Does Mandated Corporate Social Responsibility Reduce Intrinsic Motivation? Evidence from India*

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Abstract

We investigate the implementation of a Government of India mandate that requires companies to spend at least 2% of their profits on corporate social responsibility (CSR) activities. Firms that voluntarily engaged in CSR before the mandate reduce their spending significantly while others increase their spending marginally. CSR spending post mandate is highly sensitive to negative shocks to firm profits, but not to positive profit shocks, and is channelled to more opaque venues with limited third-party verification. Our results are consistent with the hypothesis that regulatory intervention dampens managers' intrinsic motivation to "do good" and, hence, could at times be counter-productive.

1 Introduction

"I don't think you generate CSR by putting statutory requirements. I think there is enough social consciousness among the larger companies to drive it on the basis of what they consider their responsibility."

- Azim Premji, Philanthropist and Chairman of Azim Premji Foundation.[1]

Governments in several countries have begun playing an active role in the area of corporate social responsibility (CSR). Some have moved from encouraging corporations to nudging them, and from nudging to mandating either spending or disclosures. Recently, the European Union member states have agreed to pass legislation requiring corporations to report their CSR activities in a specific format and in specified detail.[2] Similar laws have been passed or are being contemplated in countries such as Denmark and Canada.[3] Some countries, such as India (Manchiraju and Rajgopal (2017)) and Indonesia (Waagstein (2011)) have gone a step further and have promulgated laws that make not only disclosure, but also spending, on specified CSR activities mandatory. Given these global developments, it is interesting to investigate the impact of the governmental intervention on corporations' CSR spending.

In particular, we examine how a Government of India mandated level of CSR spending of 2% of average three years' profits impacts the CSR activities of Indian firms that voluntarily incurred CSR expenditure before the regulatory intervention. In other words, we focus on firms whose spending on CSR prior to the government intervention was higher than the minimum 2% limit specified by the government. Although there is some debate about the overall contribution of CSR to firm value (see Orlitzky, Schmidt, and Rynes (2003), McWilliams, Siegel, and Wright (2006), Margolis, Elfenbein, and Walsh (2009), and Perrini, Russo, Ten-

[1]Source:http://economictimes.indiatimes.com/news/company/corporate-trends/azim-premji-against-law-on-mandatory-csr-spending-by-corporates/articleshow/7782555.cms. Wipro is one of the largest Information technology companies in India.

[2]Source: https://www.theguardian.com/sustainable-business/eu-reform-listed-companies-report-environmental-social-impact, http://corporatejustice.org/; http://corporatejustice.org/news/1174-getting-non-financial-reporting-right-eu-commission-guidelines-clarify-expectations-towards-business; https://www.globalreporting.org/information/policy/Pages/EUpolicy.aspx

[3]Source: https://mastereia.wordpress.com/2014/04/10/mandatory-environmental-corporate-social-responsibility-can-canada-become-a-leader/; https://www.greenbiz.com/news/2009/01/07/mandatory-csr-reporting-denmarks-largest-companies

cati, and Vurro (2011) for a meta-analysis of the debate relating to link between CSR and firm value), there is a growing literature on the importance of top management motivation (Di Giuli and Kostovetsky (2014), Petrenko, Aime, Ridge, and Hill (2016)) and the legal and institutional environments (Liang and Renneboog (2017)) as explanatory variables affecting CSR spending.

If a firm that spends more than 2% before the mandate (labelled "high CSR" firms) undertakes CSR activities to transmit a positive signal to broader stakeholders (Deng, Kang, and Low (2013), Lins, Servaes, and Tamayo (2017)), then spending more than the levels mandated by the government will likely continue to have signalling value. Hence, high CSR firms are likely to be unaffected by the government mandate. However, if the intrinsic motivation of top management or of the controlling shareholders[4] to "do good" drives CSR, then as shown by Gregg and Kosfeld (2006), Tirole (2006), Mellström and Johannesson (2008), Gneezy, Meier, and Rey-Biel (2011), any regulatory intervention could be seen as a signal of the government's distrust in management's motives towards prosocial behavior.[5] In such cases, imposing mandatory CSR limits could reduce the level of CSR activities undertaken by high CSR firms to the bare minimum required by the law. Therefore, which of these views actually describes the data is an empirical question.

We examine the consequences of the law on mandatory CSR passed by the Indian Parliament in the financial year 2013–2014. The law requires that qualifying firms allocate at least 2% of their average profits for the last three years to CSR activities. Notably, the law provides that any failure to comply with the CSR requirement needs to be justified by the company's board ("the comply or explain" model).

Data on CSR spending prior to the effective years of the CSR law comes from the Prowess database maintained by the Center for Monitoring Indian Economy (CMIE). We obtain data

[4]Major Indian corporations are run by large groups of controlling shareholders, known as promoters (Bertrand, Mehta, and Mullainathan (2002), Khanna and Palepu (2000), Gopalan, Nanda, and Seru (2007)).

[5]We use the term intrinsic motivation in a broad sense to also include loss of exclusivity as a do-gooder. As noted by Gneezy, Meier, and Rey-Biel (2011) "extrinsic rewards can crowd out image motivation by diluting the signal to oneself or others of a voluntary contribution: it becomes unclear whether a person is undertaking a social activity to "do good" or to "do well"."

on post-period CSR spending from the Ministry of Corporate Affairs, Government of India. We begin by identifying firms that spent more than 2% of the average profits over the last three years on CSR before the law was passed. We find that in the post-intervention period, such high CSR firms significantly reduce their CSR spending to around 2%. As expected, the so called "low CSR firms" that spent less than 2% before the law increase their CSR spending but not up to the full 2% level. These firms prefer to explain their low spending rather than actually incur the expense to undertake socially responsible projects.

High CSR firms reduce their CSR spending by close to 10 percentage points, which represents a decline of 76% in the ratio of CSR to profits, after the law was passed. In contrast, we document a mild increase in CSR spending for low CSR firms. To formalize these changes, we estimate a difference-in-differences regression. Here, the difference in CSR as a proportion of profits between high CSR and low CSR firms in the post-period serves as the first difference. The same difference in the pre-intervention period serves as the second difference. We document that the difference between the two pre-post differences declines by 15 percentage points. 94% of high CSR firms reduce CSR spending in the post mandate period. We confirm the existence of parallel trends in CSR spending between high and low CSR firms in the pre-treatment period. The two types of firms do not differ significantly in terms of important observable characteristics. Finally, we perform placebo tests to rule out the possibility that mechanical mean reversion drives our results.

We then focus on the spillover impact of CSR. We find that in the post-intervention period, CSR contributions become highly sensitive to the level of profit. Interestingly, such increased sensitivity is driven mostly by negative shocks to profits, and not by positive shocks. A firm that reports a loss reduces CSR by, on average, Rupees 17.86 million (approximately USD 283,492 at 63 Rupees to a USD) more in the post-intervention period, compared with that in the pre-intervention period. This represents a nearly 44% reduction from the average CSR spending during the pre-intervention period. In other words, when CSR is mandatory, negative shocks to profits reduce CSR more significantly. Interestingly, we find no corresponding increase in CSR spending when firms experience positive shocks to profits in the

post intervention period. These results suggest that (i) firms view mandatory CSR as a tax, and (ii) mandatory CSR reduces firms' intrinsic motivation to devote resources to prosocial behavior.

We focus next on the change in the composition of CSR spending. We hypothesize that reduction in intrinsic motivation to engage in prosocial behavior leads to a reduction in transparency. The Prowess database classifies CSR into four broad categories, namely donations, environment related expenditure, community spending and a miscellaneous category. Note that donations can be easily verified using third party reporting (Kirchler (2008), Kleven, Knudsen, Kreiner, Saez, et al. (2011), Kleven, Kreiner, and Saez (2016)) as donees are required to maintain books of accounts in most cases.[6] The other two types of CSR spending are relatively opaque. In line with our expectations, we find that treatment firms reduce donations and increase other types of CSR spending post mandate. Given the above results, it is reasonable to infer that when forced to spend on CSR, firms may try to "manage" CSR spending as they do in case of taxes (Frank, Lynch, and Rego (2009), Rego and Wilson (2012)).

CSR in response to a government mandate potentially enjoys less of a signalling value to stakeholders relative to voluntary CSR. In this context, firms are free to spend more than the mandated 2% limit and, hence, could still credibly signal their "high quality" type (McWilliams and Siegel (2001)). Firms that voluntarily spent more than the prescribed limit later reduce their spending on CSR in response to the limit. This goes against the "reduction in signal value" hypothesis. Nonetheless, we perform several cross-sectional tests in order to investigate this mechanism further.

First, Servaes and Tamayo (2013) find that the signalling value of CSR is higher for firms that incur higher advertising expenditure.[7] Here, we test whether the reduction in CSR is higher for firms that spend more on advertising in the pre-intervention period. We do not find such a result. Second, we investigate whether the reduction in CSR spending is

[6]NGOs in India are required to be registered under various state and federal laws.

[7]The study uses advertising expenditure as a proxy for consumer awareness.

higher for firms that cause significant environmental pollution. However, the data suggests that polluting firms do not reduce their level of CSR spending more than other firms do. Finally, we examine whether firms use advertising expenditure in the post-mandate period as a substitute for CSR. If CSR loses its signalling value after the mandate, firms may have to incur higher advertising expenditures. However, we do not find any significant increase in advertising expenditure of high CSR firms. Taken together, these findings suggest that the reduction in CSR among high CSR firms is unlikely to be attributable to a reduction in signalling value. We believe that the reduction occurs because the government imposed mandate diminishes management's intrinsic motivation to devote resources to prosocial behavior (Gregg and Kosfeld (2006)).

Our results are robust to several checks. First, we redefine "high CSR" firms using three other thresholds, namely, 5%, 7.5% and 10%. Our results go through with higher magnitudes as the threshold is increased. Firms which were spending more than 10% of their profits on CSR reduce the most after the mandate.

Second, the CSR law provides broad guidelines for identifying the types of expenditure that qualify as CSR under the regulation. Note that the Prowess database maintains data on total CSR spending, as reported by a company, which in theory, can include expenditure not considered as CSR under the law. For example, donations to religious institutions are not considered as CSR under the law, even if (i) such institutions engage in charitable activities; and (ii) the company's board may consider such donations as CSR spending. As a result, total CSR expenditure reported by the Prowess database, in some cases, contains spending not considered as CSR by the law.

In order to address this limitation, we develop one more measure of CSR. Even at the risk of substantial double counting, we aggregate the CSR spending numbers reported by Prowess and by the Ministry. Because this adjustment is made for the post-intervention period only, the double counting, if any, can only underestimate the decline in CSR in the post-period and hence, bias against our main findings. All measures rely on the Prowess data in the pre-intervention period because the Ministry does not track pre-intervention

data. Our results remain directionally robust to such a rigorous re-measurement of the data. For completion, we also create a CSR measure based only on Prowess data and find that our results hold.

Third, skeptics might argue that, in the pre-mandate period, treatment firms loosely classified non-CSR spending as CSR and such an oversight was reversed in the post mandate period. That explanation is implausible because accounting and auditing standards applicable to CSR classification and reporting did not change concurrently with the CSR spending mandate. Such misclassification amounted to misrepresentation of financial statements even before the mandate. The CSR mandate did not impose any additional penalties for misrepresentation. The regulation only required firms to explain non-compliance. Therefore, our results are unlikely to be explained by a change in accounting or internal control systems of firms after the CSR spending mandate.

Fourth, critics contend that the entire decline in CSR is driven by a reduction of expenses not considered as CSR by law. To examine this objection, we examine whether the decline in CSR spending by high CSR firms leads to convergence between the CSR numbers reported by Prowess and the Ministry. We would expect such a convergence if high CSR firms cut only non-mandatory CSR expenditure. The data does not support the convergence hypothesis, however.

Fifth, the CSR law was part of the new Companies Act and such bundling would raise concerns about other confounding changes. However, the CSR provisions were implemented from the year 2014-2015 whereas the other key provisions of the new Companies Act were implemented at different times. In particular, no other provisions that were implemented in 2014-2015, in our view, impacted high and low CSR firms differentially with respect to their CSR spending. Moreover, high and low CSR firms share similar observable characteristics. And, as mentioned before, we also include firm fixed effects in all our regression-based tests. Finally, we also reproduce our main results using Industry x Year fixed effects.

Our findings suggest that the mandatory CSR is likely to adversely affect the CSR expenditure of firms in which management is motivated intrinsically and, thus, engages

in prosocial behavior on its own. Such crowding out behavior is an important cost that advocates of mandatory CSR and Government intervention might want to consider. If the proportion of intrinsically motivated managers in the economy is high enough, imposing mandatory CSR could lead to an overall reduction in CSR spending.[8]

Our study contributes to the large and growing literature on CSR (Manchiraju and Rajgopal (2017), Deng, Kang, and Low (2013), Cheng, Ioannou, and Serafeim (2014), Lins, Servaes, and Tamayo (2017), Masulis and Reza (2014), Dimson, Karaka? and Li (2015)). To the best of our knowledge, this is the first paper to examine the impact of government mandates on the actual CSR activities of different types of firms. Manchiraju and Rajgopal (2017) use the same setting but they focus on the stock price impact of CSR mandate and do not examine the implementation of the mandate. Second, our study contributes to the literature on intrinsic motivation and cost of control (Gregg and Kosfeld (2006), Tirole (2006), Mellstrom and Johannesson (2008)). To the best of our knowledge, this is the first study to examine the impact of intrinsic motivation towards prosocial behavior in a corporate setting. We find that even in a corporate setting, externally imposed controls seem to crowd out intrinsic motivation.

2 Institutional Background and the Event

India has a rich tradition of corporations contributing to social causes. Even before India achieved independence from the British, Indian business groups, such as the Tata group, the Birla group, and others, actively participated in social causes. Some corporations contributed overtly and/or covertly to the freedom struggle, even at risk of facing penal consequences from the colonial government.[9] As in the case of other countries, CSR remained a largely voluntary activity in India until 2013.

[8]As shown by Bertrand, Bombardini, Fisman, and Trebbi (2018), it is possible that a large part of CSR is nothing but tax-exempt political influence seeking. While we cannot rule out the existence of the above motive, it is reasonable to assume that influence seeking motive does not vary differently for high and low CSR firms in the post-regulation period when compared to the pre rule change period.

[9]Source:http://www.gatewayhouse.in/a-brief-history-of-indian-csr/.

Under pressure from activists and non-governmental organizations (NGOs), the Government of India introduced legislation that required companies above a threshold (defined in terms of net worth, sales, and profit) to spend 2% of their profit on CSR activities. The mandate was imposed via Section 135 of the newly introduced Companies Act of 2013. The eligibility threshold was defined as either INR[10] 50 million (USD 0.78 million)[11] in profit, INR 5 billion (USD 0.78 billion) in net worth, or INR 10 billion (USD 1.56 billion) in sales. Given the low profit threshold, almost all listed and actively traded firms fell under the purview of the new rule. Every covered company was required to create a CSR policy. Although the new Companies Act came into force on 29th August 2013, the CSR mandate was made effective from the financial year 2014-2015 (i.e., the year beginning April 1, 2014).

It is important to note that the 2% limit was not based on any economic analysis. Neither was the specific limit recommended by NGOs or think tanks which supported the mandate. It appears that having decided to mandate CSR, the Government picked a small round number for simplicity. Therefore, 2% limit is unlikely to have been viewed by firms as the optimal proportion of profits they should spend on CSR activities.

The law requires non-compliant companies to explain in their annual reports the reasons for their non-compliance. However, the law does not specify guidelines to determine whether an explanation is valid, leaving room for regulatory discretion and, in some cases, extortion by the bureaucracy. The Act defines CSR broadly, but leaves the details to the boards of the individual companies (see Manchiraju and Rajgopal (2017) for details about the CSR provisions). Certain activities, such as contributions to religious organizations, are excluded from the definition of CSR.

The reaction to the mandate was predictable. While NGOs welcomed the move, many business leaders expressed serious concerns about the government's interference in what should be a voluntary activity. The critics of the mandatory CSR law include some of the biggest philanthropists in the country.[12] One senior executive of a large Indian business

[10]INR stands for Indian Rupee.

[11]We assume an exchange rate of INR 63 to USD 1.

