IMPACT OF CLIMATE CHANGE ANOMALIES ON PLANTATION COMPANIES' STOCK RETURNS: SPECIAL REFERENCE TO RATNAPURA DISTRICT

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1. Introduction

Climate change severely threatens Sri Lanka's plantation sector, especially for crops like tea and rubber. Abnormal rainfall patterns leading to frequent floods disrupt the plantation activities and profitability of the plantation companies. The study examines the impact of Climate Change Anomalies, particularly flooding due to extreme rainfall, on the stock returns of plantation companies in Sri Lanka with special reference to Ratnapura District.

2. Research Methodology

The study used Event Study Methodology (ESM) to analyze the stock market reaction to major flood events in May 2016, May 2017, May 2018, September 2019, and May 2021. To obtain expected returns in the pre-event, event, and post-event windows for four plantation firms listed on the CSE, namely Agalawatte, Balangoda, Hapugastanne, and Kahawatte, which were located in Ratnapura District, used a regression equation of the firm's actual returns over the estimation period. Market reactions were assessed using the t-statistics.

3. Findings and Discussion

Findings indicate varied market responses, firms like Agalawatte and Kahawatte plantations had significant negative abnormal returns, and other firms like Balangoda plantation had more positive and rather resilient returns implying that plantation firms are not alike in their performance. Abnormal returns are not always significant and are affected by external factors like labor unrest, inflation, and export demands, which vary across companies and events.

4. Conclusion and Implications

The study confirms market reactions to climatic shocks, revealing varied reactions across firms due to operational, regional, and market factors. It underscores the importance of effective climate risk mitigation, resilience enhancement, and risk diversification in mitigating the impacts of climatic variations on financial markets.

Keywords: Climate change anomalies, Event study methodology, Flood events, Plantation companies, Stock returns