

Sustainability Reports and Stock Performance.

Deepak Kumar Kedia¹, Dr. Biswajit Satpathy²

1. Research Scholar, Dept. of Business Administration, Sambalpur University,
kediadeepak0663@gmail.com
2. Professor, Dept. of Business Administration, Sambalpur University,
satpathybulu@gmail.com

ABSTRACT

With the evolution of technology in the last few decades, the stock markets have also developed to a great extent. With development of mass media new information easily spreads into the stock market. Some information positively effects the stock prices while others effect negatively. The aim of this paper is to analyse the effect of release of sustainable reportof the companies on their stock prices and to find out ways through which companies can promote sustainability and enhance responsible business practices. Event Study Methodology has been used in the study to analyse the data. The findings of the study will provide important insights into the expected impact of sustainability on the stock prices of the concerned companies and more generally, the relationship between sustainable initiatives and stock performance.

Keyword: Sustainability, Abnormal Returns, Event Study.

INTRODUCTION:

In the contemporary business landscape, the imperative of sustainable development has become increasingly pronounced, reshaping the way companies operate and investors evaluate opportunities. As the world grapples with pressing environmental and social challenges, responsible business practices have emerged as a key driver of long-term value creation. The publication of sustainability reports has grown in popularity as businesses realize the value of environmental, social, and governance (ESG) considerations in their operations. These reports not only serve as a testament to a company's commitment to sustainable practices but also offer stakeholders valuable insights into its environmental and social impact. The question whether responsible business practices influence stock prices has gained traction, however empirical evidence remains mixed and context-dependent. A comprehensive understanding of how sustainability reports influence market valuations can inform firms' disclosure strategies, enabling them to better communicate their sustainability initiatives to investors and stakeholders. Therefore, this study endeavours to shed light on the nuanced interplay between sustainability reporting and stock prices through an event study methodology. Additionally, insights gleaned from this study can guide companies in prioritizing their sustainability efforts.

LITERATURE REVIEW

According to Porter and Kramer (2011), corporate social responsibility (CSR) is becoming a crucial component of businesses' long-term strategic planning and day-to-day operations. Corporate social responsibility (CSR) has been linked to a growing number of desirable economic outcomes, such as enhanced customer loyalty and satisfaction, enhanced company reputation, and increased consumer resilience to adverse events (Klein and Dawar, 2004; Luo and Bhattacharya 2006). The notion that stock return and corporate social performance are related is not new; several studies have examined the effects of CSR disclosure on firms' risk profiles, performance, and reputation (Grey et al. 1995; Pava and Krausz 1996; Scholtens 2009; Simpson and Kohers 2002; Jizi et al, 2013). Nonetheless, there has been a notable surge in empirical research in this field in recent times, exploring the potential financial benefits of investing in socially conscious firms.

Market values for CSR initiators with high perceived credibility and high quality of CSR reporting are greater than those with low perceived credibility and medium or low quality of CSR reporting (Wang and Li, 2015). Higher-quality CSR disclosures give investors the knowledge they require about their social profile, which in turn raises stock prices (Jizi et al., 2016). A company that engages in corporate social responsibility may guarantee a beneficial effect on stock performance. It is recommended that policymakers use practical methods to incentivize companies to engage in socially responsible activities (Ahmed et al., 2017). Research has demonstrated that sustainable indices and green portfolios perform better than non-sustainable and conventional stock indexes (Fang et al, 2021 ; Curto and Vital, 2014).

One of the most significant ways that businesses inform investors about their social and environmental performance is through CSR reports, which are distinguished by their thoroughness and greater degree of detail when compared to other CSR information (Dawkins 2004; Perrini 2006; Dhaliwal et al. 2011). Increased transparency broadens a company's investment base and raises investor awareness, which might enhance risk-sharing (Merton 1987). Investor confidence in a company's capacity to manage the long-term repercussions from these intra-industry crises is bolstered by CSR disclosure. Consequently, companies might avert unfavorable market responses by showcasing their excellent CSR performance through more transparency prior to the occurrence of an unfavorable incident (Heflin and Wallace, 2017). Arya and Zhang (2009) found that substantial financial gains for shareholders follow CSR announcements.