[12]Source: https://fastexposure.wordpress.com/2012/06/04/should-corporate-social-responsibility-be-

conglomerate was quoted as saying, "charitable giving used to be a big reputation builder for us...now it's just about legal compliance." Another senior executive stated that "for most organizations, the discussion at the board level is now not about what we do, but does it count as CSR and does it meet the legal requirements".[13]

If the above statements reflect the sentiment of industry in general, then firms that voluntarily engaged in CSR activities potentially lose some of the intrinsic motivation for prosocial behavior after the imposition of the mandate and hence cut back their CSR spending. In this paper, we examine whether these hypothesized consequences are seen in the data.[14]

3 Data, Variable Definition And Sample Construction

As mentioned in Section 1, we obtain data on CSR expenditure from two sources: a) the Prowess database, maintained by the Center For Monitoring Indian Economy (CMIE); and b) the CSR database maintained by the Ministry of Corporate Affairs. CMIE is a leading economic think tank in India. The Prowess database provides financial information related to all listed companies, and some unlisted companies as well. The information is extracted from annual reports of firms. Many scholarly articles (Vig (2013), Gopalan, Nanda, and Seru (2007), Bertrand and Mullainathan (2001), Alfaro and Chari (2014)) have used these data.

Prowess reports amounts spent by companies on CSR activities as indicated in their financial statements. We use the numbers reported in Prowess to compute CSR spending in the pre-regulation period. For the post-regulation period, two sources of data are available. The Ministry of Corporate Affairs started collecting data reported by firms on mandatory CSR expenditure from 2014–2015 on specific regulatory filings distinct from financial statements.[15] The Prowess database continues to report financial statement data on

voluntary-or-mandatory/

[13]Source:https://www.theguardian.com/sustainable-business/2016/apr/05/india-csr-law-requires-companies-profits-to-charity-is-it-working

[14]We have provided more reactions in Section A1.3 of the online appendix that is consistent with our hypothesis that CSR mandate affected managers' intrinsic motivation to devote resources to CSR activities.

[15]The Indian financial year starts on April 1 and ends on March 31.

CSR spending, as before. Unfortunately, the numbers reported by the two sources do not match perfectly in all cases.

The Ministry numbers are likely to accurately reflect the spending on mandatory CSR. However, companies potentially continued to contribute to charitable causes that are not considered CSR under the law. As mentioned in Section 2, donations to religious institutions are not considered CSR, even if such institutions use the funds for causes classified as CSR by the law. Prowess however codes such expenditure as CSR in their database. On the other hand, Prowess potentially omits CSR expenditure incurred with a view to comply with the law.[16] Therefore, at the risk of substantial double counting, we aggregate the expenditure reported by both sources, and consider the sum as the total expenditure on CSR in the post-regulation period. Note that the procedure substantially biases the results against us. Consider a case where Prowess reports that a company spent INR 10 million in CSR in the pre-regulation period and INR 8 million in the post-regulation period, while the Ministry reports that the same company spent INR 12 million in the post-regulation period. Then, the post-regulation expenditure is measured as INR 20 million (8 + 12) in our study. As can be seen, the measure is a very conservative estimate that biases against our hypothesis of reduced CSR spending post mandate for the high-CSR firms. We provide definitions of the key variables in Table 1.

3.1 Sample Construction

The Prowess database contains information on 33,841 companies. A large number of these are shell companies, formed with the motive of either money laundering or tax evasion. Recently, the Government of India ordered 162,000 companies to cease operations because

[16] As noted in Section 1, the definition of CSR used by Prowess is broader than the definition used by the Companies Act. Certain type of expenditures such as donations to religious institution are not counted as CSR as per the Companies Act. Therefore, there is small difference in the amount of CSR as reported by Prowess and the Ministry. We present the numbers in Table A12 given in the online appendix. As expected, the numbers reported by Prowess are higher by about 20%. For additional robustness, we also report the numbers compiled by KPMG, a consulting firm. As shown in Table A12 of the online appendix, the numbers compiled by KPMG are close to the numbers reported by the Ministry.

they were found to be shell entities.[17] The Ministry dataset covers 10,164 companies. As a starting point, we merge the two data sets using a unique corporate identification number (CIN). The merged data set contains 4,502 companies. Note that we match the records only using CIN. We do not rely on fuzzy matching techniques based on names. This is because hundreds of Indian companies are registered under similar names. The problem is acute in the case of group companies because the names of all companies belonging to the same group start with a common name. For example, there are more than 100 companies with names that begin with "Reliance". In this scenario, the fuzzy matching technique would end up matching non-unique companies. Therefore, we restrict ourselves to corporate identity numbers (CIN).

Prowess began recording CSR information from the year financial year ending 2010. Our sample starts in the same year. The years between 2009–2010 and 2013–2014 are labelled as the pre-regulation years. The sample ends in the year 2015–2016. Of the 4,502 firms, 3,948 firms contain information for all seven years. Our main sample comprises of 25,176 firm-year observations. However, for regressions that consider the impact on CSR, we include an additional filter that a firm should have earned a three year average profit of at least INR 50 million, as required by the law. This reduces the sample to 16,334 observations for those tests. These details are presented in Table 2.

Since we obtain data from different sources and perform test with multiple parameters, the number of observations differ from table to table. We reconcile the number of observations and present the same in Table A1 of the online appendix.

4 Empirical Strategy and Results

The empirical analysis begins with a definition of the key variables (see Table 1). As described in Section 3, our main measure of CSR expenditure uses the data provided by the Prowess

[17] http://www.firstpost.com/business/over-1-62-lakh-shell-companies-deregistered-over-half-from-mumbai-delhi-hyderabad-3907583.html

database for the pre-regulation period, and the data provided by the Ministry of Corporate Affairs for the post-regulation period. We normalize the CSR variable by the average profit of the preceding three years as required by the law. The normalized variable is called CSR Ratio. Note that we limit the sample to firms that report a three year average profit of more than Rupees 50 million. We do so because Rupees 50 million in average profits is the most binding criterion among the three requirements stipulated by the law. Therefore, our measure is likely to be unaffected by negative profits. Our second CSR variable is calculated as the sum of the values provided by the two data sources for the post-regulation period. The normalized form of this variable is called CSRT Ratio.[18] We use the ratio measures as the dependent variables in our regression-based tests. We create a third measure of CSR, which is based only on the Prowess data for both pre as well as post periods. We normalize the amount of CSR thus calculated using average profits for the past three years. We label this measure, CSRP Ratio.[19]

Next, we identify the "treatment" firms in our context. Note that our focus is the impact of the political intervention on CSR spending by firms that voluntarily engage in CSR activities before the intervention. We refer to these firms as "high CSR" firms. Specifically, we first calculate CSR Ratio for each firm-year. Then, we average the ratio over the pre-regulation period. Firms with an average CSR Ratio greater than 2% form the high CSR group. For robustness, we define second and third high CSR group in a similar way, but we use the conservative CSRT Ratio and CSRP Ratio, respectively, instead. As a further robustness check, we use three other threshold groups: 5%, 7.5%, and 10%.

We perform univariate tests and report the results in Table 4. We find that the firms that invested more than 2% in CSR voluntarily in the pre-regulation period cut back their spending on CSR significantly. Expectedly, firms that invested less than 2% in the pre-regulation period increase CSR spending marginally. Notice that in Table 4, we detect a sharp decline in CSR Ratio of more than 50% (from 2.8% to 1.3%) among firms that spent between 2% and 4% in the pre mandate period and no decline among firms that spent

[18]We use T to denote Total.
[19]We use P to denote Prowess.

between 0% to 2%.

Incidentally, given that the CSR expenditure was incurred in the pre mandate period and hence, cannot be manipulated by firms after learning about the law, the 2% limit appears to be an attractive candidate to implement a Regression Discontinuity (RD) design. In other words, a potential design choice might involve comparing the post mandate CSR expenditure incurred by firms that spent just above 2% in the pre-regulation period with firms that spent just below 2% using an RD framework. The univariate results hint at a strong possibility of finding such a discontinuity. However, we do not employ the RD methodology because our hypothesis does not state that firms that spent 2.01% in the pre-regulation period cut CSR expenditure whereas firms that spent 1.99% do not. An RD will look for such a possibility because that design choice examines firms close to the 2% threshold. Instead, our hypothesis is that high CSR spenders reduce spending relative to low spenders and the decline should increase with the level of spending in the pre-regulation period. An RD cannot capture such a phenomenon. In fact, an RD is likely to substantially under-estimate the impact as our results are expected to get stronger as one moves away from the 2% threshold. We cannot use other criteria such as sales, net-worth, and profits for an RD design as these metrics can be manipulated by firms (Imbens and Lemieux (2008)). Therefore, we restrict ourselves to a single difference and difference-in-difference methodology with appropriate checks such as tests for parallel trends, falsification tests, and other robustness tests.

4.1 Comparison of High and Low CSR Firms

We compare high and low CSR firms in terms of important observable characteristics, such as sales, profits and total assets (see Table 3). We do not find a significant difference between the two sets of firms in terms of sales and profits. However, low CSR firms are slightly larger than high CSR firms in terms of total assets only in the pre-regulation period. Based on these results, it is reasonable to infer that the two types of firms are similar in terms of important observable characteristics. In Table A10 of the online appendix, we perform the above comparison by limiting the sample to firms that have complete data for all seven years.

The results are qualitatively similar.

4.2 Distribution of CSR Expenditure

We depict the distribution of CSR expenditure in Figures 1 to 3. We divide the sample firms into four buckets, based on CSR Ratio, and calculate the proportion of the sample in each bucket. Figure 1 shows the distribution for the entire sample, before and after the introduction of the regulation. Note that the proportion of firms that spend more than 5% of their profit on CSR declines substantially in the post-regulation period. The proportions of firms that spend between 1% and 2% and between 2% and 5% of their profit increases. Surprisingly, the proportion of firms that spend less than 1% of their profit increases slightly, even though the law mandates that they all need to spend 2%. Thus, many firms prefer to explain their failure to comply with the law rather than actually incur the 2% of CSR spending.

In Figure 2, we focus on firms that spent more than 5% of their profit in the pre-regulation period. In the post-regulation period, a significant proportion of firms falls within the lower buckets, and the "5% plus" bucket becomes significantly smaller. Thus, many firms that spent a significant portion of their profit on CSR reduced their spending in the post-regulation period. The distribution of low CSR firms is shown in Figure 3. As expected, firms move from the lower spending buckets to the higher buckets in this group. However, much of the movement is restricted to the 1%–2% and 2%–5% brackets. Very few firms move beyond the 2%–5% bracket. Thus, the increase in spending by low CSR firms seems minimal.

4.3 Pre–Post Comparison

We estimate the following regression equation:

$$Y_{\text{it}} = \alpha + \beta_1 * Post_t + \beta_2 * X_{it} + \beta_3 * \theta_i + \epsilon_{it} \tag{1}$$

Here, the sample is restricted to those treatment firms with a three year average profit greater than INR 50 million. The dependent variable is one of our ratio measures of CSR for firm i in year t. The main explanatory variable is $Post_t$, a dummy variable that takes the value of one for 2014–2015 and 2015–2016 (post-regulation years), and zero otherwise. Then, θ_i represents the firm fixed effect, X_{it} denotes firm-level time-varying variables, such as profit and total assets. The standard errors are clustered at the firm level and adjusted for heteroskedasticity.

The results are reported in Table 5. In Panel A, CSR Ratio is the dependent variable whereas in Panel B, CSRT Ratio is the dependent variable. In columns 1(2)(3)(4), the sample is restricted to firms who spent, on average, more than 2%(5%)(7.5%)(10%) of their profits in CSR before the introduction of the regulation. As shown in Table 5, CSR Ratio decreases by 10 to 39 percentage points, and the decrease is statistically significant. A 10% decline using the 2% threshold represents a close to 76% decrease in CSR Ratio, which is also economically significant.[20] CSRT Ratio declines by between 4 to 28 percentage points depending on the threshold used. The coefficients here are statistically significant. Expectedly, given the possibility of double counting, the economic magnitude of change is lower when we use CSRT Ratio. As shown in Table A11 presented in the online appendix, between 93% to 97% of the treatment firms reduce CSR expenditure in the post mandate period. The significant decrease in CSR expenditure is in line with the "stifling of intrinsic motivation" hypothesis. As hypothesized, firms which spent significant amounts voluntarily on CSR in the pre-regulation period, seem to have cut down spending after the passage of the mandatory CSR law.

We now shift our attention to low CSR firms. These are firms that spent less than the threshold limit on CSR during the pre-regulation period. In this case, firms' CSR expenditure ought to increase as a result of the mandate. However, as explained in Section 1, these firms did have the option to spend less than 2% of profits on CSR provided they explained in their annual reports why they failed to fulfil the requirement. If firms resort to explanations,

[20]Note that the average CSR levels during the pre-regulation period are the same under both measures.

then their expenditure on CSR might remain unchanged. Finally, a reduction in intrinsic motivation of top management to "do good" could dampen the impact of the law, as in the case of the treatment firms. In such a case, even the low CSR firms may not increase CSR spending.

We estimate regression equation 1 for the low CSR sample. As before, we restrict the sample to firms with previous three years' average profit of more than INR 50 million (see Table 6). The arrangement of rows and columns in the table is the same as that in Table 5. The results show a mild increase in CSR expenditure. In Panel B, we find that CSRT Ratio increases by 0.01. The increase in CSR Ratio is very small in economic terms. This shows that the control firms increased their spending slightly in response to the law. However, they do not reach the mandated 2% level. This implies that many firms prefer to explain their inability to spend on CSR to actually complying with the minimum 2% spending limit.

For completeness, we repeat the above tests using the CSRP Ratio measure, which uses the Prowess data for both the pre-regulation and the post-regulation period. We report the results in Table A7 and Table A8 presented in the online appendix. In line with the earlier results, we find that the treatment firms reduce CSR spending significantly whereas control firms increase CSR spending mildly.

4.4 Difference-In-Differences Test

We test whether the treatment and control groups converge in the post-regulation period using the difference-in-differences approach. Note that the difference between the CSR expenditure of the treatment and the control groups may narrow either because of a reduction in spending by the treatment group firms or because of an increase in spending by the control group firms. In Tables 5 and 6, we show that the CSR spending of the treatment group decreases significantly, while the CSR spending of the control group increases marginally. Here, we use the difference-in-differences method to estimate the degree of convergence.

4.4.1 Parallel Trends

As a prerequisite for applying the difference-in-differences method, we investigate the trend in the difference between the treatment and control groups in the pre-regulation and post-regulation periods. In order to rule out the possibility that our results are driven by a mechanical continuation of pre-existing trends, it is important to show that a parallel trend exists between the two groups in terms of the dependent variable, and that the trend break occurs as a result of the government's spending mandate (Bertrand, Duflo, and Mullainathan (2004)).

The pre-trends and post-trends are shown in Figure 4, which tracks the movement in CSR Ratio between the high CSR and low CSR groups during the sample period. We plot the median of the CSR Ratio for each year and for each group. The orange line represents the high CSR group, and the grey line represents the low CSR group. Years 2011–2012, 2012–2013, and 2013–2014 represent the pre-regulation years. Years 2014–2015 and 2015–2016 represent the post-regulation years.

An almost parallel trend is clearly evident between the high CSR and the low CSR groups in the pre-regulation period. By selection, high CSR group firms spend more than the low CSR group firms in this period. Notice a sharp decrease in the spending of the high CSR group, and a moderate increase in the spending of the low CSR group firms. From this figure, it is reasonable to conclude that our results are not driven by a mechanical continuation of an existing trend. As noted in Section 4.1 (Table 3), high and low CSR firms do not significantly differ in terms of their observable characteristics.

4.4.2 Difference-in-Differences Equation

After testing for the existence of parallel trends in the pre-regulation period, we estimate the following regression equation:

$$Y_{\text{it}} = \alpha + \beta_1 * Post_t * Treatment_i + \beta_2 * X_{it} + \beta_3 * \theta_i + \beta_4 * \gamma_t + \epsilon_{it} \tag{2}$$

We restrict the sample to firms with a three year average profit greater than INR 50 million. The dependent variable is a ratio measure of the CSR of firm i in year t. The variable $Post_t$ is a dummy variable, which takes the value of one for years 2014–2015 and 2015–2016 (post-regulation years), and zero otherwise. Treatment is a dummy variable that takes the value of one if a firm's average CSR spending in the pre-regulation period is more than the threshold limit, and zero otherwise. The interaction between the above two variables is the explanatory variable of interest. Then, θ_i represents the firm fixed effects, γ_t represents the year fixed effects, and X_{it} represents firm-level time-varying variables, such as profit and total assets. The standard errors are clustered at the firm level and adjusted for heteroskedasticity.

