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## Sustainable Finance and New Trends in Digital Currency: A Simulation Study\*

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## Abstract

The purpose of this study is to determine the changing trends and significant increases or decreases in the prices of cryptocurrencies via joinpoint regression analysis. Therefore, the data sets including the monthly prices of Bitcoin, Ethereum and Litecoin are used for the period January 2019 - January 2023. This is the first study using the joinpoint regression method in cryptocurrencies. The study is organized on brief description of joinpoint regression model. Joinpoint software is used for statistical analyses and the results show that Bitcoin, Ethereum and Litecoin values change statistically significant over the study period. It is suggested that whether knowing the fluctuations in the cryptocurrencies used for investment purposes are meaningful or not will be beneficial in terms of losses and gains.

**Keywords:** crypto currency; join point regression; block chain, decentralization

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