## Investor Attention to the Fossil Fuel Divestment Movement and Stock Returns

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The fossil fuel divestment (FFD) movement aims to urge investors—particularly institutional investors—to divest their holdings of investment in firms that extract coal, gas, and oil. The FFD movement was born within U.S. universities in 2010 and has become increasingly popular over time. Even though the real amounts divested from fossil fuel companies are still moderate, the FFD movement might have side effects such as the stigmatization of the fossil fuel industry. A potential consequence of this stigmatization process is the reduction of investor demand for fossil fuel—related stocks that might drive down their stock prices.

Notwithstanding the expansion of the FFD movement worldwide, we still have limited knowledge of their potential implications for fossil fuel–related stocks. In particular, we do not know whether the FFD movement, as a symbolic tool of stigmatization, affects returns on fossil fuel stocks. In this study, we shed light on this question by examining how investor attention to the FFD phenomenon might affect the prices of fossil fuel–related stocks.

As with all social movements, it is arguable that the strength of the FFD movement depends, at least in part, on the investor attention it generates. Therefore, to address our main question, we empirically assess the effect of investor attention to FFD on the weekly excess stock returns for U.S. firms that supply coal, gas, or oil in comparison with U.S. non–fossil fuel firms. In an original manner, we use three complementary indicators of investor attention to the FFD movement: (1) the U.S. weekly Google Search Volume Index on the topic "fossil fuel divestment," (2) the U.S. weekly media coverage of FFD, and (3) the number of weekly visits to the Wikipedia page "fossil fuel divestment."

Contrary to what might be potentially expected by the FFD campaigners, our econometric estimations report a positive relationship between investor attention to FFD and the excess returns on fossil fuel-related stocks from U.S. firms. This positive effect is remarkably robust even after controlling for firm-level and energy-level variables as well as for widely accepted risk factors, such as market, size, value, and momentum. This finding also holds when we consider alternative investor attention proxies and alternative empirical approaches including difference-in-differences analyses.

One potential explanation of this key finding is that the FFD movement draws attention to the undervaluation of fossil fuel-related stocks, which makes them attractive to profit-motivated investors. Our empirical investigation of the potential channels supports this explanation by revealing that fossil fuel stocks are structurally undervalued and that, at the same time, the FFD movement leads to greater investor attention to these securities.

These findings are relevant for profit-motivated traders, climate change-conscious investors, and FFD campaigners. Profit-motivated traders might find it financially profitable to invest in fossil fuel-related stocks and divest from non-fossil fuel firms when attention to the FFD movement

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is abnormally high (and the opposite when attention is abnormally low). Climate change—conscious investors—who are inclined to exclude fossil fuel—related stocks from their investment universe—should be aware that when attention to the FFD movement increases, this exclusion strategy is likely to impact their portfolio returns. Finally, FFD activists—who are doing their best to reveal the negative environmental effects of fossil fuel firms' activities—should realize that, from a purely financial perspective, their efforts contribute to increase returns on fossil fuel firms.