Does green reward?

Study of Malaysian market suggests green stocks outperform in the short term to ESG regulatory changes

By Mustabeen Ul Bari and Elsa Satkunasingam*

Interest in businesses that prioritise governance, environmental, social responsibility and governance or ESG has surged in recent years, driven primarily by consumer demand, regulations, and unprecedented climate shocks. From an investor perspective, there is an expectation that businesses practising ESG would be more prepared to manage climate risks, scarcity of resources, and consumer demand for more eco-friendly products and services.

There is evidence that in the US, investor support for green stocks over brown has surged, driven not by anticipation of higher returns but by increasing concern about climate change.

The literature is in its infancy but there are indications that such green inclinations are still limited to North America, Europe and Japan. Moreover, due to the paucity of market-specific literature, it's difficult to assess green returns or investing appetite for such investments in emerging markets in Asia.

In this context, Malaysia provides a good laboratory to conduct such a study. The FTSE4Good Bursa Malaysia (F4GBM) Index introduced by stock market regulator Bursa Malaysia measures performance of small, medium and large-cap stocks of listed companies with good liquidity and strong ESG practices.

So we conducted a study of the F4GBM Index based on a straightforward premise: any unusual market interest in green stocks, as measured by risk-adjusted returns, in response to ESG-related regulations and news would indicate investor sensitivity to 'greenness'. Presumably, such unusual return responses could be observed as the difference between the stocks' realised and expected returns using a reasonable market risk-adjustment factor, for example the Capital Asset Pricing Model (CAPM). This difference, measured by

an 'event study' analysed within a small window surrounding the event publication date, could potentially be attributed to investors' short-term sensitivity to ESG-related regulations and news.

As is common practice in academic literature, the cumulative abnormal returns (CAR) from such an event study would capture that phenomenon. The CAR in our event study is a cumulation of abnormal returns over a 40-day window around the relevant event dates and is defined by:

Cumulative abnormal returns = $\sum_{i=-20}^{+20}$ [expected returns$_i$ (CAPM) – realised returns$_i$]

The abnormal returns isolate the portion of returns not attributable to market movements, while the brevity of the window helps attribute it to ESG-specific investor reaction to associated events.

Research focus

The focus of this research was on four events, i.e. the announcement of amendments to Bursa Malaysia's requirements for ESG disclosures on October 8, 2015, and the three subsequent disclosure enforcement dates: December 31, 2016 for stocks with a market cap above 2 billion ringgit; December 31, 2017 for stocks with a market cap ranging from 1 billion ringgit to 2 billion ringgit; and December 31, 2018 for those below 1 billion ringgit.

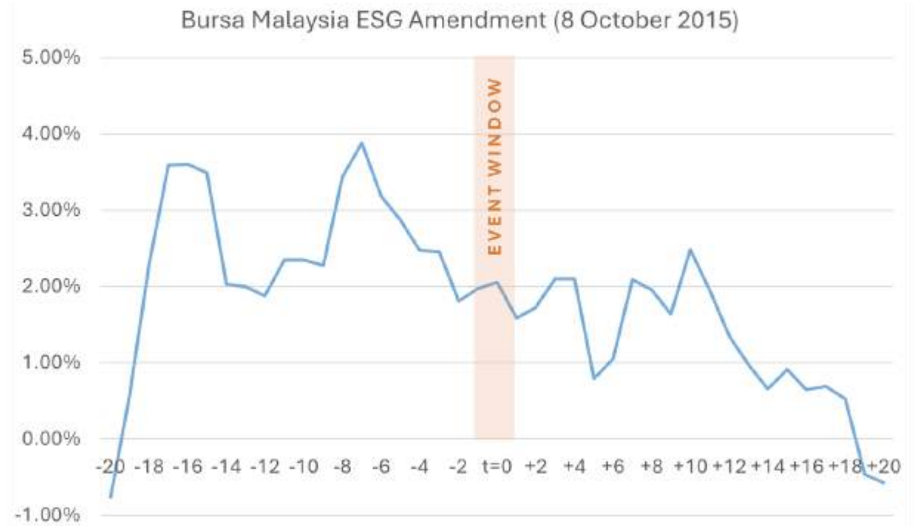
For each of these events, the CAR of two separate equal-weighted green and brown portfolios consisting only of affected stocks was calculated.

