

Investigation of Convergence in the Returns of Cryptocurrencies: Panel Nonlinear Tar Approach

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<p>Keywords: Convergence Panel Data Analysis Non-Linear Tar Test Cryptocurrency TAR Unit Root Test</p> <p>Received 11 July 2019 Revised 25 November 2019 Accepted 8 December 2019</p> <p>Article Classification: Research Article</p>	<p>Purpose – The main objective of this study is to establish/offer an optimal cryptocurrency portfolio for investors. For this purpose, the existence of convergence among the daily returns of cryptocurrencies is investigated. Through this study, it is aimed to determine whether cryptocurrencies are becoming alternative tools for each other or not.</p> <p>Design/methodology/approach – To conduct analysis a sample that includes six cryptocurrencies that have the highest market value and transaction volumes are built. The analysis is based on the daily returns of the cryptocurrencies for the 30.10.2016-12.05.2019 period. First, the linearity of the series of cryptocurrency returns is analyzed. The convergence among daily returns of these cryptocurrencies is examined by using a panel nonlinear TAR unit root test.</p> <p>Findings – According to Caner and Hansen (2001) Linearity Test Results, it is found out that the return of the cryptocurrencies is not linear. Based on Beyaert and Camacho (2008) Panel Nonlinear TAR Unit Root Test Results, it is determined that there is a convergence between the cryptocurrency returns on the condition that the daily cryptocurrency returns are higher than - 5.958%.</p> <p>Discussion – According to the test results, it can be concluded that cryptocurrencies have not been substituted for each other yet. It seems, it is time to add cryptocurrencies to the portfolio for the investors and for the purpose of profit maximization, investors should consider making an optimal allocation/diversification among the cryptocurrencies.</p>

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