The results are reported in Table 7. As expected, we find a sharp decrease in the difference between the treatment and control firms in the post-regulation period compared with that in the pre-regulation period. In Panel A, CSR Ratio is the dependent variable whereas in Panel B, CSRT Ratio is the dependent variable. In columns 1(2)(3)(4), the sample is restricted to firms who spent, on average, more than 2%(5%)(7.5%)(10%) of their profits in CSR before the introduction of the regulation. The CSR Ratio decreases by 15 to 42 percentage points in a difference-in-difference sense, and the decrease is statistically significant. CSRT Ratio declines by between 15 to 37 percentage points depending on the threshold used. As shown in Tables 5 and 6, the results are driven primarily by the decrease in the CSR expenditure of the treatment group.

We perform four additional robustness tests. First, we repeat the difference-in-difference tests using CSRP Ratio, which uses only the Prowess data for both the pre-regulation and post-regulation period, and find similar results. We report the results using CSRP Ratio in Table A9 presented in the online appendix. Second, we limit the sample to those firms for which we have CSR expenditure data for all seven years from 2009–2010 to 2015–2016. We then estimate the regression equation 2 using this subsample. The results are shown in Table A2 of the online appendix. We find that the results are in line with those reported in Table 7. Third, in order to account for possible anticipation of the law on account of the

discussion in the media before its implementation, we omit the period 2013–2014 from the sample, which is when the new Companies Act was introduced. The CSR provision came into force effective 2014–2015. We estimate equation 2 using this subsample, and find that the results are consistent with our hypotheses. We report these results in Table A3 of the online appendix. Finally, we repeat the above difference-in-difference specification after including Industry x Year effects. The purpose is to account for time-varying industry-level shocks. The results, reported in Table A5 of the online appendix, are similar to those reported in Table 7.

We then proceed to address concerns regarding mechanical mean reversion. Firms that invest more in CSR activities in one period might reduce their investment in the next period, and vice versa. However, based on extant research on CSR, such a pattern is unlikely to occur. As discussed in Section 1, certain types of firms (Servaes and Tamayo (2013)) or management groups continue to engage more in CSR than others (Di Giuli and Kostovetsky (2014)). Figure 4 clearly shows that trends in the pre-regulation period are close to parallel. Therefore, the figure does not support the mean-reversion view. Nevertheless, we perform placebo tests using false treatment years. In particular, for the placebo test, we consider the periods 2012–2013 and 2013–2014 as the false treatment years, and other years in the sample as false pre-regulation years. We then estimate regression equation 2. In line with our expectations, we do not find a statistically significant decrease in CSR expenditures in a difference-in-difference sense (see Table A4 of the online appendix).

4.5 Alternative Explanation–Possible Change in Accounting/Control Systems

Skeptics might argue that the accounting and internal control system relating to CSR changed after the mandate. A change in accounting/control system could mechanically affect our results if treatment firms reclassify certain CSR expenses from the pre-mandate period as non CSR in the post-mandate period and the control firms behaved in exactly the

opposite manner.

To address this concern, we have carefully looked at the accounting/auditing standards applicable for CSR classification before and after the mandate. A firm is allowed to classify only those expenditures that are charitable in nature as CSR. Deliberate misclassification of a business expenditure, say on research and development, as CSR is considered as misrepresentation of books of accounts under the Indian Companies Act. None of the above regulations changed with the mandate. Therefore, a change in CSR classification in response to the mandate would be tantamount to an open admission of misrepresentation, either during the pre-mandate period or during the post mandate period. We believe that such an admission is unlikely.

Moreover, in the univariate results presented in Table 4, we detect (i) a sharp decline in CSR Ratio of more than 50% (from 2.8% to 1.3%) among firms that spent between 2% and 4% in the pre mandate period; and (ii) no decline among firms that spent between 0% to 2% in the pre-mandate period. Given that the 2% limit is arbitrary, it is hard to argue that firms that spent more than just above 2% limit selectively misclassified expenditure whereas firms that spent just below the 2% threshold did not.

It is important to note that the Ministry of Corporate Affairs excluded certain expenses such as donations to religious charities from the definition of CSR for the purposes of the 2% CSR spending mandate. This rule, however, is unlikely to explain our results because they are robust to the use of CSRP, i.e. the Prowess based measure of CSR, which is based on the accounting classification of CSR in the firm's financial statements. The Ministry's definition of CSR is applicable only for the purposes of reporting compliance with mandatory CSR and not for financial statements. Even in the post mandate period, a donation to a religious charity, which is not counted as CSR from a mandate compliance point of view, should be accounted as CSR in the books of accounts.

Nonetheless, we examine whether reduction in CSR by high CSR firms leads to convergence between the CSR numbers as reported by Prowess and the Ministry. The convergence will occur if firms cut expenditure that are not counted as CSR by the Ministry. Unfortu-

nately, we have data relating to CSR as per Ministry's definition only for the post mandate period. Therefore, we can only conduct a cross sectional test using post mandate data.

In particular, we estimate the following regression equation:

$$Y_{\text{it}} = \alpha + \beta_1 * CSRchange_i + \beta_2 * X_i + \epsilon_i \tag{3}$$

The data are organized at a firm level and restricted to post mandate period. The explanatory variable is the difference between the average post period CSR ratio calculated using Prowess based CSR expenditure and the average post period CSR ratio calculated using the Ministry's definition. The explanatory variable is the average change in the Prowess based CSR ratio in the post period when compared to the pre-regulation period. We include other firm level controls as before. As each firm has a single observation, we cannot include firm fixed effects.

We present the results in Panel A of Table A6 presented in the online appendix. We estimate the results for the treatment group. We investigate all four expense thresholds used in this paper. As shown in the table, there is no significant association between change in CSR in the post mandate period and the difference between CSR ratios using the two data sources. In other words, the evidence does not support the view that reduction in CSR leads to convergence in CSR as measured by Prowess (overall CSR) and by the Ministry.

For completeness, we estimate a difference-in-difference specification where we compare the convergence rate between the treatment and control firms. Specifically, we estimate the following regression equation:

$$Y_{\text{i}} = \alpha + \beta_1 * Treatment_i * CSRchange_i + \beta_2 * CSRchange_i + \beta_3 * Treatment_i + \beta_3 * X_{it} + \epsilon_{it} \tag{4}$$

We report the results in Panel B of Table A6 presented in the online appendix. As before, we use four different thresholds for defining treatment firms. The data are organized at a firm

level. Our interest here is in the interaction between treatment and change in CSR terms. We find that the interaction term is statistically indistinguishable from zero. In other words, the decline in CSR contribution among CSR firms does not lead to any significant change in the difference between CSR numbers reported as measured by Prowess and as measured by the Ministry.

4.6 Shocks to Profit

As described in Section 2, the new Companies Act prescribed mandatory CSR as a function of a firm's profit. Therefore, it is natural to expect that, in the post-regulation period, CSR contributions would become more sensitive to profit. Our hypothesis in this study is that intervention by the government dampens the intrinsic motivation of top management to engage in prosocial behavior by forcing them to view CSR purely as a compliance exercise. In such a scenario, we expect two things to happen in the post-regulation period. First, CSR contributions will likely decrease sharply in a year when a company reports a loss. Note that the legal obligation to invest in CSR is smaller anyway for lower levels of profit. Second, we expect that CSR contributions will not increase when companies earn significantly higher profits, because these companies will limit their contributions such that it is close to the legally mandated 2% level. Note that we expect greater sensitivity in the post-regulation period between profit and CSR contributions for negative shocks, and lower sensitivity between the two variables for positive shocks, relative to the pre-regulation period.

4.6.1 Overall Shocks to Profit

We consider the overall shocks to profit by estimating the following regression equation:

$$Y_{\text{it}} = \alpha + \beta_1 * Post_t * Profit_{it} + \beta_2 * Profit_{it} + \beta_3 * X_{it} + \beta_4 * \theta_i + \beta_5 * \gamma_t + \epsilon_{it} \quad (5)$$

Here the dependent variable is a CSR spending number (expressed in INR) as the purpose is to understand the sensitivity of the level of CSR expenditure to the level of profits. The independent variable of interest is the interaction term between the post-regulation dummy and profit, measured at the firm-year level. This specification picks up the incremental sensitivity of CSR in the post-regulation period compared with that in the pre-regulation period. We include firm and time fixed effects in all specifications.

The results are reported in Table 8. We use CSR-H (which considers Prowess data for pre-regulation period and the Ministry data for the post-regulation period) as the dependent variable in columns 1 and 2, and CSR-T (which sums the values from the two data sources in the post-regulation period) as the measure of CSR expenditure. Note that these are raw amounts, not ratios. The interaction term indicates that CSR expenditure becomes more sensitive to profit in the post-regulation period, although the magnitude of the association is quite low, ranging from 0.01 to 0.04.

4.6.2 Direction of Profit and Sensitivity

The implication of the increase in sensitivity between CSR and profit depends crucially on whether such an increase happens during positive or negative profit shocks. An increase in sensitivity during positive shocks, and no change, or a decrease during negative shocks, is likely to lead to an increase in overall CSR expenditure. The opposite is true if the increase in sensitivity is limited to negative shocks.

We estimate the above relation using the following regression equation:

$$Y_{\text{it}} = \alpha + \beta_1 * Shock_{it} * Post_t + \beta_2 * Shock_{it} + \beta_3 * X_{it} + \beta_4 * \theta_i + \beta_5 * \gamma_t + \epsilon_{it} \qquad (6)$$

We define a negative shock in two ways. Our first measure is a dummy variable that takes the value of one if a firm reports a loss in a year, and zero otherwise. The second

measure is also a dummy variable, which assumes the value of one if the profit reported in a year is more than 50% lower than that of the preceding year. We define two measures of positive shocks in a similar way. Here, our focus is on the interaction term.

We report the results in Table 9. The first four columns report the results related to the two types of negative shocks. We find that a negative shock leads to a reduction in CSR contributions by INR 17.86 million (USD 283,492 approximately). Note that the average CSR expenditure incurred by companies during the pre-regulation period is INR 41.04 million (USD 654,142 approximately). A decrease of INR 17.86 million during negative shocks is a meaningful reduction in economic terms. The next four columns report the results for positive shocks. The interaction terms are statistically indistinguishable from zero in all four columns.

In sum, the results presented in Table 9 show that the increased sensitivity between profit and CSR expenditure in the post-regulation period (shown in Table 8) is driven primarily by lower CSR spending during periods of negative profit shocks. In other words, firms reduce their spending on CSR when faced with negative profit shocks, but they do not increase their spending when they experience positive profit shocks. As discussed in the early part of this section, the above result clearly indicates that firms treat mandatory CSR as a mere compliance activity, devoid of much internal motivation to engage in prosocial behavior after the government intervention.

4.7 Composition of CSR Expenditure

The results presented thus far indicate that, in the post intervention period, firms view CSR as a compliance activity akin to a tax to be paid. Extant research has shown that firms attempt to manage their tax liabilities via aggressive tax sheltering and geographic transfers of income to low tax jurisdictions (Desai and Dharmapala (2006), Frank, Lynch, and Rego (2009), Hoi, Wu, and Zhang (2013), Chyz (2013)). If firms view mandatory CSR as a quasi tax, they potentially also start managing their CSR contributions. A potential

way to game mandatory spending limits is to shift CSR expenditure from relatively more transparent avenues, which are subject to third party reporting, to relatively opaque avenues where very little third party reporting exists. Extant research has shown that third party reporting works as a deterrent against tax avoidance (Kirchler (2008), Kleven, Knudsen, Kreiner, Saez, et al. (2011), Kleven, Kreiner, and Saez (2016), Duflo, Greenstone, Pande, and Ryan (2013)) .

The Prowess database classifies CSR expenditure into four categories, namely donations, environment protection related expenditures, and community service and others. Note that donations are usually made to recognized funds set up by the government[21] or NGOs. Both the government as well as NGOs maintain books of accounts and hence a large fraction of these expenditures is verifiable through third party reporting. The other two types of expenditures are relatively opaque. Firms direct such expenditures to their in-house trusts and foundations. Therefore, the motive and the opportunity for managing CSR expenditure is higher when such trusts and foundations are involved.

Given the above discussion, we expect firms to shift CSR expenditure from donations to the other two sources in the post intervention period. We estimate regression equation 1 separately for treatment and control firms. We rely on the proportion of each type of expenditure over total CSR expenditure as the dependent variable. We report the results in Table 10. Note that donations as a proportion of total CSR decline by 41 percentage points for the treatment group and 56 percentage points for the control group. Expenditure on community activities increases by 57 percentage points for both the groups. Environment related expenditure stays almost unchanged. These results are consistent with our conjecture that firms start "managing" CSR expenditure in the post intervention period. However, this test entails a sharp decline in the number of observations. This is because the classification of expenditure into one of the three types is missing for large number of firms in the database. Hence, we treat this evidence as suggestive given the proportion of missing data and the absence of a clean exogenous method for classifying expenditure based on transparency.

[21]Examples include Prime Minister's Drought Relief Fund, cleanliness campaign launched by the Federal Government, fund for protecting female children, etc.

4.8 Impact on Different Types of Firms

Servaes and Tamayo (2013) show that the signalling value of CSR is higher for firms with greater consumer awareness. In their study, the authors use advertising as a proxy for consumer awareness. Similarly, firms responsible for high levels of pollution are likely to engage in greater CSR to send a signal about their social responsibility to stakeholders (Keim (1978), Devinney (2009), Laroche, Bergeron, and Barbaro-Forleo (2001)). As noted in Section 2, the law does not prevent firms from spending more than the mandated 2% of profit. Thus, firms that intend to signal their type to stakeholders could continue to do so by spending more than the mandated limit. On the other hand, if imposing control reduces the intrinsic motivation on the part of management to "do good" we expect all types of firms to reduce their CSR spend.

We use a triple-interaction framework to examine the impact of the law on firms that advertise more. Specifically, we estimate the following regression equation:

$$\begin{aligned} Y_{\text{it}} &= \alpha + \beta_1 * HighAd_i * Post_t * Treatment_i + \beta_2 * Post_i * Treatment_i + \beta_3 * Post_i * HighAd_i \\ &\quad + \beta_4 * X_{it} + \beta_5 * \theta_i + \beta_5 * \gamma_t + \epsilon_{it} \end{aligned} \tag{7}$$

The treatment and post-regulation dummies have the same meaning assigned to them in previous tables. Here, we consider a threshold of 2%, of CSR spending relative to the average of last three years' profits, for the treatment group. "High Ad" is a dummy variable that takes the value of one if a firm spends more than the average advertising-to-sales ratio in the pre-regulation period.[22] Each observation is a firm-year. The CSR Ratio is the dependent variable. Our focus is on the triple interaction term $HighAd * Post * Treatment$.

The results are reported in Table 11. The triple interaction term is statistically indistinguishable from zero. This result suggests that the change in CSR spending does not

[22]Our results remain directionally similar even if we use the median for classification.

depend on firms' pre-regulation advertising activities. Note that the interaction term between the post-regulation dummy and the treatment dummy continues to be negative in all specifications, with economic magnitudes comparable to those reported in Table 7.

In a similar spirit, we examine firms that belong to highly polluting industries. We obtain the three digit CIN codes of the highly polluting industries from the Ministry of Environment, Government of India. These industries are coded as red by the Ministry. Then, we compare CSR spending of such firms before and after the mandate with those of firms in other industries, using the triple interaction term in equation 7. We report the results in Table 12. As in the case of advertising, the triple interaction term is statistically insignificant throughout. These findings are inconsistent with the signalling hypothesis but are supportive of the intrinsic motivation view. Note that the interaction term between the post-regulation dummy and the treatment dummy is negative and significant in all specifications, even when we use the triple interaction framework. In other words, the treatment firms spend relatively less on CSR in the post-regulation period.

4.9 Impact on Advertising Expenditure

Finally, we examine the impact of the government mandate on total advertising expenditure. If CSR were used primarily for signalling, and regulation diminishes the signalling value of CSR, then firms would potentially increase their advertising expenditure as a substitute. On the other hand, if CSR was driven by intrinsic motivation of senior management to "do good", then we do not expect any impact on their firms' advertising budgets.

We examine the impact of the government mandate on advertising expenditure by estimating an equation similar to equation 2. We use the INR value spent on advertising by a firm in a year as the dependent variable. We report the results in Table 13. Here, we focus on the interaction term. If advertising is substituted for CSR in the post-regulation period, we expect the interaction term to acquire a positive and significant coefficient. However, the reported coefficient acquires a negative sign. More importantly, the coefficient value is sta-

tistically indistinguishable from zero. Given these results, it is reasonable to conclude that the treatment firms did not increase their advertising expenditure after the event. These results further reinforce our claim that the reduction in CSR expenditure is driven by the negative impact of the government mandate on intrinsic motivation.

