

The Impact of Cryptocurrency on the Stock Market Performance in Sri Lanka: An Empirical Study Based on Bitcoin

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Abstract

Introduction: This study examines the impact of cryptocurrency on the stock market performance in Sri Lanka. It is an empirical study based on Bitcoin.

Methodology: The analysis uses the information of Bitcoin and the Stock market indices, ASPI Return, and S&P SL20 Return of Sri Lanka for the period 2010–2023 on a weekly basis. The Generalized Autoregressive Conditional Heteroskedasticity (GARCH) model has been estimated separately for the ASPI Return and S&P SL20 Return time series data using the Maximum Likelihood (ML) method with the Autoregressive Conditional Heteroskedasticity (ARCH) algorithm.

Findings: The empirical results indicate a weak negative relationship between Bitcoin returns and ASPI Returns, suggesting a subtle inverse correlation. In contrast, a weak positive relationship is observed between Bitcoin returns and S&P SL20 returns in the Sri Lankan context. These findings provide insights into the dynamic interactions between Bitcoin and the two stock market indices in Sri Lanka.

Conclusion: This paper makes two significant contributions to the existing body of knowledge. Firstly, it introduces Bitcoin returns as a determinant influencing stock market performance in Sri Lanka. Secondly, it explains the relationships between Bitcoin and both ASPI Return and S&P SL20 Return in the Sri Lankan market context, enriching our understanding of the dynamics between cryptocurrency and traditional stock indices.

Keywords: ASPI Return, S&P SL20 Return, Bitcoin, Cryptocurrency