

Recently, there is a growing body of literature focusing on oil and gold market connectedness. However, the effect of uncertainty on the correlation among the assets has limited and often conflicting results. The aim of the research is to examine the relationship between gold and oil markets and study the effect of uncertainty and different announcements on the dynamic relationship of these markets.

The methodology in the research can be divided into four sections. Firstly, structural oil price shocks are separated. Secondly, the correlation among the assets is estimated. Thirdly, the effect of uncertainty and announcements on the connectedness is examined. Finally, optimal hedge ratios, portfolio weights and hedging effectiveness is calculated.

The study not only considers oil-gold connectedness but also separates three different structural oil price shocks, based on a Structural vector autoregression model. The separated shocks are demand-, supply- and risk shocks.

The connectedness between the series is modeled with ADCC-GARCH methodology which allows the correlation to vary over time and to see if there is an asymmetric nature in the relationship.

As a proxy for uncertainty, I use three different indexes, namely the Economic Policy Uncertainty index, the Geopolitical Risk index and the VIX index. The EPU and GPR indexes measures uncertainty based on newspaper articles related to economic policy- and geopolitical uncertainty. The financial risk aspect is captured by the VIX index.

The effect of uncertainty on the connectedness is estimated with different regression models. The baseline model is a regular OLS regression, a limitation of the model is that it only allows to calculate the average effect, therefore a quantile regression is also calculated. Recent studies indicating nonlinear effect of uncertainty on asset connectedness, therefore a Markov regime switching model also computed.

In summary, oil price shock separation is necessary to better understand the nexus. Uncertainty generally, has a negative effect on oil-gold and demand shock-gold correlation, while a positive on supply- and risk shock-gold correlations. The effect is indeed regime dependent. Gold can be considered a diversifier asset but does not provide safe haven. Both the OPEC and FOMC announcements have a significant impact on the correlation. The optimal hedge properties are affected by uncertainty.