

Oil and Asset Classes Implied Volatilities: Dynamic Connectedness and Investment Strategies

David Gabauer

Johannes Kepler University, Austria
david.gabauer@hotmail.com

Abstract:

Building on the increased interest in the spillover effects among oil prices and other financial assets, this paper examines dynamic connectedness and contagion effects of their implied volatility shocks. We then proceed to the examination of the optimal hedging strategies and optimal portfolio weights for implied volatility portfolios between oil and financial assets. The results suggest that oil implied volatility (OVX) is a net volatility receiver of shocks, whereas implied volatilities indices by the stock markets (mature or emerging) are net volatility transmitters. Hedge ratios indicate that VIX is the least useful implied volatility index to hedge against oil implied volatility. Finally, we show that investors can benefit substantially by adjusting their portfolios based on the dynamic weights and hedge ratios obtained from the dynamic conditional correlation models, although a trade-off exists between the level of risk reduction and portfolio profitability.

Keywords: Dynamic Volatility Connectedness; Hedging Strategies; Volatility Portfolios.

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