firm and its CSR outcomes.

The second landmark reform introduced by the Companies Act (2013) required firms above specified thresholds to spend a minimum of two percent of net profits on CSR activities. We examine the annual trends in the CSR spending of firms in Figure 3. As expected, we find a significant increase in CSR expenses post-2014.

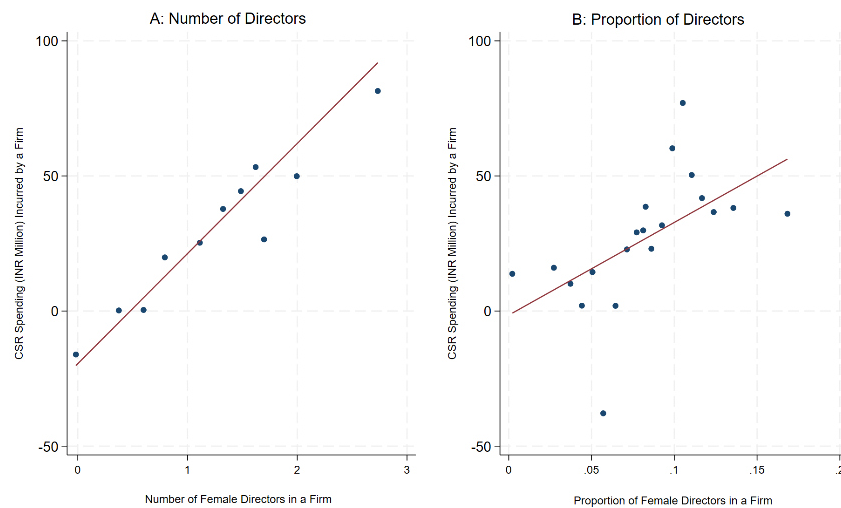
Figure 3. Annual trends in CSR spending



Notes: (i) Figure presents the coefficient estimates (and their 95% confidence intervals) of CSR spending regressed on year dummies, controlling for firm fixed effects (this removes all time-invariant differences across firms in terms of size, culture, industry, management philosophy, etc.). (ii) The coefficients are benchmarked to the year 2013.

Next, we present the correlation between the presence of female directors in a firm and the CSR expenses that a firm carries out in Figure 4. Panel A plots the correlation of CSR expenses with number of female directors, while Panel B does the same with the proportion of female directors. In both the cases, the result is strongly positive suggesting that presence of women directors influence CSR outcomes.

Figure 4. Female directors in a firm and CSR spending (correlation)



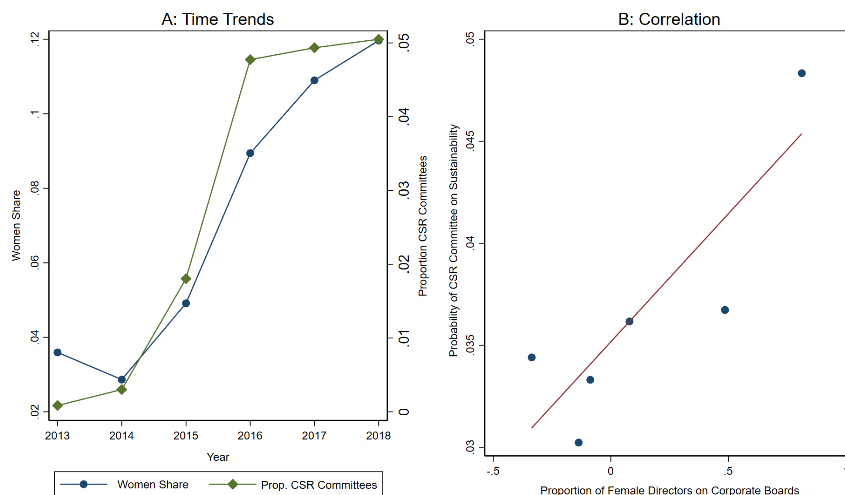
Notes: (i) Figure presents binscatter plots of CSR spending by a firm against the number (proportion) of female directors in that firm in Panel A (Panel B). (ii) In both plots, we control for firm fixed effects.

Do these expenses translate into long-term strategies?

