Causality between Stock Indices and Cryptocurrencies during the Russia-Ukraine War

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Abstract : This article examines the causal relationship between stock indices and cryptocurrencies during the current war between Russia and Ukraine. The econometric investigation runs from February 24, 2022, to April 12, 2023, focusing on seven stock market indices (S&P500, DAX, CAC40, Nikkei, TSX, MOEX, and PFTS) and seven cryptocurrencies (Bitcoin, Ethereum, Litcoin, Dash, Ripple, DigiByte and XEM). In this article, we try to understand how investors react to fluctuations in financial assets to seek safe havens in cryptocurrencies. We used dynamic causality to detect a possible causal relationship in the short term and seven models to estimate the long-term relationship between cryptocurrencies and financial assets. The causal relationship between financial market indexes and cryptocurrency coins in the short run indicates that three famous cryptocurrencies (BITCOIN, ETHEREUM, RIPPLE) and the two digital assets with minor popularity (XEM, Digibyte) are impacted by the German, Russian, and Ukrainian stock markets. In the long run, we found a positive and significate effect of the American, Canadian, French, and Ukrainian stock market indexes on Bitcoin. Thus, the stability of the traditional financial markets during the current war period can be explained on the one hand by investors' fears of an unstable business climate, and on the other hand, by speculators' sentiment towards new electronic products, which are perceived as hedging instruments and a safe haven in the face of the conflict between Ukraine and Russia.

Keywords : causality, stock indices, cryptocurrency, war, Russia, Ukraine

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