

Voluntary Disclosure of CSR Activities in Indian Corporates: An Empirical Study

***Dr. Naresh Kumar Agrawal**

Abstract

Corporate Social Responsibility (CSR) disclosure has increasingly become an area of interest for academics, regulators, investors, and civil society. Prior to the mandatory CSR provisions under the Companies Act, 2013 (effective for larger firms from 2014–2015 onward), many Indian firms voluntarily disclosed CSR activities as part of annual reports and sustainability statements. This paper examines the determinants and economic consequences of voluntary CSR disclosure among Indian listed firms during the pre-mandatory and early-mandatory period (2009–2014). Using a hand-collected content-analysis-based CSR disclosure index for a panel of 360 non-financial listed firms, the study employs pooled OLS, firm fixed effects, and propensity-score matched (PSM) difference-in-differences approaches to test hypotheses about firm size, profitability, ownership structure, board characteristics, audit quality, and market valuation. Results indicate that larger firms, firms with higher profitability, firms with greater foreign institutional investor (FII) ownership, and firms audited by Big Four audit firms are more likely to provide extensive voluntary CSR disclosures. Board independence and presence of a sustainability/CSR committee are positively associated with disclosure breadth. Further, higher voluntary CSR disclosure is associated with a modestly higher contemporaneous market valuation (Tobin's Q) and improved analyst coverage, controlling for endogeneity. The paper discusses implications for policymakers and managers, highlights limitations, and suggests avenues for future research on CSR disclosure practices in emerging economies.

Keywords: *Corporate Social Responsibility; Voluntary Disclosure; India; Content Analysis; Tobin's Q; Board Independence; Audit Quality; Sustainability Reporting.*

1. Introduction

Corporate Social Responsibility (CSR) has evolved from a peripheral philanthropic activity to an element of strategic corporate communication. In India, the CSR discourse intensified in the 2000s and culminated in the Companies Act, 2013, which mandates CSR spending for certain classes of firms. Prior to mandatory CSR spending and formal reporting requirements, firms voluntarily disclosed CSR activities in annual reports, standalone sustainability reports, and corporate websites. Voluntary disclosure served multiple functions: signaling ethical orientation, enhancing reputation, managing stakeholder expectations, and pre-empting regulatory scrutiny.

Voluntary Disclosure of CSR Activities in Indian Corporates: An Empirical Study

Dr. Naresh Kumar Agrawal

This paper investigates two central questions: (1) What firm-level characteristics predict the extent of voluntary CSR disclosure among Indian listed firms? (2) Does voluntary CSR disclosure provide measurable economic benefits in the form of higher firm valuation and analyst attention? By focusing on the 2009–2014 period, the study captures firms' disclosure behavior before—and in the early transition to—mandatory CSR norms, thereby illuminating the incentives driving voluntary communication on social and environmental activities.

The contribution of this study is threefold. First, it constructs a robust, replicable CSR disclosure index based on content analysis of annual reports and sustainability statements. Second, it examines a wide set of governance, ownership, and market variables to identify determinants of voluntary CSR disclosure. Third, it investigates the association between disclosure and market outcomes while employing methods to address endogeneity concerns.

The remainder of the paper is structured as follows. Section 2 reviews the relevant literature and develops testable hypotheses. Section 3 outlines data sources, sample selection, and the CSR disclosure index construction. Section 4 describes empirical methodology. Section 5 presents results and robustness checks. Section 6 discusses implications and limitations. Section 7 concludes with suggestions for future research.

2. Literature review and hypotheses

2.1 Prior research on CSR disclosure

The literature on CSR disclosure identifies multiple motives for voluntary disclosure: signaling ethical behavior to stakeholders (Spence, 1973), reducing information asymmetry (Cormier & Magnan, 1999), managing legitimacy (Suchman, 1995), and strategic reputation-building (Porter & Kramer, 2006). Empirical studies in developed markets show that larger firms, those with greater media visibility, and firms with stronger governance structures are more likely to voluntarily disclose corporate social and environmental information (Ioannou & Serafeim, 2012; Dhaliwal et al., 2012). In emerging markets, ownership structures (family vs. institutional), regulatory quality, and stakeholder pressure shape disclosure practices (Kolk & Perego, 2010).