The effects of publication of CSR reports and disclosure on the stock market have been the subject of several studies,

however the results have not always been consistent. There haven't been any studies done using sustainability reports by multiple firms. In an attempt to bridge the gap, this study analyzes stock data from a number of carefully chosen firms and uses the event study technique to look into how the release of a sustainability report impacts stock returns.

METHODOLOGY

Using the Python `y.finance` package, daily index data of the NIFTY 500 as well as the daily closing data of a subset of firms (chosen based on the NIFTY sectoral indices, with the top three companies from each of the top five sectors) were extracted. Fifteen companies in all were chosen to carry out the study. The days leading up to the publication of the report were identified as t_{0-i} (pre-event days), the day when corporations issued their sustainability reports was identified as t_0 (event day), and the days that followed the release of the report were identified as t_{0+i} (post-event days). Two event periods were included for the study: 11 days (5 pre event and 5 post event) and 31 days (15 pre event and 15 post event) for each firm. Based on recognised literature, an estimation time of 250 days, i.e., 250 days before the event window—was used for the computation of the normal returns.

The daily stock price data was obtained, modified into daily returns, and subsequently changed into abnormal returns using `numpy`, `pandas`, `y.finance`, `scipy`, and `linregress`, among other Python tools. The data was then extracted and imported into SPSS and Excel for additional processing and analysis.

The Market Model (MacKinlay 1997) has been used in this study to compute abnormal returns, and the standard paired t-test has been used to assess and examine how stock prices have responded to the release of Sustainable Reports.

ANALYSIS & FINDINGS

| Pre-Event Descriptive Statistics | | | | | | |
|----------------------------------|---------|---------|--------|----------------|----------|----------|
| COMPANY | Minimum | Maximum | Mean | Std. Deviation | Skewness | Kurtosis |
| TATAMOTORS | -.0220 | .0480 | .0028 | .0160 | 1.7472 | 4.3624 |
| M&M | -.0220 | .0240 | -.0023 | .0126 | .2559 | -.1658 |
| MARUTI | -.0130 | .0130 | -.0008 | .0079 | .0394 | -1.0235 |
| SBIN | -.0080 | .0290 | .0051 | .0097 | 1.0792 | 1.3471 |
| HDFC | -.0160 | .0080 | -.0012 | .0067 | -.8901 | .2359 |
| ICICI | -.0160 | .0100 | -.0017 | .0080 | -.3929 | -.5926 |
| ITC | -.0160 | .0210 | -.0006 | .0095 | .9302 | 1.0978 |
| HINDUNILVR | -.0180 | .0190 | -.0015 | .0090 | .2180 | 1.3966 |
| NESTLEIND | -.0150 | .0410 | .0032 | .0149 | 1.4431 | 1.9146 |
| INFY | -.0080 | .0160 | .0018 | .0075 | .2436 | -.7910 |
| TCS | -.0110 | .0180 | -.0001 | .0079 | .7898 | .3392 |
| HCL | -.0130 | .0120 | -.0023 | .0068 | .4935 | -.1335 |
| RELIANCE | -.0210 | .0150 | -.0002 | .0106 | -.6158 | -.3539 |
| ADANI | -.0280 | .0470 | .0064 | .0221 | .1872 | -.6251 |
| ONGC | -.0190 | .0250 | .0043 | .0122 | .1912 | -.0471 |