5 Suggestive Evidence Regarding Motivation

In this study, we hypothesize that the political intervention in the area of CSR diminishes senior management's intrinsic motivation to "do good", resulting in reduction in CSR spending among firms that invested heavily on CSR before the regulation was passed. Admittedly, it is difficult to find explicit archival evidence in support of or against a motive behind any empirical phenomenon. Our study is no exception to this limitation. Nonetheless, we attempt to infer the manager's motives by collating multiple pieces of "suggestive" evidence. In Section A1 of the online appendix, we present a brief description of CSR reporting in the annual reports. We find a noticeable decline in the quality of reporting in the post-regulation period.

Various statements made by prominent businessmen that we cite in Section 1 and in Section A1.3 of the online appendix, and a cursory analysis of the annual reports presented in Section A1 of the online appendix, are consistent with our thesis. To provide yet another piece of evidence, we examine the CSR spending of firms that constitute the Environmental, Social and Governance (ESG) Index launched by the Bombay Stock Exchange (BSE). The companies listed in the index satisfy the norms laid down for social and environmental responsibility. Firms with high corporate governance scores are also a part of the index. Assuming the these firms are intrinsically motivated to "do good", we hypothesize that if mandatory CSR indeed destroys management's intrinsic motivation to "do good" then firms which are a part of this index should reduce CSR spending relatively more in the post intervention period.

After passing through the data filtering process explained in Section 4, we are left with

37 ESG firms whose CIN codes match with firms in our main database. To maintain comparability, we limit the sample to firms that are a part of BSE-100 index. In other words, ESG firms that are a part of the BSE-100 form the treatment group whereas ESG firms that are not a part of the BSE-100 index form the control group.

We estimate the following regression equation on the sample of high CSR firms:

$$Y_{\text{it}} = \alpha + \beta_1 * Post_t * ESG_i + \beta_2 * X_{it} + \beta_3 * \theta_i + \beta_4 * \gamma_t + \epsilon_{it} \tag{8}$$

ESG firms invest more than 2% of their average three years' profits on CSR in the pre-regulation period. A measure of CSR is the dependent variable and the explanatory variable of interest is the interaction term between ESG Dummy and Post Period dummies.

We report the results in Table 14. In column 1(2), the dependent variable is CSR Ratio (CSRT Ratio). Note that the interaction term is negative and statistically significant. The decline ranges between 1% and 2%, which is economically meaningful. Even the economic magnitude is comparable to that of our main results. This implies that among the high CSR spenders, ESG firms reduce CSR spending more than other firms in a difference-in-difference design. However, the number of observations in this sub sample is just 46. This explains the large standard errors.

In columns 3 and 4, we consider the subsample of low CSR firms, i.e. firms that invested less than 2% of their average three years' profits in CSR in the pre-regulation period. Note that in this sub sample, by construction, even the ESG companies did not spend much on CSR voluntarily in the pre-regulation period. As shown in the table, expectedly, we do not find any decrease in CSR expenditure in this sub-sample.

6 Alternative Explanations

Critics might argue that not enough time has passed to infer that high CSR spenders cut their involvement in CSR activities. However, a relatively short period of two years after the

mandate should not matter for high spenders as they simply have to continue doing what they were doing before if they wanted to retain CSR spending at the previous higher level. On the contrary, one could argue that the two year period potentially underestimates the cuts as high CSR firms may not be able to instantaneously unwind existing projects started before the mandate. If loss of intrinsic motivation is a first order phenomenon, then firms will be able to reduce expenditure even more in the long run as the existing projects get completed. We concede that firms that underspend in the pre-mandate period might need to catch up and spend more but the main thrust of the paper is to document lower intrinsic motivation of high spenders in the pre-mandate regime.

Another concern could be that firms don't know the optimal amount of CSR spending and the 2% level becomes some sort of a benchmark that every one follows. Note, however, that the 2% level is an arbitrarily imposed limit. Neither the government nor the NGOs provided any economic logic as to why the numerical cut-off should be 2% and not something else. Companies were also aware that the number was arrived at arbitrarily. Therefore, it is unlikely that companies naively consider 2% as the optimal level of CSR for their businesses irrespective of their original motives. If the motive of a company was to achieve 100% literacy in a geographical area, for instance, the firm is unlikely to consider 2% of profits as optimal just because the Government says so. Only firms whose primary intention is to comply with the legal mandate are likely to consider 2% as optimal just because the Government mandates that level. Moreover, as discussed, high CSR firms do not converge to 2% level. They simply reduce their CSR spending. Some of them continue to spend above 2% and some even go below the 2% level. This behavior is inconsistent with claims that 2% has become the new optimal level of CSR spending. Furthermore, as shown, in the post mandate regime, CSR expenditure becomes sensitive to profits only in bad times. If 2% was optimal, firms should have adhered to it irrespective of the level of profits they earned in the year.

Finally, skeptics could argue that that the 2% mandate relieves companies from uncertainty about how much everyone else is donating. Thus 2% may become a new social norm,

leading to the situation documented in this paper whereby high CSR firms reduce spending and low CSR firms increase giving. This explanation is again unlikely to explain our results because firms used to disclose CSR spending in their financial statements even before the passage of law. As mentioned above, the financial reporting and auditing standards related to CSR spending did not change after the mandate. The amount spent on CSR by every company was publicly known even before the passage of the law. Therefore, there is no reason to believe that firms became aware of others spending after the passage of the new CSR mandate.

7 Conclusion

In this study, we examine the impact of a regulatory edict related to minimum CSR spending on the actual CSR spending of firms. We rely on the recent law passed in India that mandates all companies above a certain profit threshold have to spend at least 2% of their average three years' profits on CSR. We separately examine the impact of this law on firms that were voluntarily engaged in CSR before the regulation was passed, relative to those that did not do so.

We find that voluntary spenders reduced their CSR spending significantly after the mandate to close to the legally mandated limit of 2% of average three years' profits. On the other hand, firms that spent less on CSR during the pre-regulation period increased their spending slightly to meet the new requirement. We go on to examine the possible mechanism behind these results. If firms that spent voluntarily on CSR are altruistic or use CSR to signal their type, then imposing a non-binding cap should not reduce their CSR spending. If CSR indeed signals a firm's type to its stakeholders, then spending significantly more than the mandated limit should serve the same purpose. On the other hand, if CSR spending is the result of intrinsic motivation of the top management and the controlling shareholders towards prosocial behavior, then the mandate could negatively impact their motivation. The end result could be a reduction in CSR spending by firms that spent on CSR voluntarily in

the pre-regulation period.

We perform several tests in order to understand the mechanism behind the results. First, we examine whether the sensitivity between profit and CSR expenditure changes in the post-regulation period. We find that high CSR firms reduce their spending when faced with negative shocks to profit, but do not increase their spending when they experience positive shocks to profit. In addition, we also find that firms divert CSR spending from relatively transparent avenues to relatively opaque activities, suggesting "management" of CSR expenditure. The evidence suggests that in the post-regulation period, firms treat CSR as a compliance activity, consistent with the view that the regulation crowds out managers' intrinsic motivation for engaging in CSR.

Second, we identify firms that would have used CSR as a signalling tool in the pre-regulation period, and examine whether such firms reduce their expenditure on CSR by a level greater than the others. We would expect such a result if the law diminished the signalling value of CSR. We do not find any incremental reduction in CSR spending by such firms when compared to other firms. Finally, we find that firms do not increase their advertising expenditure as a substitute for the possible reduction in the signalling value of CSR. The above results indicate that the cut in CSR spending among high CSR firms is likely due to their diminished intrinsic motivation for CSR. We do not claim that CSR does not have signalling value. Our hypothesis, given that firms have an option of spending more than the mandated limit, is that the signalling value of CSR does not diminish after imposing a non-binding mandate.

Regulators might want to consider the possible impact of a proposed intervention on the CSR spending of firms that voluntarily engage in prosocial behavior. It is possible that, in the short run, a mandate may lead to an increase in total CSR spending because it brings a larger number of companies into the mandatory CSR net. In fact, a recent KPMG report shows that the total CSR increased following the regulation.[23] However, if the compulsion

[23]Source-KPMG Report can be found here: https://assets.kpmg.com/content/dam/kpmg/in/pdf/2018/02/CSR-Survey-Report.pdf

to spend on CSR reduces firms' intrinsic motivation to "do good", then such a mandate may lead to a reduction in CSR spending in the long run. Companies that would have voluntarily spent on CSR, with some persuasion by NGOs, may not do so when regulation is imposed. In such a case, the magnitude of CSR spending in the pre-regulation period may not serve as the appropriate counter factual. Many Indian firms would have potentially initiated CSR investments voluntarily in the absence of a mandate in response to growing prosperity given that India is the fastest growing large economy in the world.

Our study opens up interesting follow up questions. First, does the mandate reduce the unobserved quality of CSR given that firms treat CSR as a compliance activity? Second, does the imposition of a mandate reduce the responsiveness of firms to local natural disasters? Top management may feel that they have discharged their social responsibility by complying with the regulation and, hence, do not need to do more. Answers to these questions may reveal additional costs of mandating CSR over and above those identified in this study.

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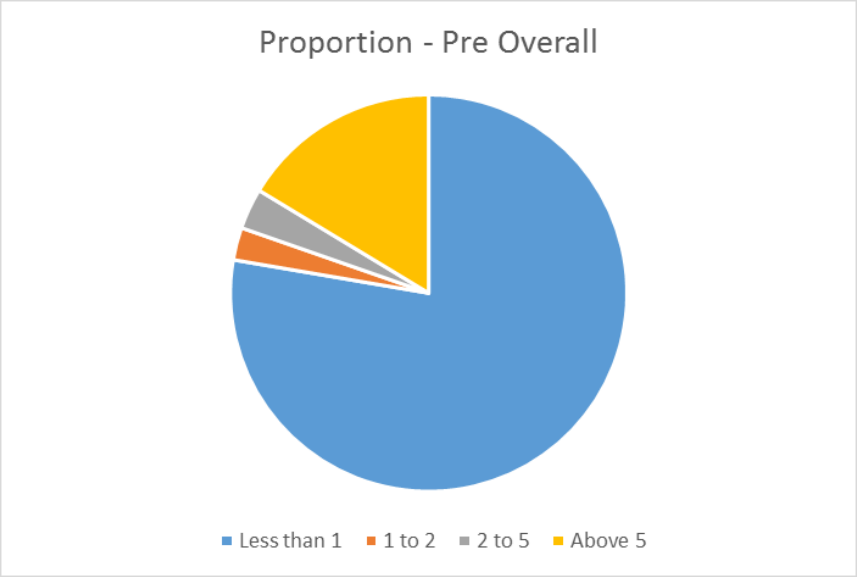
Figure 1: Distribution of CSR Expenditure
This pie chart divides the sample firms into different buckets based on CSR Ratio.



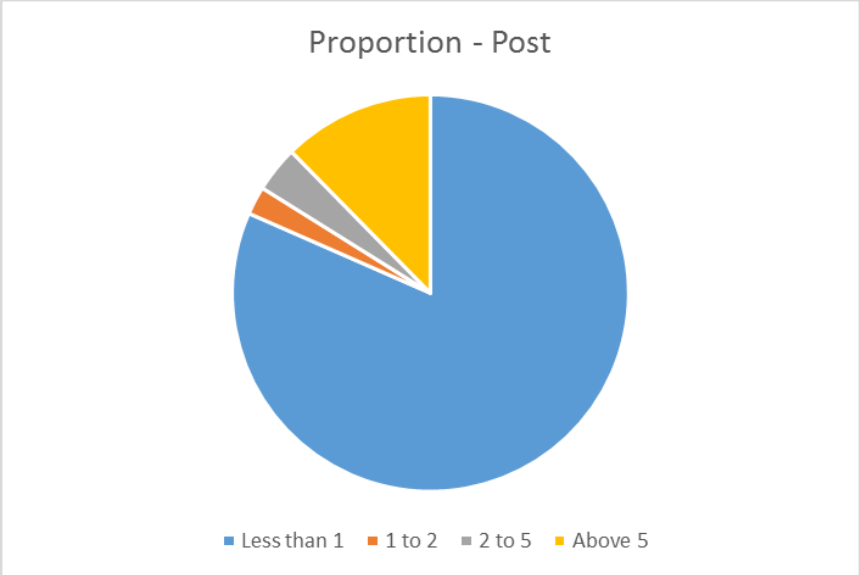
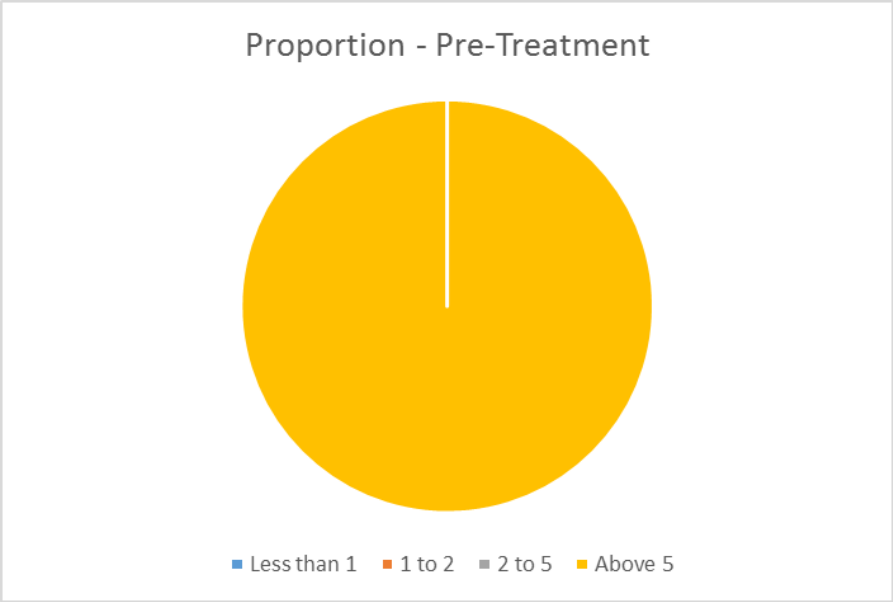


Figure 2: Distribution of CSR Expenditure for Treatment Firms
This pie chart divides the treatment firms into different buckets based on CSR Ratio.



