

Risk Spillovers and Optimal Hedging in Commodity ETFs: A TVP-VAR Approach

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Abstract

Despite the growing popularity of commodity exchange traded funds (ETFs), research on their risk transmission dynamics is lacking. The study employs a Time-Varying Parameter Vector Autoregressive (TVP-VAR) model to analyze volatility transmission among commodity ETFs during significant events like the COVID-19 pandemic and geopolitical conflicts. It aims to minimize interconnectedness among ETFs to reduce associated risk using the Mean Co-skewness optimal portfolio (MCoP) technique. The findings emphasize the importance of adaptability in portfolio management and provide actionable information for investors seeking to optimize allocation and manage risk exposure effectively in dynamic market environments.

Keywords: Commodities, Exchange traded funds (ETFs), TVP-VAR, Risk spillover, Hedging strategies, Economic shocks