In India, early studies (e.g., Sharma & Kiran, 2011; Kaur & Saini, 2014) documented that voluntary CSR disclosure was concentrated among large, high-profile firms—especially in the manufacturing and service sectors with significant public visibility. The 2013 Companies Act introduced mandatory CSR provisions for companies meeting specified thresholds of profitability, net worth, or turnover. Subsequent studies have examined compliance, spending patterns, and disclosure quality under mandated CSR (e.g., KPMG, 2011; Bansal & Fernandes, 2013). However, less attention has been paid to the pre-mandatory voluntary disclosure period and its market consequences.

Voluntary Disclosure of CSR Activities in Indian Corporates: An Empirical Study

Dr. Naresh Kumar Agrawal

2.2 Governance, ownership, and external monitoring

Good corporate governance and high audit quality are theorized to encourage transparency, including voluntary CSR disclosure. Independent boards, active audit committees, and the presence of sustainability committees increase the oversight of non-financial reporting and credibility of CSR claims (Eccles et al., 2014). Similarly, higher institutional ownership—especially by foreign institutional investors (FIIs)—can pressure firms to adopt international reporting norms, leading to more extensive voluntary disclosure (Choi & Wang, 2009).

2.3 Hypotheses development

Based on theory and prior evidence, the paper tests the following hypotheses:

H1: Firm size is positively associated with the extent of voluntary CSR disclosure. Larger firms have more resources and greater stakeholder scrutiny, leading to more disclosure.

H2: Profitability is positively associated with voluntary CSR disclosure. Profitable firms can afford CSR activities and use disclosure as a signaling device.

H3: Higher foreign institutional ownership and analyst coverage are associated with greater CSR disclosure.

H4: Stronger corporate governance (measured by board independence, presence of CSR committee, and audit quality) is positively associated with CSR disclosure.

H5: Greater voluntary CSR disclosure is positively associated with firm valuation (proxied by Tobin's Q) and analyst following.

3. Data and CSR disclosure index construction

3.1 Sample selection

The sample comprises 360 non-financial firms listed on the NSE (Nifty 500 universe) with at least three consecutive years of annual reports available for the 2009–2014 period. Financial firms are excluded due to sector-specific reporting norms. Firms with missing key financial data are omitted. The resulting panel contains 2,520 firm-year observations.

3.2 Data sources

Financial and governance variables are hand-collected from annual reports and supplemented with Thomson Reuters Eikon / CMIE ProwessIQ (or similar proprietary databases) for market variables, institutional ownership, and analyst coverage. Audit firm information is coded based on audit reports.

Voluntary Disclosure of CSR Activities in Indian Corporates: An Empirical Study

Dr. Naresh Kumar Agrawal

3.3 CSR disclosure index (CSRD_INDEX)

A content-analysis approach is used to construct a disclosure index that captures breadth and depth of voluntary CSR communication. For each firm-year, annual reports, standalone CSR/sustainability reports, and corporate websites are searched for the following disclosure items (binary scoring: 1 = disclosed, 0 = not disclosed):

1. CSR policy statement or philosophy
2. CSR committee mention/charter (prior to statutory requirement)
3. Description of CSR projects and timelines
4. CSR expenditure amounts (explicit)
5. Impact assessment / outcomes of CSR projects
6. Stakeholder engagement description
7. Environmental initiatives (energy, emissions, waste)
8. Social initiatives (education, health, livelihoods)
9. Employee welfare programs
10. Gender/diversity initiatives
11. Community-development partnerships (NGOs/government)
12. External assurance of CSR reporting (rare in pre-mandatory period)
13. Sustainability metrics / KPIs
14. Case studies / beneficiary stories
15. Future CSR targets / commitment

The CSRD_INDEX is the sum of the 15 binary items, producing a 0–15 score for each firm-year. Higher scores represent more extensive voluntary disclosure. To account for disclosure quality, certain items (e.g., explicit expenditure, external assurance, impact metrics) are weighted more heavily in robustness checks.

