

Abstract

This Bachelor's thesis studies connectedness effects between returns of US-listed cryptocurrency-linked stocks (CLS), the traditional US stock market, and major cryptocurrencies. We present results of connectedness measures obtained by utilizing the Dynamic Networks framework. Our dataset contains daily returns of 20 CLS, the stock market index S&P 500 and five major cryptocurrencies, with a time span ranging from September 2021 to July 2023. The connectedness measures indicate a significant total connectedness among variables within the system, across the whole time span. We also present directional connectedness measures for individual variables and decompose the total connectedness into time horizons. We report the short-term horizon of connectedness effects between 1-5 days to be the most significant. Finally, we build Ordinary Least Squares (OLS) regressions for CLS returns and find connectedness measures to influence returns of CLS with high exposure to the cryptocurrency market most significantly.

Keywords Connectedness effects of returns, Cryptocurrencies, Bitcoin, Dynamic Networks, Cryptocurrency-linked stocks, Stock market

Title Connectedness between Stocks of Cryptocurrency-linked US companies and the Cryptocurrency market.