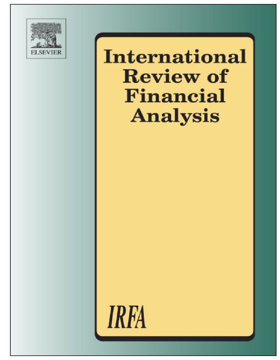

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Bitcoin is not the New Gold – A Comparison of Volatility, Correlation, and Portfolio Performance☆

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Abstract

Cryptocurrencies such as Bitcoin are establishing themselves as an investment asset and are often named the *New Gold*. This study, however, shows that the two assets could barely be more different. Firstly, we analyze and compare conditional variance properties of Bitcoin and Gold as well as other assets and find differences in their structure. Secondly, we implement a BEKK-GARCH model to estimate time-varying conditional correlations. Gold plays an important role in financial markets with flight-to-quality in times of market distress. Our results show that Bitcoin behaves as the exact opposite and it positively correlates with downward markets. Lastly, we analyze the properties of Bitcoin as portfolio component and find no evidence for stable hedging capabilities. We conclude that Bitcoin and Gold feature fundamentally different properties as assets and linkages to equity markets. Our results hold for the broad cryptocurrency index CRIX. As of now, Bitcoin does not reflect any distinctive properties of Gold other than asymmetric response in variance.

Keywords: Bitcoin, Correlation, Cryptocurrencies, Gold, Asymmetry
JEL classification: C10; C58; G11

1. Introduction

The popularity of cryptocurrencies has risen significantly since Nakamoto (2008) introduced the concept of Bitcoin. Cryptocurrencies embody innovative technology, high-security architecture, prosperity in functionalities, and investment opportunity as an asset whats makes them attractive for computer scientists, venture capitalists as well as investors. However, the decentralization and unregulated markets add an additional layer of uncertainty to its pricing and projection of application. Examples are the closures

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