

Impact of International Climate Agreements on Stock Markets: A Sectoral and Regional Analysis

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Abstract

Changes in the climate have encouraged international cooperation to reach a consensus on how to address this global challenge. This led to the creation of the United Nations Framework Convention on Climate Change (UNFCCC), aimed at tackling the main driver of these changes: rising greenhouse gas (GHG) concentrations in the atmosphere. Within this framework, the Conference of the Parties (COP) is held annually to assess progress and identify emerging challenges. Compliance with these agreements introduces transition risks for firms, linked to the level of commitment of participating countries. Signatories must implement national policies to reduce emissions, leading to higher operating costs that may affect future cash flows and increase market risk premiums, ultimately impacting stock prices. As markets respond to each region's level of commitment, this study examines stock market reactions to international climate agreements across main economic sectors and geographic regions. The methodology employed is an event study analysing ten key economic sectors across three regions: Latin America, North America and Europe. Abnormal returns (AR) and cumulative abnormal returns (CAR) are calculated to measure the impact of climate agreements on stock prices, covering an analysis period from the UNFCCC (1994) to the Paris Agreement (2016), comprising twenty-two years of international climate policy. The results indicate that most sectors in Latin America and the European Union experienced negative market reaction, reflected in a decrease in market value following announcements related to the Kyoto Protocol and the Paris Agreement. In the European context, this behaviour is attributed to the transition risk derived from stricter national regulations implemented to meet emission reduction targets. In contrast, for Latin America, the reaction suggests that markets anticipate a future tightening of the regulatory framework, especially in carbon-intensive industries, despite currently less stringent policies. By contrast, North American markets show mainly positive reactions, which may be explained by the region's lower level of commitment to these agreements and the potential for firms to gain a competitive advantage over those operating under stricter environmental rules. This study contributes to the literature by highlighting the heterogeneous regional impact of transition risks and the role of regulatory expectations in financial market performance.

Keywords: climate policy, event study, stock markets, transition risk

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