Does the increase in the proportion of women directors in a firm also lead to structural changes in terms of firms focusing on specific issues? We are specifically interested in exploring the focus on sustainability issues. We examine if firms chose to form a higher number or share of committees with a focus on sustainability issues. For this, we utilise the Prime database that allows us to identify the number of CSR committees focusing on sustainability issues, including environment, conservation of resources, socioeconomic inequalities (for example, women empowerment). We plot it along with the women's share of directors in Figure 5.

We find a strong co-movement in the annual trends in the share of women directors in a firm and the proportion of committees within a firm that focus on CSR (Panel A of Figure 5).. Panel B shows a significant positive correlation between the firm's share of female directors and the likelihood of having sustainability committees in the firm. These plots motivate that the presence of women directors in a firm may not be merely symbolic, but perhaps carries a meaningful transformation of a firm's long-term strategy toward sustainability issues.

Figure 5. Women directors and CSR committees on sustainability



Notes: (i) Panel A of the figure presents the co-movement of the proportion of women directors (to all directors) and the sustainability CSR committees (in proportion to all other committees). (ii) Panel B presents a correlation among these two variables (correlation coefficient=0.36, $p < 0.05$). (iii) In both plots, we control for firm fixed effects.

Policy prescription

Our findings underscore an important channel of how gender diversity can influence corporate behaviour, especially towards long-term sustainability issues. In addition, findings on the formation of committees further substantiates the evidence that an increase in women's representation in the boardrooms may not have been symbolic positions but can translate into meaningful contributions in terms of the formation of new committees. This implies that gender diversity reforms may produce benefits extending beyond representation to broader social and environmental outcomes. Thus, gender inclusion policies should be viewed not only as equity-enhancing interventions but also as governance reforms with broader societal impacts. Policymakers designing CSR frameworks should recognise the importance of board composition. Mandatory CSR expenditure rules without corresponding governance reforms may produce compliance-oriented spending without meaningful social investments. Greater diversity in boardrooms has the potential to strengthen the quality and targeting of CSR expenditures.

On the other hand, our findings indicate that for firms, board diversity increasingly appears not merely as a governance objective but as an important determinant of responsible corporate behaviour. Firms themselves may benefit from integrating diversity objectives into governance strategies. If women improve CSR effectiveness and stakeholder trust, gender diversity can act as an element of long-run value creation rather than merely a regulatory requirement.

Note:

¹ A 95% confidence interval is a way of expressing uncertainty about estimated effects. Specifically, it means that if you were to repeat the experiment over and over with new samples, 95% of the time the calculated confidence interval would contain the true effect.

Further Reading

- Ben-Amar, Walid, Millicent Chang and Philip McIlkenny (2017), "Board Gender Diversity and Corporate Response to Sustainability Initiatives: Evidence from the Carbon Disclosure Project", *Journal of Business Ethics*, 142(2): 369-383. Available [here](#).
- Byrnes, James P, David C Miller and William D Schafer (1999), "Gender Differences in Risk Taking: A Meta-Analysis", *Psychological Bulletin*, 125(3): 367-383. Available [here](#).
- Chattopadhyay, Raghabendra and Esther Duflo (2004), "Women as Policy Makers: Evidence from a Randomized Policy Experiment in India", *Econometrica*, 72(5): 1409-1443. Available [here](#).
- Cook, Alison and Christy Glass (2018), "Women on Corporate Boards: Do They Advance Corporate Social Responsibility?", *Human Relations*, 71(7): 897-924. Available [here](#).
- Endrikat, Jan, Charl de Villiers, Thomas W. Guenther and Edeltraud M. Guenther (2021), "[Board Characteristics and Corporate Social Responsibility: A Meta-Analytic Investigation](#)", *Business & Society*, 60(8): 2099-2135.
- Jensen, Michael C and William H Meckling (1976), "[Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure](#)", *Journal of Financial Economics*, 3(4): 305-360.
- Nwude, E Chuke and Comfort Amaka Nwude (2021), "[Board Structure and Corporate Social Responsibility: Evidence from Developing Economy](#)", *SAGE Open*, 11(1): 21582440209.
- Oino, Isaiah and Jonathan Liu (2022), "[Do Female Board Members Influence Corporate Social Responsibility Performance?](#)", *IIM Kozhikode Society & Management Review*, 11(2): 195-206.