Table-1: Descriptive statistics of the companies' abnormal stock return in the Pre event window

| Post-Event Descriptive Statistics | | | | | | |
|-----------------------------------|---------|---------|--------|----------------|----------|----------|
| COMPANY | Minimum | Maximum | Mean | Std. Deviation | Skewness | Kurtosis |
| TATAMOTORS | -.0250 | .0150 | .0001 | .0103 | -.9503 | 1.3070 |
| M&M | -.0280 | .0210 | -.0023 | .0136 | -.0933 | -.5655 |
| MARUTI | -.0110 | .0110 | .0007 | .0061 | .1277 | -.3743 |
| SBIN | -.0160 | .0120 | -.0028 | .0080 | .3568 | -.3379 |
| HDFC | -.0510 | .0120 | -.0025 | .0145 | -2.8887 | 9.9607 |
| ICICI | -.0140 | .0310 | .0028 | .0115 | .9077 | 1.3073 |

| | | | | | | |
|-------------------|--------|-------|--------|-------|---------|---------|
| ITC | -.0390 | .0230 | -.0036 | .0150 | -.5395 | 1.4245 |
| HINDUNILVR | -.0330 | .0120 | -.0045 | .0102 | -1.2955 | 3.9880 |
| NESTLEIND | -.0130 | .0230 | .0021 | .0104 | .7551 | -.0823 |
| INFY | -.0200 | .0180 | -.0001 | .0095 | .1191 | .8713 |
| TCS | -.0200 | .0140 | -.0009 | .0085 | -.4469 | .6927 |
| HCL | -.0190 | .0270 | .0030 | .0128 | -.0520 | -.0520 |
| RELIANCE | -.0160 | .0150 | -.0017 | .0102 | .0988 | -1.2616 |
| ADANI | -.0680 | .0160 | -.0083 | .0196 | -2.1969 | 6.2339 |
| ONGC | -.0130 | .0370 | .0009 | .0119 | 2.1183 | 5.9634 |

Table-2: Descriptive statistics of the companies' abnormal stock return in the Post event window

Table 1 & 2 present descriptive analysis of the stock returns before and after the event. Adani Enterprises shows the highest mean returns in the Pre-event window falls to lowest in the Post-event window. Adani Enterprises also show highest standard deviation in both Pre-event and Post-event window, along with high difference in skewness and kurtosis between the Pre and Post event windows. Interestingly HDFC shows very high change in kurtosis between Pre and Post event window. It can be inferred from the above data that investors were highly interested in the publication of sustainability reports by Adani Enterprises.

| Result of Paired t-test | | | |
|-------------------------|--------------|--------------|-----------|
| Event Period | TATAMOTORS | M&M | MARUTI |
| 15 Days | 0.641 | 0.990 | 0.553 |
| 5 Days | 0.583 | 0.003 | 0.695 |
| | | | |
| | SBIN | HDFC | ICICI |
| 15 Days | 0.016 | 0.753 | 0.294 |
| 5 Days | 0.178 | 0.834 | 0.044 |
| | | | |
| | ITC | HINDUNILVR | NESTLEIND |
| 15 Days | 0.571 | 0.352 | 0.803 |
| 5 Days | 0.589 | 0.250 | 0.901 |
| | | | |
| | INFY | TCS | HCL |
| 15 Days | 0.558 | 0.748 | 0.203 |
| 5 Days | 0.961 | 0.784 | 0.729 |
| | | | |
| | RELIANCE | ADANI | ONGC |
| 15 Days | 0.710 | 0.042 | 0.373 |
| 5 Days | 0.162 | 0.165 | 0.345 |

Table- 3

The paired t-test results for the chosen companies are shown in Table 3. At the 5% level of significance, the results for SBI and Adani Enterprises were deemed significant, while the results for Mahindra & Mahindra were deemed significant at the 1% level of significance. It can be inferred from the above data that apart from SBI, Adani Enterprises and Mahindra & Mahindra no other selected company's share price was impacted due the publication of the sustainability reports.

CONCLUSION

The finding of the study indicates where on side that stock returns of SBI and Adani enterprises took time to show impact of publication of sustainability reports, stock returns of Mahindra & Mahindra showed immediate impact, further stock return of rest of the company show no impact of publication of sustainability reports. The evidences are contradictory to that of (Astuti and Prayoga, 2020). The study also recommends that, in order to encourage businesses to engage in socially conscious activities and to promote sustainability, policymakers should implement practical measures. These include requiring companies to provide investors with comprehensive information about various sustainable initiatives and to concentrate on implementing green business practices.

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