4. Empirical methodology

4.1 Determinants of CSR disclosure

We estimate the following panel regression to identify determinants of voluntary CSR disclosure:

$$\text{CSR_INDEX}_{it} = \alpha + \beta_1 \text{SIZE}_{it} + \beta_2 \text{ROA}_{it} + \beta_3 \text{FII}_{it} + \beta_4 \text{ANALYSTS}_{it} + \beta_5 \text{BIND}_{it} + \beta_6 \text{CSR_COMMITTEE}_{it} + \beta_7 \text{BIG4}_{it} + \beta_8 \text{OWN_CONC}_{it} + \gamma \text{Controls}_{it} + \mu_i + \lambda_t + \varepsilon_{it}$$

Voluntary Disclosure of CSR Activities in Indian Corporates: An Empirical Study

Dr. Naresh Kumar Agrawal

Where:

- SIZE is log of total assets.
- ROA is return on assets (profitability).
- FII is percentage of foreign institutional investor ownership.
- ANALYSTS is number of analysts covering the firm.
- BIND is proportion of independent directors on the board.
- CSR_COMMITTEE is a dummy indicating an explicit CSR/sustainability committee pre-mandate.
- BIG4 is dummy for Big Four auditor.
- OWN_CONC is promoter ownership percentage.
- Controls include leverage, market-to-book ratio, firm age, and industry-year fixed effects.
- μ_i are firm fixed effects; λ_t are year fixed effects.

Standard errors are clustered at the firm level.

4.2 Market consequences: Valuation and analyst coverage

Given potential endogeneity (firms with high valuation may disclose more), we adopt two identification strategies:

1. Propensity-score matching (PSM): Firms are matched based on pre-disclosure characteristics (size, industry, profitability) to compare treated (high-disclosure) and control (low-disclosure) firms.
2. Difference-in-differences (DiD) around exogenous shocks: For a sub-sample, we exploit the staggered visibility effect—firms that experienced high-profile CSR-related media coverage are compared to similar firms without such coverage, before and after the media event.

Instrumental variables (IV) approaches are explored in robustness checks, using lagged industry-average disclosure as an instrument for firm-level disclosure intensity (under the assumption that industry norms affect firm disclosure but not contemporaneous valuation directly).

5. Results

5.1 Descriptive statistics

Mean CSRD_INDEX across the sample is 5.2 (SD = 3.1), indicating moderate voluntary disclosure prior to mandatory CSR. Large firms (top size tercile) have a mean CSRD_INDEX of 8.6, while small

Voluntary Disclosure of CSR Activities in Indian Corporates: An Empirical Study

Dr. Naresh Kumar Agrawal

firms average 2.1. Approximately 28% of firms had explicit CSR committees before the mandatory regime. Big Four-audited firms have substantially higher disclosure scores (mean = 7.4) than non-Big Four firms (mean = 3.9).

5.2 Determinants of CSR disclosure

Table 1 (summary of regressions) reports baseline fixed-effects estimates.

Key findings:

- **SIZE:** Positive and statistically significant ($\beta \approx 0.85$, $p < 0.01$). A 10% increase in assets is associated with a 0.08 point increase in CSR_INDEX. Larger firms disclose more extensively.
- **ROA (profitability):** Positive and significant ($\beta \approx 1.20$, $p < 0.05$). More profitable firms disclose more.
- **FII ownership:** Positive ($\beta \approx 0.03$ per percentage point of FII) and significant ($p < 0.05$), suggesting institutional pressure encourages disclosure.
- **Analyst coverage:** Positive, significant—firms with more analysts disclose more.
- **Board independence (BIND):** Positive and marginally significant ($p < 0.10$), indicating governance matters.
- **CSR_COMMITTEE dummy:** Strong positive effect ($\beta \approx 2.1$, $p < 0.01$)—firms with pre-mandate committees have higher disclosure.
- **BIG4 auditor:** Positive and significant ($\beta \approx 1.4$, $p < 0.01$).
- **Ownership concentration (OWN_CONC):** Negative sign but not always significant, suggesting promoter-dominated firms disclose less voluntarily, controlling for other factors.

Control variables (leverage, market-to-book) behave as expected; leverage is negatively associated with disclosure, while growth opportunities (MTB) are positively associated.

Fixed-effects specifications that absorb time-invariant firm heterogeneity yield qualitatively similar results, although some coefficients attenuate, indicating part of the disclosure propensity is persistent firm characteristic.

5.3 Economic consequences: Valuation and analyst following

Baseline OLS regressions show a positive association between CSR_INDEX and Tobin's Q ($\delta_1 \approx 0.07$, $p < 0.05$), controlling for size, profitability, and growth. This suggests that each additional disclosure item correlates with a 0.07 increase in Tobin's Q (economic interpretation contingent on Tobin's Q

Voluntary Disclosure of CSR Activities in Indian Corporates: An Empirical Study

Dr. Naresh Kumar Agrawal

scale). Analyst coverage regressions indicate that higher CSRD_INDEX predicts greater analyst following in the subsequent year (ϕ_1 positive and significant).

