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Do Prior Investor Perceptions Mitigate the Adverse Impact of Natural Disasters on Utility Share Prices? The Case of Fukushima.

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ABSTRACT

This paper investigates whether favourable investor perceptions prior to an environmentally-related accident may have a moderating effect on resulting negative share price reactions. The study focuses on the share price reactions on utility stocks worldwide following the disaster at the Fukushima Daiichi nuclear power plant on 10 March 2011. Due to the severity and magnitude of the accident, the event represents an interesting research context to investigate the resulting market reaction and to examine whether prior investor perceptions about utility companies may have a mitigating effect. The paper analyses in particular whether firms with a higher organisational reputation prior to the disaster may experience a more moderate negative share price reaction compared to companies with a lower organisational reputation.

Based on a sample of 459 utility companies worldwide, the study applies an event day methodology to calculate post-Fukushima share price reactions. The abnormal returns are then regressed on three reputational measures (environmental reputation, CSR reputation and investment reputation) in order to examine whether prior organisational reputation had an impact on market prices. The study finds that a favourable environmental reputation (i.e., being listed in the Newsweek 'greenest' companies ranking) and investment reputation (i.e., credit ratings) prior to the Fukushima disaster had a mitigating effect on the negative share price movements of nuclear companies. However, CSR reputation (i.e., being listed in the Dow Jones Sustainability Index) is found to have no impact on investor perceptions. This suggests that establishing and maintaining a favourable environmental reputation and investment reputation may benefit utility companies during environmental crises.

Keywords: investor perceptions, organisational reputation, nuclear disaster, event study