Stocks from the F4GBM Index constitute the green portfolio. The remaining stocks in the benchmark Bursa Malaysia KLCI index and the Mid 70 index were used as the comparable brown portfolios for market caps above and below 2 billion ringgit, respectively.

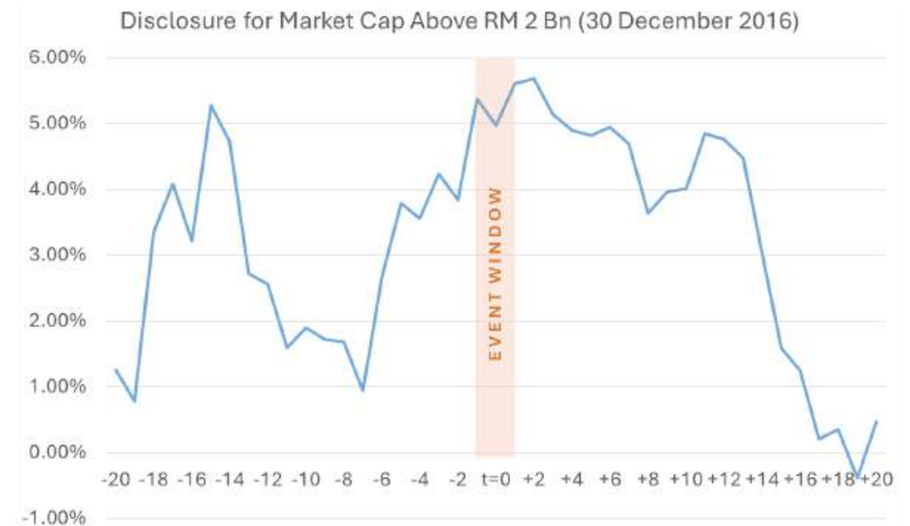
The return spread between the green and comparable brown portfolios in each event, which we denote as GMB (green minus brown), potentially represents a short-term green premium or spread driven by investor reaction to ESG regulation changes.

GMB spread = CAR of green portfolio – CAR of brown portfolio

GMB Spread: First Event



GMB Spread: Second Event



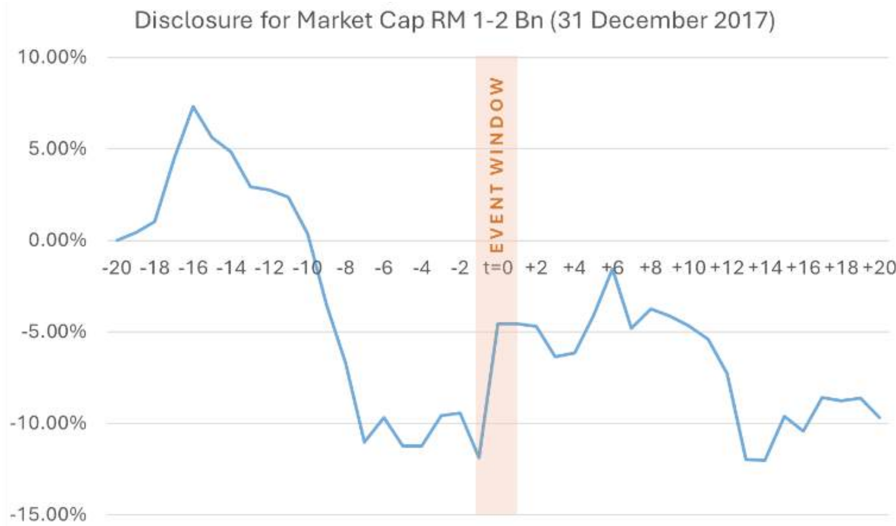
Both the first and second events demonstrate a significant positive GMB spread during the event window. In the days leading up to the first event date, which was the ESG amendment declaration, a steep rise in the GMB spread peaking at 3.9% and averaging around 2.4% was observed.