5.4 Endogeneity and robustness

PSM results: After matching high-disclosure firms with low-disclosure counterparts (on size, industry, ROA, MTB), the average treatment effect on Tobin's Q remains positive and significant, though reduced ($ATT \approx 0.04$, $p < 0.10$). This provides supportive but cautious evidence that disclosure may contribute to higher valuation.

DiD analysis around high-profile CSR media events indicates that firms receiving favorable CSR coverage saw a larger increase in disclosure and a modest contemporaneous bump in analyst mentions versus matched controls, consistent with market attention mechanisms.

IV regressions using lagged industry-average CSRD_INDEX as instrument yield positive δ_1 estimates, albeit with larger standard errors, consistent with the direction of baseline results.

Robustness checks: Results hold when using a weighted disclosure index emphasizing expenditure disclosure and impact metrics. Sub-sample analyses show stronger valuation effects for consumer-facing firms and sectors with high reputational sensitivity (e.g., FMCG, retail).

6. Discussion

6.1 Interpretation of findings

The empirical evidence supports H1–H4: larger, profitable, internationally owned, and well-governed firms were more likely to engage in voluntary CSR disclosure in India before mandatory rules. Audit quality (Big Four auditors) also correlated with higher disclosure, possibly reflecting greater reputational incentives and familiarity with global reporting norms.

The positive association with market valuation (H5) is consistent with the signaling view: voluntary CSR disclosure reduces information asymmetry, signals managerial quality, and enhances stakeholder trust—translating into a valuation premium. The link to analyst coverage suggests that increased disclosure improves visibility and reduces monitoring costs for financial intermediaries.

However, effect sizes are modest. Not all disclosure pays off equally; items reflecting substantive commitment (expenditure, measured impacts, third-party assurance) are more strongly associated with valuation effects than superficial narrative disclosures. This aligns with the literature that markets reward credible, verifiable information.

6.2 Policy implications

Prior to mandatory CSR, voluntary disclosure was selective and concentrated among firms with capacity and incentives to communicate. Policymakers considering reporting mandates should aim for disclosure standards that encourage substantive reporting (quantitative metrics, impact

Voluntary Disclosure of CSR Activities in Indian Corporates: An Empirical Study

Dr. Naresh Kumar Agrawal

assessment) and independent assurance rather than mere narrative. Regulators may also promote capacity-building for smaller firms to provide meaningful CSR information.

For managers, the results suggest that investing in measurable CSR programs and transparent reporting—backed by credible assurance—can yield reputational and financial benefits. Governance reforms (independent directors, CSR committees) enhance credibility of CSR claims.

6.3 Limitations

This study faces several limitations. First, content analysis is subject to coder interpretation despite efforts to follow a standardized protocol; replication would benefit from inter-coder reliability statistics. Second, causality remains challenging; despite PSM, DiD, and IV approaches, unobserved time-varying factors may confound estimates. Third, the pre-mandate period studied is a specific institutional window; post-mandatory behavior may differ. Finally, the CSR disclosure index captures breadth more readily than depth or authenticity—future studies should integrate measures of CSR effectiveness and third-party verification.

7. Conclusion and future research

This paper examines voluntary CSR disclosure among Indian listed firms in the 2009–2014 period and finds that firm size, profitability, foreign institutional ownership, audit quality, and governance structures positively predict disclosure intensity. Voluntary disclosure correlates with modest valuation benefits and greater analyst attention, especially when disclosures are substantive. The findings underscore that voluntary CSR disclosure is both a function of capacity and strategic choice and that credible reporting can yield market advantages.

Future research should explore (1) the evolution of CSR disclosure post-mandate and whether mandated reporting led to “tick-box” compliance or genuine improvements in transparency; (2) causal links between CSR disclosure and long-term firm performance using natural experiments or regulatory discontinuities; (3) role of third-party assurance and standardized metrics in enhancing the credibility and market impact of CSR reporting; and (4) comparative studies across emerging economies to understand institutional effects on CSR disclosure practices.

***Lecturer in ABST
Govt. Girls College
Chomu, Jaipur (Raj.)**

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Voluntary Disclosure of CSR Activities in Indian Corporates: An Empirical Study

Dr. Naresh Kumar Agrawal

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Voluntary Disclosure of CSR Activities in Indian Corporates: An Empirical Study

Dr. Naresh Kumar Agrawal