

Referee report

“What drives food price volatility? Evidence based on a generalized VAR approach applied to the food, financial and energy markets” submitted to *Economics E-Journal*

Summary

The main aim of the submitted manuscript is to examine the sources of food price volatility for a daily sample period running from January 4, 2000 to April 1, 2017. In doing so, the authors focus on the volatility of futures prices for corn, wheat, soybean, rice, the US dollar, WTI crude oil and the S&P500 and apply a generalized VAR approach to estimate total, net, directional and pairwise volatility spillovers following Diebold and Yilmaz (2012) for all markets considered. Based on their results, the authors argue that volatility spillovers are observed mostly within the group of food markets and within the group of other markets and much less between these groups. Volatility spillovers from financial and energy markets to agricultural markets are stronger in crisis periods and the corn futures market turns out to be the most important source of volatility within food markets.

General comments

Since the financialization of commodity markets, volatility transmission from (conventional) financial markets to commodity markets and within commodity markets is of great interest. Therefore, the paper tackles an important research question that has not been studied in-depth in the existing literature. In this regard, the paper provides some new and interesting insights and could therefore be relevant for the literature on commodity volatility transmission. Therefore, I see the potential for publication. Some detailed comments with questions and suggestions are listed below.

Specific comments

(1) Methodology:

- (a) Eq. (1): I was wondering why the price range has been constructed by a double logarithm (i.e. both prices separately and then the difference of prices). What is the rationale behind this procedure?
- (b) Why has the price range been taken as a proxy for volatility instead of estimating the time-varying volatility within a GARCH model?
- (c) Why has the VAR model given in Eqs. (2) and (3) been estimated without constant terms? This is a restriction that needs to be justified.

(2) Data:

- (a) Several other commodity futures prices could be included into the analysis. I was wondering why not e.g. including gold futures prices as an additional (important and often analyzed) financial market and also copper futures prices as an industrial metals market, which is attached to the global business cycle due to its importance for the construction industry. Either include these or justify why omitting.
- (b) Why are you accounting for seasonal patterns referring to the month in the year but not for the day-of-the-week effect?
- (c) You refer to the normality of most of the volatility measures without explicitly testing. In Table 1 only Skewness and Kurtosis is reported.

(3) Conclusion: The paper lacks on policy implications based on the results.

I hope that my feedback will be useful for the authors.