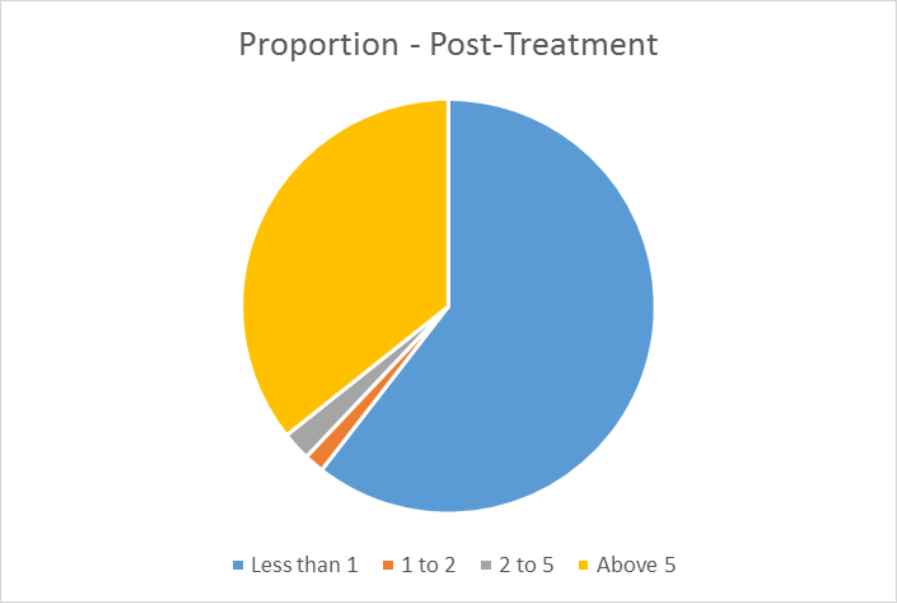
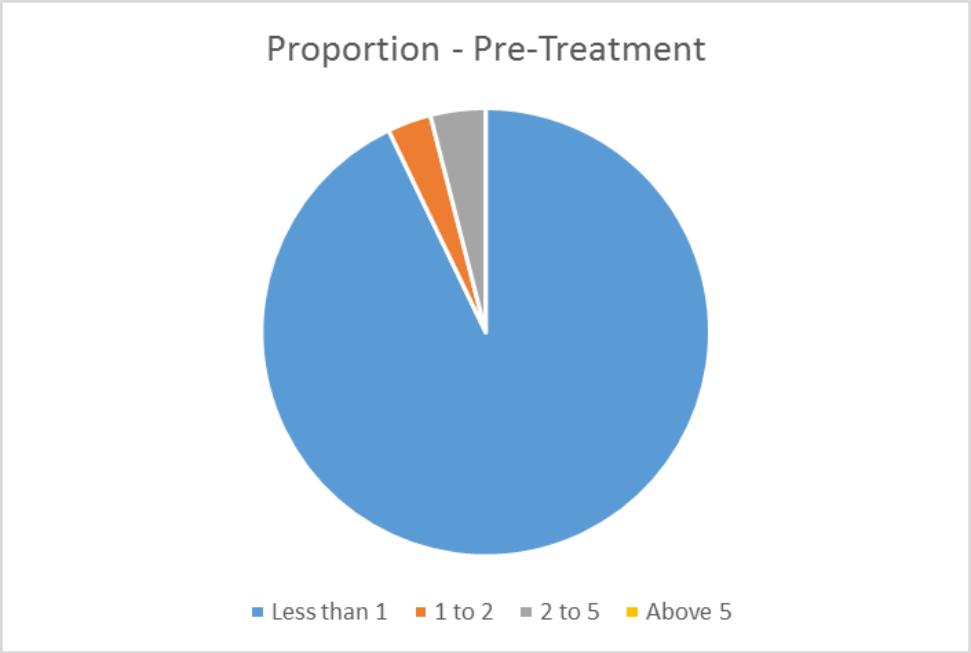


Figure 3: Distribution of CSR Expenditure for Control Firms
This pie chart divides the control firms into different buckets based on CSR Ratio



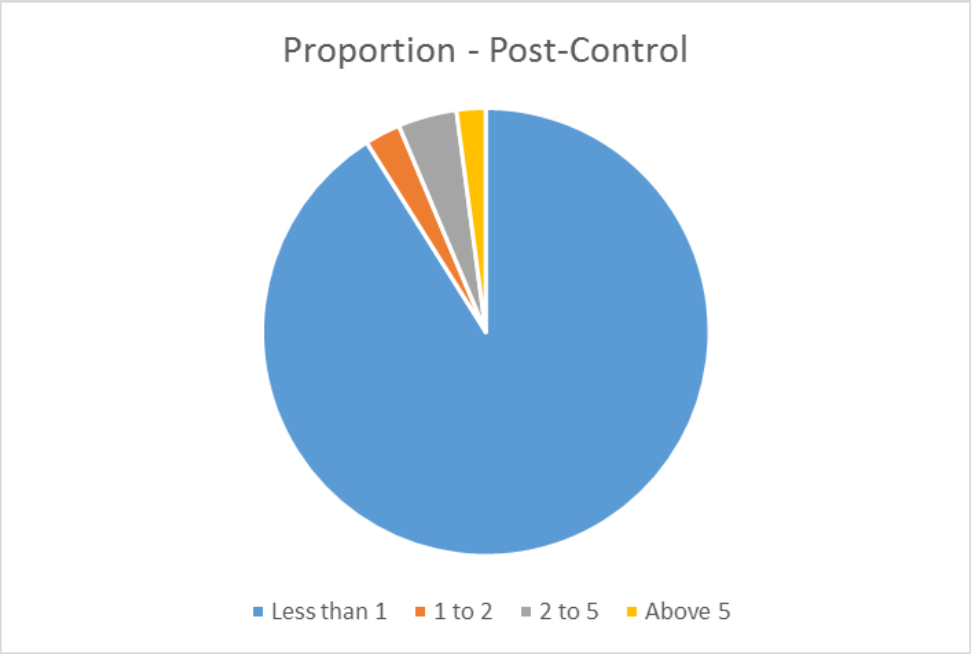


Figure 4: Pre-Trends and Post-Trends Between Control and Treatment Groups

This figure tracks the movement in CSR Ratio between the treatment and control groups during the sample period. We plot the median of CSR Ratio for each year for the two groups. The orange line represents the treatment group and the grey line represents the control group. Years 2011–2012, 2012–2013, and 2013–2014 represent the pre-regulation years. Years 2014–2015 and 2015–2016 represent the post-regulation years.

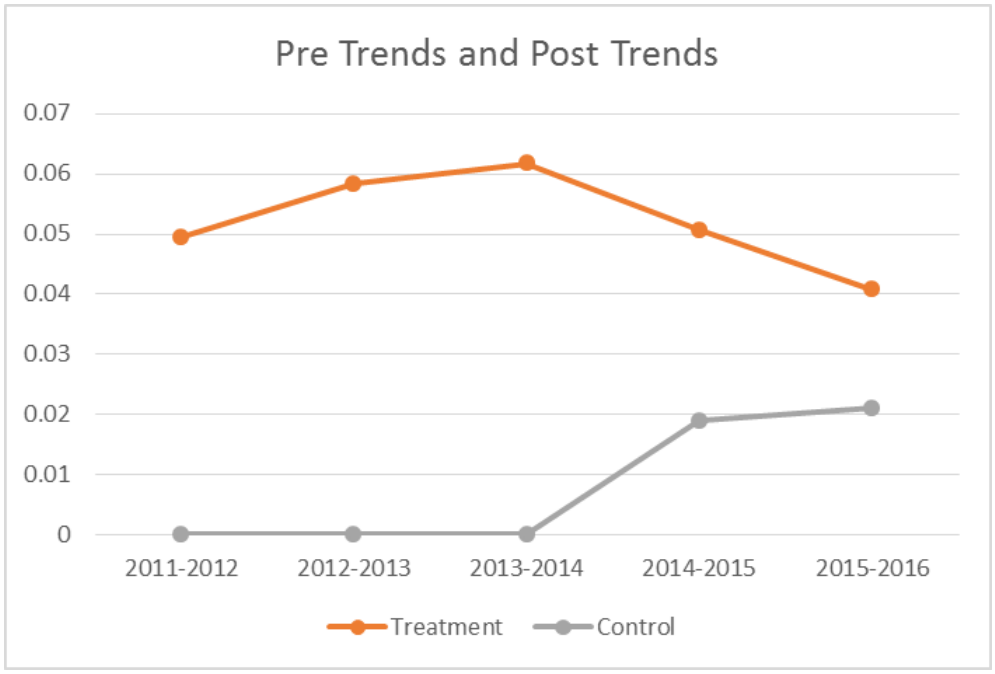


TABLE 1: Variable Definition

In this table, we define the key variables.

Variable	**Definition**
High CSR companies	Companies that spent more than a threshold in terms of CSR-to-profit ratio in the pre-regulation period.
Low CSR companies	Companies that spent less than a threshold in terms of CSR-to-profit ratio in the pre-regulation period.
Post-regulation period	Financial years 2014-2015 and 2015-2016.
CSR-P	Data reported only by Prowess.
CSR-H	Pre-regulation period: Data reported by Prowess; Post-regulation period: Ministry Data.
CSR-T	Pre-regulation period: Data reported by Prowess; Post-regulation period: Sum of Prowess and Ministry Data.
CSRP Ratio	Ratio between CSR-P and average profit in the previous three years.
CSR Ratio	Ratio between CSR-H and average profit in the previous three years.
CSRT Ratio	Ratio between CSR-T and average profit in the previous three years.

TABLE 2: Sample Construction

In this table, we report details about the sample used.

Variable	Values
Number of companies in Prowess database	33,841
Number of companies in Ministry database	10,164
Number of companies in the merged data set	4,502
Number of years	7
Number of observations in total	25,176
Number of observations where three years' average profit is above INR 50 million in a firm-year	16,334
Number of companies with non-missing data	4,502

TABLE 3: Comparison between High and Low CSR Firms

In this table, we compare high and low CSR firms in terms of observable characteristics in the pre-regulation period. We use the CSR-H measure (as defined in Table 1) for classification. Median values are given in parentheses.

Variable	Low CSR	High CSR	Difference	T-stat
Pre-regulation Period				
Sales (in million INR)	15,072	15,313	-241	-0.10
	(2015.4)	(2855.8)	(750.4)	
Profit (in million INR)	900	1,069	-169	-1.05
	(93.1)	(125.4)	(32.3)	
Total Assets (in million INR)	28,072	19,799	8,273***	2.5
	(2699.15)	(2979.35)	(280.2)	
Post-regulation period				
Sales (in million INR)	23,164	23,962	-798	-0.11
	(3588.7)	(5341.5)	(1752.75)	
Profit (in million INR)	1,512	1,326	186	0.28
	(150.4)	(243.85)	(93.45)	
Total Assets (in million INR)	58,549	34,884	23,665	1.46
	(5605.45)	(7092.7)	(1487.25)	

TABLE 4: Univariate Comparison Between Treatment And Control Firms

In this table, we present univariate comparisons between the treatment and the control groups. In Panel A, we use the entire sample whereas in Panel B, we consider only those firms for which we have data for all seven years. Firms are grouped based on their pre-regulation spending on CSR. In column 1, we consider firms that spent zero on CSR. In column 2, we consider firms that spent between 0 to 1 percent of previous three years' average profits in the pre-regulation period. Similarly, in each column, we consider a progressively higher range. We compare the difference between pre-regulation and post-regulation expenditure and also report the T-statistics. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	Groups Based on Pre-Period CSR Ratio - Full Sample						
	0	0 to 1	1 to 2	2 to 4	4 to 6	6 to 8	8 to 10
Pre	0	0.001	0.014	0.028	0.048	0.069	0.09
Post	0.006	0.021	0.014	0.013	0.008	0.013	0.01
Difference (Post-Pre)	0.006	0.02	0	-0.015	-0.04	-0.056	-0.08
T-Stat	-3.77***	-2.77***	-0.04	6.59***	4.74***	6.33**	4.38***
Pre Observations	9152	13,923	1335	1201	571	257	144
Post Observations	2959	4496	453	397	183	74	40

	Groups Based on Pre-Period CSR Ratio - Firms with Data For All Seven Years						
	0	0 to 1	1 to 2	2 to 4	4 to 6	6 to 8	8 to 10
Pre	0.006	0.013	0.014	0.027	0.048	0.069	0.089
Post	0.006	0.014	0	0.014	0.007	0.014	0.013
Difference (Post-Pre)	0.006	0.014	0	-0.013	-0.041	-0.055	-0.076
T-Stat	-1.98**	-2.14**	-0.11	4.75***	3.29***	4.61***	3.75***
Pre Observations	4643	7506	834	758	335	135	80
Post Observations	1875	3021	334	304	134	54	32

TABLE 5: Change in CSR for Treatment Firms

In this table, we compare the CSR expenditure before and after the CSR mandate. Firms spending above a threshold in terms of proportion of previous three years' average profits are included in the sample. The threshold used is 2% in columns 1 and 5, 5% in columns 2 and 6, 7.5% in columns 3 and 7, and 10% in columns 4 and 8. The sample is restricted to firms with previous three years' average profit of more than INR 50 million. Each observation represents a firm-year. CSR Ratio (CSRT Ratio), as defined in Table 1, is the dependent variable in Panel A (Panel B). The explanatory variable of interest - Post - is a dummy variable, taking the value of one for years after the regulation change, and zero otherwise. Errors are clustered at the firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio
				Panel A				
Post	-0.10***	-0.23***	-0.32***	-0.39***	-0.10***	-0.22***	-0.30***	-0.36***
	[-4.51]	[-4.01]	[-3.78]	[-3.59]	[-4.06]	[-3.64]	[-3.39]	[-3.19]
Profits					-0.00*	-0.00**	-0.00**	-0.00*
					[-1.72]	[-2.13]	[-2.14]	[-1.68]
Total Assets					-0.00	-0.00	-0.00	-0.00
					[-1.61]	[-1.11]	[-1.02]	[-0.69]
Constant	0.13***	0.25***	0.34***	0.41***	0.15***	0.29***	0.41***	0.49***
	[33.62]	[28.17]	[25.99]	[24.14]	[11.35]	[10.42]	[9.78]	[9.12]
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treatment Classification Threshold	2%	5%	7.50%	10%	2%	5%	7.50%	10%
Observations	2,718	1,187	805	622	2,718	1,187	805	622
R-squared	0.66	0.65	0.65	0.65	0.66	0.66	0.65	0.65

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio
				Panel B				
Post	-0.04**	-0.14***	-0.22***	-0.28***	-0.04	-0.13**	-0.20**	-0.25**
	[-2.05]	[-2.61]	[-2.74]	[-2.72]	[-1.63]	[-2.25]	[-2.37]	[-2.33]
Profit					-0.00*	-0.00*	-0.00**	-0.00*
					[-1.73]	[-1.95]	[-2.08]	[-1.68]
Total Assets					-0.00*	-0.00	-0.00	-0.00
					[-1.75]	[-1.29]	[-1.10]	[-0.74]
Constant	0.13***	0.25***	0.34***	0.41***	0.15***	0.30***	0.41***	0.49***
	[35.49]	[29.53]	[27.49]	[25.52]	[11.58]	[10.59]	[9.74]	[9.11]
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treatment Classification Threshold	2%	5%	7.50%	10%	2%	5%	7.50%	10%
Observations	2,718	1,187	805	622	2,718	1,187	805	622
R-squared	0.67	0.66	0.66	0.65	0.67	0.66	0.66	0.66

TABLE 6: Change in CSR for Control Firms

In this table, we compare the CSR expenditure before and after the CSR mandate. Firms investing below a threshold in terms of proportion of previous three year's average profits are included in the sample. The threshold used is 2% in columns 1 and 5, 5% in columns 2 and 6, 7.5% in columns 3 and 7, and 10% in columns 4 and 8. The sample is restricted to firms with previous three years' average profit of more than INR 50 million. Each observation represents a firm-year. CSR Ratio (CSRT Ratio), as defined in Table 1, is the dependent variable in Panel A (Panel B). The explanatory variable of interest - Post - is a dummy variable, taking the value one for years after the regulation change, and zero otherwise. Errors are clustered at the firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio
				Panel A				
Post	0.04	0.03	0.03	0.03	0.04	0.03	0.03	0.03
	[1.17]	[1.10]	[1.07]	[1.04]	[1.25]	[1.16]	[1.12]	[1.10]
Profits					-0.00	-0.00	-0.00	-0.00
					[-0.84]	[-0.85]	[-0.85]	[-0.85]
Total Assets					0.00	0.00	0.00	0.00
					[0.86]	[0.86]	[0.86]	[0.86]
Constant	-0.01	-0.00	0.00	0.00	0.00	0.01	0.01	0.01
	[-0.85]	[-0.23]	[0.07]	[0.27]	[0.45]	[0.85]	[1.02]	[1.13]
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treatment Classification Threshold	2%	5%	7.50%	10%	2%	5%	7.50%	10%
Observations	13,616	15,147	15,529	15,712	13,615	15,146	15,528	15,711
R-squared	0.43	0.43	0.43	0.43	0.44	0.44	0.44	0.44
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio
				Panel B				
Post	0.11	0.10	0.10	0.10	0.10	0.09	0.09	0.08
	[1.23]	[1.26]	[1.26]	[1.26]	[1.32]	[1.35]	[1.36]	[1.36]
Profits					-0.00	-0.00	-0.00	-0.00
					[-0.85]	[-0.85]	[-0.85]	[-0.85]
Total Assets					0.00	0.00	0.00	0.00
					[0.86]	[0.86]	[0.86]	[0.86]
Constant	-0.01	-0.00	-0.00	0.00	0.02	0.02	0.02	0.02
	[-0.43]	[-0.18]	[-0.07]	[0.02]	[0.72]	[0.89]	[0.96]	[1.01]
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treatment Classification Threshold	2%	5%	7.50%	10%	2%	5%	7.50%	10%
Observations	13,616	15,147	15,529	15,712	13,615	15,146	15,528	15,711
R-squared	0.23	0.23	0.23	0.23	0.25	0.25	0.24	0.24

