

Impact of Green Bonds Issuance on Stock Prices: An Event Study on Respective Indian Companies

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Abstract : The primary objective of this study is to analyze the impact of green bond issuance on the stock prices of respective Indian companies. An event study methodology has been employed to study the effect of green bond issuance. For in-depth study and analysis, this paper used different window frames, including 15-15 days, 10-10 days, 7-7days, 6-6 days, and 5-5 days. Further, for better clarity, this paper also used an uneven window period of 7-5 days. The period of study covered all the companies which issued green bonds during the period of 2017-2022; Adani Green Energy, State Bank of India, Power Finance Corporation, Jain Irrigation, and Rural Electrification Corporation, except Indian Renewable Energy Development Agency and Indian Railway Finance Corporation, because of data unavailability. The paper used all three event study methods as discussed in earlier literature; 1) constant return model, 2) market-adjusted model, and 3) capital asset pricing model. For the fruitful comparison between results, the study considered cumulative average return (CAR) and buy and hold average return (BHAR) methodology. For checking the statistical significance, a two-tailed t-statistic has been used. All the statistical calculations have been performed in Microsoft Excel 2016. The study found that all other companies have shown positive returns on the event day except for the State Bank of India. The results demonstrated that constant return model outperformed compared to the market-adjusted model and CAPM. The p-value derived from all the methods has shown an almost insignificant impact of the issuance of green bonds on the stock prices of respective companies. The overall analysis states that there's not much improvement in the market efficiency of the Indian Stock Markets.

Keywords : green bonds, event study methodology, constant return model, market-adjusted model, CAPM

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