In the second event involving disclosure enforcement of stocks with market cap above 2 billion ringgit, there was an even more pronounced 4 percentage point rise in the GMB during the event window, from 0.78% to 5.68%.

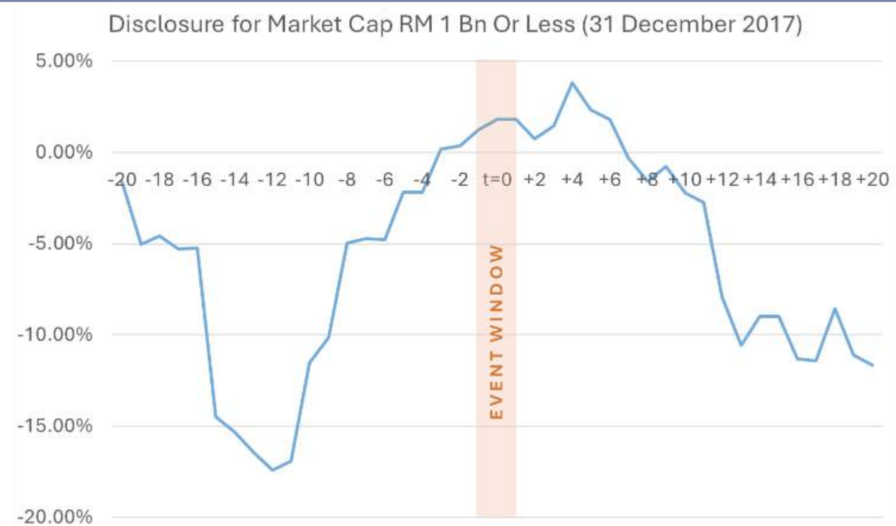
These concurrent results over the event study window period imply unusual positive interest in green over brown stocks during significant ESG regulation announcements.

Notably in both these events, the GMB spread fails to persist beyond the 40-day event window period. They fall to -0.57% and 0.47%, respectively, potentially raising questions regarding long-term investor confidence in green stocks. Moreover, the green portfolios in these events are dominated by larger-cap stocks within the market cap range and hence cannot be generalised to the entire market.

GMB Spread: Third Event



GMB Spread: Fourth Event



The third and fourth events provide a glimpse int mid- and small-cap green stocks. Both underperform compared to their brown counterparts, with the GMB averaging -4.72% and -5.49%, respectively, throughout the event window. However, as with the large-cap stocks, we observed a steep ten and 21 percentage point respective rise in the GMB spread during the two events.

Analysed together, these results add credibility to a general phenomenon of short-term green interest during an ESG event, but suggest positive outcomes only for large-cap stocks. We note once again that this effect is short-lived beyond the event date, with the GMB spread ending at -11.66% for mid-cap green stocks and -5.36% for small-cap green stocks.

Implications for emerging markets

While in no way conclusive, the analysis above showcases short-term outperformance of green stocks to ESG regulatory changes in Malaysia. In two of the four events, we observe outperformance of green over brown stocks, and in three events, we find immediate positive reactions. We also note that the outperformance may be limited to larger-cap stocks, while immediate positive investor reaction may be generalisable to all green stocks.

The scope of this study needs to be enlarged in order to assess whether the positive reactions during the various event study window periods were solely due to ESG regulation announcements and disclosures, given that we did not control for other factors apart from the market. Furthermore, our study was limited to green stocks in the Malaysian stock market.

Further studies could be carried out to determine if the positive reaction story can be replicated in other emerging markets in the region. There is also a need to study the long-term risk-adjusted performance of green stocks in emerging markets, which would be of interest to investors, regulators and policymakers.

**Mustabeen Ul Bari is a graduate of the Master of Business Administration programme at the Asia School of Business (ASB) in Kuala Lumpur. Elsa Satkunasingam is a director and senior lecturer in executive education at the school.* *The authors would like to express their appreciation to Yasmin Ahmad of ASB Executive Education for her research assistance.*

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