TABLE 7: Comparison Between Treatment And Control Firms

In this table, we compare the CSR expenditure before and after the government mandated 2% spending levels between treatment and control firms. The sample is restricted to firms with previous three years' average profit of more than INR 50 million. Each observation represents a firm-year. CSR Ratio (CSRT Ratio), as defined in Table 1, is the dependent variable in Panel A (Panel B). Firms investing above a threshold in terms of proportion of previous three year's average profits are considered as treatment firms. The threshold used is 2% in columns 1 and 5, 5% in columns 2 and 6, 7.5% in columns 3 and 7, and 10% in columns 4 and 8. Post is a dummy variable taking the value one for years after the regulation change, and zero otherwise. The explanatory variable of interest is the interaction between Post and Treatment variables. Errors are clustered at the firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio
				Panel A				
Post x Treatment	-0.15***	-0.27***	-0.35***	-0.42***	-0.14***	-0.27***	-0.35***	-0.41***
	[-3.45]	[-4.09]	[-3.97]	[-3.83]	[-3.62]	[-3.93]	[-3.97]	[-3.84]
Profit					-0.00	-0.00	-0.00	-0.00
					[-0.86]	[-0.86]	[-0.86]	[-0.86]
Total Assets					0.00	0.00	0.00	0.00
					[0.87]	[0.88]	[0.87]	[0.87]
Constant	0.03***	0.03***	0.03***	0.03***	0.04***	0.04***	0.04***	0.04***
	[4.55]	[4.55]	[4.56]	[4.58]	[3.53]	[3.53]	[3.53]	[3.54]
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treatment Classification Threshold	2%	5%	7.50%	10%	2%	5%	7.50%	10%
Observations	16,334	16,334	16,334	16,334	16,333	16,333	16,333	16,333
R-squared	0.46	0.46	0.46	0.46	0.47	0.47	0.47	0.47
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio	CSRT Ratio
				Panel B				
Post x Treatment	-0.15*	-0.24**	-0.32***	-0.37***	-0.15*	-0.26**	-0.32***	-0.36***
	[-1.69]	[-2.54]	[-2.86]	[-2.99]	[-1.78]	[-2.28]	[-2.82]	[-3.07]
Profits					-0.00	-0.00	-0.00	-0.00
					[-0.86]	[-0.86]	[-0.86]	[-0.86]
Total Assets					0.00	0.00	0.00	0.00
					[0.86]	[0.87]	[0.86]	[0.86]
Constant	0.03***	0.03***	0.03***	0.03***	0.06**	0.06**	0.06**	0.06**
	[2.91]	[2.90]	[2.90]	[2.91]	[2.17]	[2.17]	[2.17]	[2.17]
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treatment Classification Threshold	2%	5%	7.50%	10%	2%	5%	7.50%	10%
Observations	16,334	16,334	16,334	16,334	16,333	16,333	16,333	16,333
R-squared	0.24	0.24	0.24	0.24	0.26	0.26	0.26	0.26

TABLE 8: Sensitivity of CSR Expenditure to Profit

In this table, we test the sensitivity of total CSR expenditure to profit in the pre-regulation and post-regulation periods. Measures of expenditure on CSR, as defined in Table 1, are the dependent variables in different columns. CSR-H uses the data reported by Prowess in the Pre-Regulation period but uses the data reported by the Ministry in the Post-Regulation period. CSR-T uses the data reported by Prowess in the Pre-Regulation period but uses the sum of the data reported by the Ministry and the data reported by Prowess in the Post-Regulation period. Each observation represents a firm-year. Here, Post is a dummy variable that takes the value of one for years after the regulation change, and zero otherwise. The main explanatory variable of interest is the interaction term between profit and the Post dummy. Errors are clustered at the firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)
Dependent Variable	CSR-H	CSR-H	CSR-T	CSR-T
Post x Profit	0.01***	0.01***	0.04***	0.04***
	[7.31]	[7.24]	[4.08]	[4.04]
Profit	-0.00	-0.00	-0.01***	-0.01***
	[-1.29]	[-1.62]	[-2.64]	[-2.61]
Total Assets		0.00**		0.00
		[1.99]		[1.28]
Constant	11.42***	8.14**	16.44***	12.63***
	[5.02]	[2.48]	[6.29]	[3.26]
Year Fixed Effects	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes
Observations	22,907	22,905	22,907	22,905
R-squared	0.73	0.74	0.73	0.73

TABLE 9: Sensitivity of CSR Expenditure to Profit and Losses, Separately

In this table, we test the sensitivity of total CSR expenditure to negative and positive shocks separately. Measures of expenditure on CSR, defined as in Table 1, are the dependent variables in different columns. CSR-H uses the data reported by Prowess in the Pre-Regulation period but uses the data reported by the Ministry in the Post-Regulation period. CSR-T uses the data reported by Prowess in the Pre-Regulation period but uses the sum of the data reported by the Ministry and the data reported by Prowess in the Post-Regulation period. In columns 1 and 2 (5 and 6), the negative shock (positive shock) dummy takes the value of one if a firm reports a loss (profit) in a year, and zero otherwise. In columns 3 and 4 (7 and 8), the negative shock (positive shock) dummy takes the value of one if a firm reports at least a 50% decrease (increase) in profit from the previous year, and zero otherwise. Here, Post is a dummy variable that takes the value of one for years after the regulation change, and zero otherwise. The main explanatory variable of interest is the interaction term between a shock and the Post dummy. Errors are clustered at the firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable	CSR-T	CSR-T	CSR-H	CSR-H	CSR-T	CSR-T	CSR-H	CSR-H
Negative Shock x Post	-51.17***	-40.06***	-17.86***	-12.36***				
	[-3.97]	[-3.61]	[-3.66]	[-2.73]				
Postive Shock x Post					20.35	8.27	9.69	3.86
					[1.17]	[0.64]	[1.48]	[0.77]
Negative Shock	10.29***	14.90**	3.13***	5.74*				
	[4.09]	[2.38]	[2.95]	[1.87]				
Postive Shock					-8.00***	-11.10**	-1.75	-3.42
					[-2.83]	[-2.49]	[-1.27]	[-1.58]
Profits		0.00		0.00		0.00		0.00
		[1.17]		[1.27]		[1.23]		[1.30]
Total Assets		0.00**		0.00***		0.00**		0.00***
		[2.50]		[3.07]		[2.50]		[3.08]
Constant	7.33**	-19.72	9.16***	-3.14	15.68***	-8.10	11.10***	0.60
	[2.35]	[-1.61]	[4.50]	[-0.62]	[7.23]	[-0.76]	[5.39]	[0.13]
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	23,133	22,905	23,133	22,905	23,133	22,905	23,133	22,905
R-squared	0.41	0.47	0.59	0.64	0.41	0.47	0.59	0.64

TABLE 10: Change in CSR Composition

In this table, we compare the composition of CSR expenditure before and after the CSR mandate. Each observation represents a firm-year. Donations refers to the ratio of donations to total CSR expenditure. Commmunity Expenses refers to the ratio between community related expenditure and total CSR expenditure. Environment refers to the ratio between environment related expenditure and total CSR expenditure. The sample consists of treatment group firms in columns 1, 2 and 3 and control group firms in columns 4, 5 and 6. Errors are clustered at the firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variable	Donations	Community Expenses	Environment	Donations	Community Expenses	Environment
Post	-0.41***	0.57***	-0.03***	-0.56***	0.57***	-0.02***
	[-15.13]	[26.35]	[-3.05]	[-25.18]	[26.35]	[-2.98]
Constant	0.77***	0.16***	0.12***	0.81***	0.16***	0.03***
	[160.66]	[21.07]	[63.75]	[104.36]	[21.07]	[19.35]
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,410	5,115	2,410	5,115	5,115	5,115
R-squared	0.81	0.86	0.87	0.85	0.86	0.84

TABLE 11: Difference based on Advertising Expenditure

In this table, we compare the CSR expenditure of firms with a high advertising budget and firms with a low advertising budget, using a triple-difference framework. Treatment and Post dummies have the same meaning assigned to them as in previous tables. Here, we consider a threshold of 2% for defining the treatment group. "High Ad" is a dummy variable that takes the value of one for firms that spent more than the average advertising-to-sales ratio in the pre-regulation period. Each observation represents a firm-year. CSR Ratio, as defined in Table 1, is the dependent variable. Errors are clustered at firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio
Post x Treatment x High Ad	-0.09	-0.32	-0.56	-0.82	-0.10	-0.34	-0.55	-0.81
	[-0.41]	[-0.69]	[-0.80]	[-0.89]	[-0.46]	[-0.73]	[-0.77]	[-0.87]
Treatment x Post	-0.20**	-0.30***	-0.36***	-0.38***	-0.19**	-0.30***	-0.38***	-0.38***
	[-2.27]	[-3.37]	[-3.79]	[-3.87]	[-2.40]	[-3.46]	[-3.47]	[-3.70]
Treatment x High Ad	-0.09	-0.08	-0.08	-0.08	-0.09	-0.08	-0.09	-0.09
	[-0.90]	[-1.03]	[-1.04]	[-1.04]	[-1.04]	[-1.05]	[-1.02]	[-1.03]
Profit					-0.00	-0.00	-0.00	-0.00
					[-0.91]	[-0.92]	[-0.90]	[-0.89]
Total Assets					0.00	0.00	0.00	0.00
					[0.91]	[0.92]	[0.79]	[0.79]
Constant	0.03	0.03	0.03	0.03	0.04	0.04	0.04*	0.04
	[1.42]	[1.42]	[1.39]	[1.39]	[1.64]	[1.64]	[1.65]	[1.63]
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treatment Classification Threshold	2%	5%	7.50%	10%	2%	5%	7.50%	10%
Observations	14,825	14,825	14,825	14,825	14,825	14,825	13,534	13,534
R-squared	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.17

TABLE 12: Difference between Polluting and Other Firms

In this table, we compare the CSR expenditure of highly polluting firms to that of other firms in a triple-difference framework. The Treatment and Post dummies have the same meaning assigned to them as in previous tables. Here, we consider a threshold of 2% for defining the treatment group. Polluting is a dummy variable that takes the value of one for firms that belong to highly polluting industries. Each observation represents a firm-year. CSR Ratio, as defined in Table 1, is the dependent variable. Errors are clustered at the firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio
Post x Treatment x Polluting	0.13	0.31	0.36	0.51	0.12	0.12	0.09	0.10
	[1.02]	[1.06]	[0.87]	[0.94]	[0.95]	[0.88]	[0.70]	[0.73]
Post x Treatment	-0.25**	-0.52*	-0.73*	-0.91*	-0.25**	-0.50**	-0.69*	-0.85*
	[-2.13]	[-1.90]	[-1.81]	[-1.76]	[-2.12]	[-1.98]	[-1.91]	[-1.84]
Post x Polluting	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02
	[-1.32]	[-1.42]	[-1.23]	[-1.26]	[-1.31]	[-1.15]	[-1.12]	[-1.06]
Profits					-0.00	-0.00	-0.00	-0.00
					[-0.91]	[-0.92]	[-0.91]	[-0.90]
Total Assets					0.00	0.00	0.00	0.00
					[0.90]	[0.92]	[0.91]	[0.90]
Constant	0.03*	0.03*	0.03*	0.03*	0.03*	0.03**	0.03**	0.03**
	[1.87]	[1.91]	[1.90]	[1.93]	[1.96]	[1.99]	[1.98]	[2.00]
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treatment Classification Threshold	2%	5%	7.50%	10%	2%	5%	7.50%	10%
Observations	22,854	22,854	22,854	22,854	22,835	22,835	22,835	22,835
R-squared	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17

TABLE 13: Impact on Advertising Expenditure

In this table, we test the impact of the regulation on total advertising expenditure. The amount spent on advertising (in INR), normalized by sales, is the dependent variable. The Treatment and Post dummies have the same meaning assigned to them in Table 7. Each observation represents a firm-year. Errors are clustered at the firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)
Dependent Variable	Advertisement Expenditute			
Post x Treatment	-1.25	-2.50	-2.61	-3.31
	[-0.26]	[-0.78]	[-0.75]	[-0.94]
Sales	0.00	0.00	0.00	0.00
	[1.04]	[1.04]	[1.04]	[1.04]
Profit	-0.00*	-0.00*	-0.00*	-0.00*
	[-1.90]	[-1.91]	[-1.90]	[-1.90]
Total Assets	-0.00	-0.00	-0.00	-0.00
	[-0.97]	[-0.96]	[-0.97]	[-0.97]
Constant	10.46***	10.46***	10.47***	10.47***
	[3.13]	[3.13]	[3.13]	[3.13]
Year Fixed Effects	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes
Treatment Classification Threshold	2%	5%	7.50%	10%
Observations	19,405	19,405	19,405	19,405
R-squared	0.26	0.26	0.26	0.26

TABLE 14: Suggestive Evidence Relating To Motive

In this table, we present suggestive evidence relating to the motive behind phenomenon. ESG is a dummy variable that takes the value of one for firms which are a part of the Enviornment Social and Governance (ESG) Index of Bombay Stock Exchange (BSE) and zero otherwise. All the other terms have the same meaning as in Table 7. The overall sample is restricted to firms that are a part of BSE-100 index. In columns 1 and 2 (3 and 4), the sample is further restricted to firms that invested at least 2% of their average three years' profits in CSR activities (less than 2% of their average three years' profits in CSR activities). CSR Ratio (CSRT Ratio), as defined in Table 1, is the dependent variable in columns 1 and 3 (2 and 4). Standard Errors are clustered at the firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)
Dependent Variable	CSR Ratio	CSRT Ratio	CSR Ratio	CSRT Ratio
Post x ESG	-0.02***	-0.01***	-0.00	-0.01
	[-3.97]	[-4.81	[-0.79]	[-0.99]
Firm Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Constant	0.08***	0.08***	0.01***	0.01***
	[5.22]	[5.43]	[6.71]	[6.01]
Sample	High CSR Firms		Low CSR Firms	
Observations	46	46	286	286
R-squared	0.68	0.70	0.69	0.72

Online Appendix

Does Mandated Corporate Social Responsibility Reduce Intrinsic Motivation? Evidence from India

A1 Observations From Actual CSR Disclosures

We examine the change in reporting of CSR expenditure after the passage of the law. If, as hypothesized in this paper, companies view CSR as a mere compliance activity, we expect the reporting of CSR expenditure to follow a mechanical check-the-box approach in the post-regulation period. To understand the change, if any, in reporting behavior, we examine the annual reports of four companies whose average CSR expenditure as a percentage of PAT (Profit After Tax) decreased in the period after the passage of the Companies Act of 2013. The purpose of this exercise is only to provide a few examples that may be useful in understanding the motivation of companies engaging in CSR before and after the regulation and not necessarily to draw any causal inferences.

A1.1 Pre Period:

Prior to April 1, 2014, companies in general enumerated a more detailed list of all the projects that they had executed during the financial year. In addition to this, the section of the annual report under which these projects were mentioned almost always started with a brief about the policy of the company towards social initiatives. For example, the annual report for financial year 2013-2014 of Lupin Limited, one of the largest pharmaceutical companies in India, states "LHWRF[1] was set up with the objective of creating a replicable and ever-evolving model for sustainable development with the simple goal of uplifting families." The reports in this period also mention the reasons behind starting an initiative and describe the details of execution. The same report of Lupin Limited states "LHWRF operates in districts with a low HDI score . . ." and elaborates further by stating " . . . collaborated with numerous institutions, governments, individuals, visionaries and domain experts on multiple projects." In addition to this, the reports in the pre-regulation period specifically mention the impact of the project being taken up by the company. For example, Lupin's report for financial year 2012-2013 states, "In FY 2013, LHWRF provided skill training to 4,478 persons and facilitated establishment of about 4,014 new self-enterprises." Overall, the tone of the text in the pre-regulation period suggests that the company cared for their initiatives potentially hinting at greater intrinsic motivation to "do good". Apart from text, companies use illustrative tools like pictures to highlight the various initiatives that have been undertaken by them. An example from Lupin's report is given below:

[1]LHWRF stands for Lupin Human Welfare and Research Foundation.

Figure A1.2.1: Pictures From Annual Reports

This picture is from Lupin's Annual Report.

A1.2 Post Period:

The first visible change in the reporting of CSR initiatives after the government mandate effective April 1st, 2014 is that the amount of content explaining CSR initiatives reduces by two-thirds compared to the pre-regulation period. The tone of the description itself changes from a descriptive one in the pre-regulation period to a more mechanical tenor in the post-regulation period. Almost no mention of outcomes of initiatives undertaken is made in the report. For example, Lupin's report for FY 2013-2014 (pre-regulation period) states, "In FY 2014, about 2.5 lakh[2] patients were treated through medical camps and our Mobile Medical Diagnostic Unit (MMDU)". In the following financial year's annual report (post-regulation period), for the same nature of activity, only the following statement is referenced as a bullet point, " The key areas of focus for the LHWRF program are: . . . providing Quality Health Services in remote areas."

The third major visibile change is the shift from outcome to outlays. This is not surprising as the legal mandate is based on outlays. As required by law, all companies present details of outlays in a standardized box. For example, in Dr. Reddys, another large pharmaceutical company, annual report for financial year 2014-2015, only tables containing the breakdown of CSR expenditure is given. The company does not describe the context and progress of any of the activities they have undertaken as a part of CSR. These changes are more visible with each passing year in the post-regulation period. In addition, the number of pictures used also reduces. Overall, the tone of the presentation in the post-regulation period can be interpreted as a desire to comply with the law rather than out of intrinsic motivation for prosocial behavior.

A1.3 Statements by Industry Leaders on CSR Law:

Given below is a list of statements made by industry leaders and politicians in India both for and against the law.

Statements made against the law:

- "Corporate India is very much in favour of affirmative action, but it is against any mandatory, compulsory or quota-related action. Corporate India is very supportive of affirmative action on a voluntary basis."[3]

  "I am very worried that this is a political move to divert money for political purposes. I would be very careful of such mandatory recommendations."[4]

  - Adi Godrej, Chairman, Godrej Group

- "My worry is the stipulation should not become a tax at a later stage . . . . . Spending 2% on CSR is a lot, especially for companies that are trying to scale up in these difficult times. It must not be imposed." - Azim Premji, Chairman of Wipro Limited[5]

[2] A lakh is 100,000.

[3] https://www.livemint.com/Companies/XQhLPQuXDQ4TK6BvXXow8M/CII-president-designate-in-favour-of-mandatory-CSR-spending.html

[4] http://archive.indianexpress.com/news/2–csr-spend-a-ploy-to-divert-funds-for-political-aims/874531/

[5] https://www.theguardian.com/sustainable-business/india-csr-law-debate-business-ngo

- "We have a phenomenon which is meant to be good but is going to be somewhat chaotic . . . . . we don't as yet know what kind of monitoring there'll be in terms of how well this money is used."[6]

  "You will have a registered NGO, you will have the money, the money goes to the NGO and it may be three or four years before the whole thing explodes in a series of fraudulent operations; money being given to people that dont exist, or causes that are subterfuge for something else."[7]

  "Philanthropy or giving is something that comes within . . . . . The mandated 2% that the government has, becomes like a tax, which everyone pays."[8]

  - Ratan Tata, Chairman Emeritus, Tata Group

- "While the mandatory 2% CSR spend, is almost a fait accompli, I am not very sure about its implementation. My view is that giving should come from the heart. We must find it within ourselves to look beyond ourselves." - Kumar Mangalam Birla, Chairman of Aditya Birla Group[9]

- "We will have to move from a model of Corporate Social Responsibility to a model of Continuous Social Business through enterprise and entrepreneurship." - Mukesh Ambani, Chairman & Managing Director of Reliance Industries Limited[10]

- "We must trust our promoters. If you are mandating conscience and generosity, it is not generosity anymore." - Rahul Bajaj, Chairman of Baja Group & Chairman, CII (Confederation of Indian Industry) National Council on Corporate Governance and Regulatory Affairs[11]

- "If it is made mandatory, it becomes another tax in a sense. I am not comfortable with that position." - Venu Srinivasan, Chairman and Managing Director of TVS Motor Company[12]

- "I was hoping that the government would incentivise the CSR activities."[13]

  "Tax incentives favoured for Corporate Social Responsibility."[14]

  "I dont think anything should be made mandatory because it then becomes very cosmetic. I think there needs to be a realization from corporate India that they have to necessarily engage in this because without that their businesses themselves are not sort of exuding good governance."[15]

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[6] https://www.theguardian.com/sustainable-business/india-csr-law-debate-business-ngo

[7] http://www.philanthropyage.org/finance/ratan-tata-indias-icon

[8] https://www.hindustantimes.com/business/mandatory-corporate-social-responsibility-a-blessing-sudha-murty/story-KY4vOVEYnBzuZ6gAnB7kyO.html; https://www.hindustantimes.com/business/compulsory-csr-spending-is-like-taxation-ratan-tata/story-7WUeCykln0eoGQ5dZ6tXWO.html

[9] http://www.adityabirla.com/Media/press-reports/The-rigour-that-the-CA-course-demands

[10] https://www.livemint.com/Politics/EXe1hWUP0gQoarzlnWf1iO/Not-just-CSR-but-Continuous-Social-Business-need-of-the-hour.html

[11] https://www.firstpost.com/business/mandatory-csr-india-inc-bristles-but-has-little-options-83310.html

[12] http://indiacsr.in/business-leaders-questions-mandatory-csr/

[13] http://indiacsr.in/business-leaders-questions-mandatory-csr/

[14] https://economictimes.indiatimes.com/news/company/corporate-trends/tax-incentives-favoured-for-corporate-social-responsibility-kiran-mazumdar-shaw-biocon/articleshow/10353382.cms

[15] http://causebecause.com/csr-in-india-government-for-mandatory-spends-corporate-india-not-sure/4112

- Kiran Mazumdar Shaw, Chairperson and Managing Director of Biocon Limited

- "Distribution of net profit should be decided by shareholders and not the government . . . . . The issue really is on the practical side of making the proposal mandatory. Today, the government wants to pass a law on how companies should distribute profits. Tomorrow, it may be on something else. How does the story end?" - RC Bhargava, Chairman of Maruti Suzuki[16]

- "I can say on behalf of the business and chamber houses that voluntarily compliance is always better than any forced degree because firms which will be doing CSR voluntarily will be doing it with heart and mind and will do it very well." - Sunil Bharti Mittal, Chairman of Bharti Enterprises[17]

- If such a compulsion (of CSR) is imposed on companies . . . . . it may turn counterproductive as companies may resort to camouflaging activities to meet such regulations, particularly, during recessionary periods and economic downturns." - FICCI (Federation of Indian Chambers of Commerce & Industry)[18]

- "Making it mandatory would also require enforcement and the creation of yet another inspectorate. This as we know has its inherent problems of rent generation and compliance evasion." - Rajiv Kumar, Secretary General, FICCI (Federation of Indian Chambers of Commerce & Industry)[19]

- "Companies just want to comply with the 2% CSR mandate. They are least bothered about understanding the true spirit of CSR looking at the social returns or stakeholder in stakeholder interests. They are looking for shortcuts and quick fixes, and in the process, come up with weird ideas about how they can escape spending the money." - Rajesh Tiwari, CEO of India Centre for CSR.[20]

- "It is my personal view that one should not be mandating anything. While CSR has been mandated, and is good for the country, why is it not allowed as a taxable deduction? If every other expenditure is allowed as tax deductible and increasing stakeholder engagement is being asked for, why not provide tax breaks for companies to undertake this community engagement, which is outside the purview of their business mandate anyway? They call it voluntary, but it is mandatory for all practical purposes. If you dont spend on CSR, then you have to say why you did not do it. No board is going to allow it to be reported that it has not been done." - Richard Rekhy, CEO, KPMG India[21]

- "Also, by making CSR mandatory, companies may treat it as a "check the box" exercise rather than looking at ways to innovate and generate a return from doing social

[16]https://www.financialexpress.com/archive/india-inc-slams-making-csr-spend-mandatory/753034/

[17]https://www.governancenow.com/news/regular-story/csr-should-be-voluntary-best-results-sunil-mittal

[18]http://www.business-standard.com/article/economy-policy/ficci-wants-tax-concessions-says-no-to-mandatory-csr-109120700147_1.html

[19]https://www.thehindubusinessline.com/opinion/columns/rajiv-kumar/dont-make-csr-mandatory/article20311363.ece1

[20]https://economictimes.indiatimes.com/news/company/corporate-trends/world-of-csr-a-jigsaw-puzzle-for-many-companies/articleshow/45725877.cms

[21]https://www.livemint.com/Companies/dBCf5yVBdOLMvIVEFk8WlO/CSR-rules-need-flexibility-incentives-and-foresight-Richar.html

and environmental good. And most companies will comply by channeling funds to community organizations that are addressing one of the priority topics mentioned." - Chhavi Ghuliani, Associate Director, BSR[22]

- "I am not in favour. I dont know what will be achievedIn a large measure, the act of running the business and the act of doing social good are mutually independent things." - Nitin Paranjpe, MD and CEO, HUL[23]

- "Moreover, the definition of CSR activity could now get blurred with every company trying to cut down their budget. Companies might introduce some schemes for employees and pass these off as CSR." - Shobana Kamineni, Executive Director, Apollo Hospitals[24]

- "While CSR is a necessity, it should not be thrust upon companies. Thats not right." - Deepak Puri, Chairman, Moser Baer[25]

- "CSR spending is entirely a corporate entitys personal choice, no legislation is needed. If the government decides to make the clause mandatory, then it could also lead to manipulation." - Subodh Bhargava, Chairman of Tata Communications[26]

- "For most organisations, the discussion at board level is now not about what we do, but does it count as CSR and does it meet the legal requirements." - Vikas Goswami, Head of Godrej Industries Sustainability Program[27]

- "Anything that is made mandatory can be misused. If your heart is not in it and you are forced to do it, then it is easy to find wonderful ways to dodge." - Anu Aga, Director of Thermax[28]

- "CSR should not be seen as a compulsion but as an activity in terms of doing things which are meaningful and will create more value for the society." - Praful Patel, Former Minister for Industries and Public Enterprises[29]

- "I am quite clear that the government will not make it mandatory. We have to make it more persuasive by having more peer pressure, disclosure, setting own standards and self-regulation. It should be more than just "ticking a box"." - Salman Khurshid, Former Minister for Corporate Affairs[30]

[22]https://www.bsr.org/en/our-insights/blog-view/india-companies-act-2013-five-key-points-about-indias-csr-mandate

[23]http://causebecause.com/csr-in-india-government-for-mandatory-spends-corporate-india-not-sure/4112

[24]https://www.firstpost.com/business/mandatory-csr-india-inc-bristles-but-has-little-options-83310.html

[25]https://www.financialexpress.com/archive/india-inc-slams-making-csr-spend-mandatory/753034/

[26]https://www.financialexpress.com/archive/india-inc-slams-making-csr-spend-mandatory/753034/

[27]https://www.theguardian.com/sustainable-business/2016/apr/05/india-csr-law-requires-companies-profits-to-charity-is-it-working

[28]https://www.washingtonpost.com/world/india-mandates-increase-in-charitable-giving-by-corporations-critics-fear-government-control/2013/09/10/e556d53a-157d-11e3-961c-f22d3aaf19ab_story.html?noredirect=on&utm_term=.0108ab7f985b

[29]https://economictimes.indiatimes.com/news/company/corporate-trends/praful-patel-calls-for-measurable-value-from-corporate-social-responsibility/articleshow/12209613.cms

[30]https://economictimes.indiatimes.com/salman-khurshid-endorses-csr/articleshow/7250764.cms

- "Corporates should make their contributions in a participative manner with the CSR projects that they are involved in by developing the local surroundings in an around their project sites rather than making plain contributions in an artificial manner." - Jayant Sinha, Former Minister of State for Finance[31]

- "Mandatory CSR over and above taxation, forces companies to do the governments job. And trying to outsource the states primary job is a bad idea." - Rohini Nilekani, a philanthropist and wife of Nandan Nilekani[32]

Statements made in favour of the law:

- "The aim of the proposed law was to encourage firms to undertake social welfare voluntarily instead of imposing that through inspector raj and make India an attractive and safe investment destination." - Sachin Pilot, Former Minister of Corporate Affairs.[33]

- "I personally do." - Shiv Nadar, Founder and Chairman of HCL Technologies on being asked by reporters whether he welcomes the mandatory 2% CSR spending by corporates.[34]

- "CSR should be mandatory for the first three to five years. Thereafter, the momentum will be self-sustaining." - Harsh Goenka, Chairman of RPG Enterprises[35]

- "When we got the 2% CSR funding, it came as a boon to us." - Sudha Murty, Chairman, Infosys Foundation[36]

A2 Note on Reconciliation of Number of Observations

As noted in Table 2, our main sample consists of 16,334 observations. These are firm years where average three years' profit is more than Rupees 50 million. In our presentation of the tables, we use different categories of treatment and control firms. Hence, the number of observations in each regression varies based on the category we consider.

In Table 5, we consider only the treatment firms whereas in Table 6, we consider only the control firms. However, in Table 7, we consider all the firms together. Hence, the sum of observations in the corresponding columns of Table 5 and Table 6 should sum up to the number of observations of the corresponding column in Table 7. For example, in column 1 of Table 5 (where we consider only treatment firms), the number of observations is 2,718. In column 1 of Table 6 (where we consider only control firms), the number of observations

[31]https://economictimes.indiatimes.com/news/economy/policy/jayant-sinha-asks-corporates-to-be-participative-in-csr-activities/articleshow/45561672.cms

[32]http://indiacsr.in/csr-funds-kuber-ka-khajana/

[33]https://nextbillion.net/mandatory-csr-in-india/

[34]https://economictimes.indiatimes.com/news/company/corporate-trends/hcl-founder-shiv-nadar-welcomes-2-mandatory-spending-on-csr-activities/articleshow/25270023.cms

[35]https://economictimes.indiatimes.com/opinion/et-commentary/why-it-is-a-good-idea-to-mandate-corporate-social-responsibility/articleshow/16101647.cms

[36]https://www.livemint.com/Companies/nILMXOcl1xp6WJZpdVBoPK/CSR-funding-came-as-a-boon-says-Infosys-Foundations-Sudha.html

is 13,616. When these number of observations are summed up, we get 16,334 observations which is the same as that shown in column 1 of Table 7 (where we consider all firms). Using the same reasoning, the sum of observations from every pair of columns in Table 5 and Table 6 should be equal to the number of observations in the corresponding column of Table 7. We compare the same in the table given below.

Note that in columns 1 to 4, we employ only time and firm fixed effects. In other words, we do not use any firm level characteristic as a control variable. In columns 4 to 8, in addition to firm fixed effects, we also include firm level control variables. The data are missing for 1 firm years in the control sample. Therefore, the number of observations falls to 16,333 (1 less than 16,334).

TABLE A1: Reconciling The Number of Observations

In this table, we reconcile the number of observations between Tables 5 and 6.

Regression Type	**With Controls**				**Without Controls**			
Expected sum of Observations in Table 5 and Table 6	16,334	16,334	16,334	16,334	16,333	16,333	16,333	16,333
Column Number	1	2	3	4	5	6	7	8
Column Definition	< 2% CSR	< 5% CSR	< 7.5% CSR	< 10% CSR	< 2% CSR	< 5% CSR	< 7.5% CSR	< 10% CSR
Number of Observations in Table 5 [Treatment Firms]	2,718	1,187	805	622	2,718	1,187	805	622
Number of Observations in Table 6 [Control Firms]	13,616	15,147	15,529	15,712	13,615	15,146	15,528	15,711
Actual sum of Observations in Table 5 and Table 6	16,334	16,334	16,334	16,334	16,333	16,333	16,333	16,333

TABLE A2: Change in CSR Difference-In-Differences for Firms with Complete Data for Seven Years

In this table, we compare the CSR expenditure before and after the CSR mandate using a difference-in-differences framework. The sample is restricted to firms for which we have data for all seven years. Each observation represents a firm-year. CSR Ratio, as defined in Table 1, is the dependent variable. The threshold used to define the treatment is 2% in columns 1 and 5, 5% in columns 2 and 6, 7.5% in columns 3 and 7, and 10% in columns 4 and 8. Here, Post is a dummy variable that takes the value one for years after the regulation change, and zero otherwise. Treatment is a dummy variable that takes the value one for firms that invested above a threshold level in the pre-regulation period, and zero otherwise. Different threshold levels are considered in each column. Errors are clustered at the firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio
Post x Treatment	-0.16***	-0.31***	-0.40***	-0.49***	-0.16***	-0.32***	-0.41***	-0.48***
	[-3.09]	[-3.68]	[-3.60]	[-3.46]	[-3.21]	[-3.53]	[-3.60]	[-3.46]
Profits					-0.00	-0.00	-0.00	-0.00
					[-0.90]	[-0.90]	[-0.90]	[-0.89]
Total Assets					0.00	0.00	0.00	0.00
					[0.90]	[0.91]	[0.91]	[0.90]
Constant	0.03***	0.03***	0.03***	0.03***	0.05***	0.05***	0.05***	0.05***
	[3.54]	[3.51]	[3.51]	[3.52]	[2.75]	[2.74]	[2.75]	[2.75]
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treatment Classification Threshold	2%	5%	7.50%	10%	2%	5%	7.50%	10%
Observations	9,936	9,936	9,936	9,936	9,936	9,936	9,936	9,936
R-squared	0.20	0.20	0.20	0.20	0.22	0.22	0.22	0.22

TABLE A3: Change in CSR Difference-In-Differences without Considering 2013–2014

In this table, we compare the CSR expenditure before and after the CSR mandate using a difference-in-differences framework. We omit the year 2013–2014 from the sample. Each observation represents a firm-year. CSR Ratio, as defined in Table 1, is the dependent variable. The threshold used to define the treatment is 2% in columns 1 and 5, 5% in columns 2 and 6, 7.5% in columns 3 and 7, and 10% in columns 4 and 8. Here, Post is a dummy variable that takes the value one for years after the regulation change, and zero otherwise. Treatment is a dummy variable that takes the value one for firms that invested above a threshold level in the pre-regulation period, and zero otherwise. Different threshold levels are considered in each column. Errors are clustered at the firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio
Post x Treatment	-0.16***	-0.29***	-0.39***	-0.42***	-0.16***	-0.30***	-0.39***	-0.46***
	[-3.38]	[-3.93]	[-3.81]	[-2.95]	[-3.48]	[-3.75]	[-3.81]	[-3.69]
Profits					-0.00	-0.00	-0.00	-0.00
					[-0.84]	[-0.84]	[-0.84]	[-0.83]
Total Assets					0.00	0.00	0.00	0.00
					[0.84]	[0.85]	[0.84]	[0.84]
Constant	0.03***	0.03***	0.03***	0.03**	0.04***	0.04***	0.04***	0.04***
	[4.15]	[4.15]	[4.16]	[2.25]	[3.03]	[3.03]	[3.03]	[3.04]
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treatment Classification Threshold	2%	5%	7.50%	10%	2%	5%	7.50%	10%
Observations	13,681	13,681	13,681	13,681	13,680	13,680	13,680	13,680
R-squared	0.48	0.48	0.48	0.27	0.49	0.49	0.49	0.49

TABLE A4: Change in CSR Difference-In-Difference Placebo Test

In this table, we compare the CSR expenditure before and after the CSR mandate using a difference-in-differences framework. Here, we consider years 2012–2013 and 2013–2014 as placebo treatment years. Each observation represents a firm-year. CSR Ratio, as defined in Table 1, is the dependent variable. The threshold used to define the treatment is 2% in columns 1 and 5, 5% in columns 2 and 6, 7.5% in columns 3 and 7, and 10% in columns 4 and 8. Post is a dummy variable that takes the value one for years after the regulation change, and zero otherwise. Treatment is a dummy variable that takes the value one for firms that invested above a threshold level in the pre-regulation period, and zero otherwise. Different threshold levels are considered in each column. Errors are clustered at the firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio
Post x Treatment	-0.84	-1.41	-1.86	-2.32	-0.84	-1.41	-1.86	-2.32
	[-1.27]	[-1.25]	[-1.24]	[-1.23]	[-1.27]	[-1.25]	[-1.24]	[-1.23]
Profit					0.00	0.00	0.00	0.00
					[0.40]	[0.45]	[0.63]	[0.70]
Total Assets					0.00	0.00	0.00	0.00
					[1.00]	[0.97]	[0.92]	[0.93]
Constant	-32.38***	-32.37***	-32.37***	-32.36***	-33.17***	-33.16***	-33.16***	-33.15***
	[-272.14]	[-259.89]	[-251.01]	[-241.94]	[-280.74]	[-268.67]	[-260.00]	[-251.33]
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treatment Classification Threshold	2%	5%	7.50%	10%	2%	5%	7.50%	10%
Observations	76,200	76,200	76,200	76,200	74,391	74,391	74,391	74,391
R-squared	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

TABLE A5: Change in CSR Difference-In-Differences with Industry x Year Fixed Effects

In this table, we compare the CSR expenditure before and after the CSR mandate using a difference-in-differences framework. Each observation represents a firm-year. CSR Ratio, as defined in Table 1, is the dependent variable. The threshold used to define the treatment is 2% in columns 1 and 5, 5% in columns 2 and 6, 7.5% in columns 3 and 7, and 10% in columns 4 and 8. Here, Post is a dummy variable that takes the value one for years after the regulation change, and zero otherwise. Treatment is a dummy variable that takes the value one for firms that invested above a threshold level in the pre-regulation period, and zero otherwise. Different threshold levels are considered in each column. We include Industry x Year fixed effects in all specifications. Errors are clustered at the firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio	CSR Ratio
Post x Treatment	-0.14***	-0.25***	-0.34***	-0.41***	-0.14***	-0.26***	-0.34***	-0.41***
	[-3.69]	[-4.67]	[-4.46]	[-4.29]	[-3.76]	[-4.55]	[-4.47]	[-4.28]
Profits					-0.00	-0.00	-0.00	-0.00
					[-1.00]	[-1.00]	[-1.00]	[-0.99]
Total Assets					0.00	0.00	0.00	0.00
					[0.99]	[0.99]	[0.99]	[0.99]
Industry x Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treatment Classification Threshold	2%	5%	7.50%	10%	2%	5%	7.50%	10%
Observations	15,147	15,147	15,147	15,147	15,146	15,146	15,146	15,146
R-squared	0.21	0.21	0.21	0.21	0.23	0.23	0.23	0.23

TABLE A6: Impact of Non-Mandatory CSR

In this table, we regress the difference between the post-regulation period CSR expendtiure, as reported by our two data sources (Prowess and Ministry), on the difference in average CSR Ratio (as deinfed in Table 1) between the pre-regulation period and the post-regulation period. Each observation represents a firm level entry. The threshold used to define the treatment is 2% in columns 1 and 5, 5% in columns 2 and 6, 7.5% in columns 3 and 7, and 10% in columns 4 and 8. Treatment is a dummy variable that takes the value one for firms that invested above a threshold level in the pre-regulation period, and zero otherwise. Different threshold levels are considered in each column. Errors are clustered at the firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

Panel A

Dependent Variable	(1) Average CSR Difference	(2) Average CSR Difference	(3) Average CSR Difference	(4) Average CSR Difference	(5) Average CSR Difference	(6) Average CSR Difference	(7) Average CSR Difference	(8) Average CSR Difference
CSR Pre - CSR Post	-0.01	-0.01	0.02	0.02	-0.01	-0.01	0.02	0.03
	[-0.05]	[-0.05]	[0.15]	[0.17]	[-0.05]	[-0.03]	[0.16]	[0.18]
Average Profits					0.00	0.00	-0.00	-0.00
					[1.15]	[0.44]	[-0.07]	[-0.11]
Average Total Assets					-0.00**	-0.00**	-0.00	-0.00
					[-2.23]	[-2.03]	[-0.37]	[-0.31]
Constant	-0.08	-0.17	0.55	0.70	0.10	0.31	0.65	0.83
	[-0.28]	[-0.26]	[1.10]	[1.08]	[0.32]	[0.43]	[1.17]	[1.16]
Observations	502	221	151	118	502	221	151	118
R-squared	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00

Panel B

Dependent Variable	(1) Average CSR Difference	(2) Average CSR Difference	(3) Average CSR Difference	(4) Average CSR Difference	(5) Average CSR Difference	(6) Average CSR Difference	(7) Average CSR Difference	(8) Average CSR Difference
CSR Pre - CSR Post	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
	[-0.28]	[-0.29]	[-0.29]	[-0.29]	[-0.23]	[-0.24]	[-0.24]	[-0.24]
Treatment x (CSR Pre - CSR Post)	0.01	0.01	0.04	0.04	0.01	0.00	0.03	0.04
	[0.12]	[0.08]	[0.47]	[0.53]	[0.08]	[0.04]	[0.44]	[0.50]
Treatment	-0.08	-0.17	0.59***	0.74***	-0.09	-0.18	0.59***	0.73***
	[-0.70]	[-1.01]	[2.86]	[3.16]	[-0.72]	[-1.02]	[2.85]	[3.15]
Average Profits					0.00	0.00	0.00	0.00
					[0.52]	[0.50]	[0.51]	[0.48]
Average Total Assets					-0.00	-0.00	-0.00	-0.00
					[-0.80]	[-0.79]	[-0.75]	[-0.74]
Constant	0.00	0.00	-0.03	-0.03	0.01	0.01	-0.03	-0.03
	[0.06]	[0.04]	[-0.81]	[-0.80]	[0.15]	[0.13]	[-0.72]	[-0.70]
Observations	3,401	3,401	3,401	3,401	3,401	3,401	3,401	3,401
R-squared	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A7: Change in CSRP Ratio for Treatment Firms

In this table, we compare the CSR expenditure before and after the CSR mandate. Here, CSRP Ratio represents the ratio between CSR Expenditure (reported only by Prowess) and the average profit in the previous three years. Firms spending above a threshold in terms of proportion of previous three year's average profits are included in the sample. The threshold used is 2% in columns 1 and 5, 5% in columns 2 and 6, 7.5% in columns 3 and 7, and 10% in columns 4 and 8. The sample is restricted to firms with previous three years' average profit of more than INR 50 million. Each observation represents a firm-year. CSRP Ratio is the dependent variable. The explanatory variable of interest - Post - is a dummy variable, taking the value of one for years after the regulation change, and zero otherwise. Errors are clustered at the firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable	CSRP Ratio	CSRP Ratio	CSRP Ratio	CSRP Ratio	CSRP Ratio	CSRP Ratio	CSRP Ratio	CSRP Ratio
Post	-0.07***	-0.18***	-0.22***	-0.27***	-0.05**	-0.14***	-0.20***	-0.26***
	[-2.82]	[-3.03]	[-3.07]	[-3.00]	[-2.47]	[-2.64]	[-2.77]	[-2.73]
Profits					0.00	0.00	-0.00**	-0.00*
					[0.42]	[0.39]	[-2.16]	[-1.86]
Total Assets					-0.00	-0.00*	-0.00	-0.00
					[-1.45]	[-1.76]	[-0.96]	[-0.51]
Constant	0.13***	0.25***	0.34***	0.41***	0.15***	0.29***	0.41***	0.48***
	[30.86]	[25.89]	[27.90]	[26.02]	[9.62]	[8.40]	[10.03]	[9.63]
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treatment Classification Threshold	2%	5%	7.50%	10%	2%	5%	7.50%	10%
Observations	2,743	1,204	822	635	2,743	1,204	822	635
R-squared	0.66	0.65	0.67	0.66	0.66	0.66	0.67	0.67

TABLE A8: Change in CSRP Ratio for Control Firms

In this table, we compare the CSR expenditure before and after the CSR mandate. Here, CSRP Ratio represents the ratio between CSR Expenditure (reported only by Prowess) and the average profit in the previous three years. Firms investing below a threshold in terms of proportion of previous three year's average profits are included in the sample. The threshold used is 2% in columns 1 and 5, 5% in columns 2 and 6, 7.5% in columns 3 and 7, and 10% in columns 4 and 8. The sample is restricted to firms with previous three years' average profit of more than INR 50 million. Each observation represents a firm-year. CSRP Ratio is the dependent variable. The explanatory variable of interest - Post - is a dummy variable, taking the value one for years after the regulation change, and zero otherwise. Errors are clustered at the firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable	CSRP Ratio	CSRP Ratio	CSRP Ratio	CSRP Ratio	CSRP Ratio	CSRP Ratio	CSRP Ratio	CSRP Ratio
Post	0.06	0.05	0.05	0.05	0.05	0.04	0.04	0.04
	[1.22]	[1.24]	[1.19]	[1.18]	[1.35]	[1.37]	[1.31]	[1.31]
Profits					-0.00	-0.00	-0.00	-0.00
					[-0.84]	[-0.84]	[-0.82]	[-0.82]
Total Assets					0.00	0.00	0.00	0.00
					[0.85]	[0.85]	[0.83]	[0.82]
Constant	-0.00	-0.00	0.00	0.00	0.01	0.01	0.01	0.01
	[-0.59]	[-0.10]	[0.12]	[0.28]	[0.56]	[0.87]	[1.01]	[1.09]
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treatment Classification Threshold	2%	5%	7.50%	10%	2%	5%	7.50%	10%
Observations	13,625	15,164	15,546	15,733	13,624	15,163	15,545	15,732
R-squared	0.29	0.29	0.29	0.29	0.31	0.31	0.30	0.30

TABLE A9: Comparison Between Treatment And Control Firms using CSRP Ratio

In this table, we compare the CSR expenditure before and after the government mandated 2% spending levels between treatment and control firms. Here, CSRP Ratio represents the ratio between CSR Expenditure (reported only by Prowess) and the average profit in the previous three years. The sample is restricted to firms with previous three years' average profit of more than INR 50 million. Each observation represents a firm-year. CSRP Ratio is the dependent variable. Firms investing above a threshold in terms of proportion of previous three year's average profits are considered as treatment firms. The threshold used is 2% in columns 1 and 5, 5% in columns 2 and 6, 7.5% in columns 3 and 7, and 10% in columns 4 and 8. Post is a dummy variable taking the value one for years after the regulation change, and zero otherwise. The explanatory variable of interest is the interaction between Post and Treatment variables. Errors are clustered at the firm level and robust t-statistics are reported in parentheses. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variable	CSRP Ratio	CSRP Ratio	CSRP Ratio	CSRP Ratio	CSRP Ratio	CSRP Ratio	CSRP Ratio	CSRP Ratio
Post x Treatment	-0.12**	-0.22***	-0.26***	-0.31***	-0.12**	-0.24***	-0.27***	-0.31***
	[-2.35]	[-3.24]	[-3.31]	[-3.30]	[-2.42]	[-2.88]	[-3.27]	[-3.34]
Profit					-0.00	-0.00	-0.00	-0.00
					[-0.83]	[-0.83]	[-0.83]	[-0.83]
Total Assets					0.00	0.00	0.00	0.00
					[0.84]	[0.84]	[0.84]	[0.84]
Constant	0.03***	0.03***	0.03***	0.03***	0.05***	0.05***	0.05***	0.05***
	[4.24]	[4.25]	[4.24]	[4.26]	[2.98]	[2.98]	[2.98]	[2.98]
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Treatment Classification Threshold	2%	5%	7.50%	10%	2%	5%	7.50%	10%
Observations	16,368	16,368	16,368	16,368	16,367	16,367	16,367	16,367
R-squared	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33

TABLE A10: Comparison between High and Low CSR Firms

In this table, we compare high and low CSR firms in terms of observable characteristics in the pre-regulation period. Here, we restrict the sample to firms that have data for all seven years. We use the CSR-H measure (as defined in Table 1) for classification. Median values are given in parentheses.

Variable	Low CSR	High CSR	High-Low	T-Stat
	Pre-regulation Preiod (In Millions)			
Profits	1,565	1,601	-36	-0.13
	(142.7)	(196.05)	(53.35)	
Sales	22,466	22,205	261	0.06
	(3,105.2)	(4,742.4)	(1,637.2)	
Assets	45,512	27,878	17,634***	3.10
	(4,280.3)	(5,121.5)	(8,41.2)	
	Post-regulation Period (In Millions)			
Profits	1,858	1,582	276	0.5
	(156.8)	(238.7)	(81.9)	
Sales	27,248	27,023	225	0.5
	(3,958.55)	(6,049.1)	(2,090.55)	
Assets	67,972	37,230	30,742**	2.29
	(6,110.75)	(7,522.05)	(1,411.3)	

TABLE A11: Classification of CSR Firms based on CSR Expenditure between pre-period and post-period

In this table, we classify the treatment firms based on their change in CSR expenditure between the pre-period and the post-period. We use the CSR Ratio measure (as defined in Table 1) for classification.

	Groups Based on Pre-Period CSR Ratio–Full Sample		
	0 to 2	2 to 5	5 to 10
Treatment companies that decreased CSR	445	252	94
Treatment Companies that increased CSR	35	29	3

TABLE A12: Comparison of CSR Expenditure with KPMG Report

In this table, we compare the total CSR expenditure as calculated by both our sources of data against that reported by a KPMG report. Since the KPMG report calculates total CSR expenditure for the top 100 companies by market capitalization i.e. N100, we also do the same.

Cateogory of Data	Year	
	2014-2015	2015-2016
Total Expenditure by N100 companies according to KPMG report [in Rupees Million]	51,145	65,180
Total CSR Expenditure by N100 companies according to Prowess Data [in Rupees Million]	62,678	73,948
Total CSR Expenditure by N100 companies according to Ministry Data [in Rupees Million]	49,517	60,394