An Analysis of Statistical Causality Between the Russo-Ukrainian Conflict and Food Commodity Prices H

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Abstract

Producing a combined 80% of Europe’s wheat supply, Russia and Ukraine feeds a mass population with their fertile soils. Since the Russo-Ukrainian conflict began in 2014, however, Ukraine’s agricultural production sector has seen fluctuating grain production while both countries face troubles in exporting goods, leading to a negative supply shock in the global wheat supply. Such events not only affect the national economies of Ukraine and Russia, but also changed agricultural markets worldwide. Previous research has focused on the overall economic impacts of the conflict globally, including skyrocketing energy and oil prices and foreign financial investments affected by the sanctions of the Russian economy. The aim of this paper is to focus specifically on the relationship between the Russo-Ukrainian conflict and agricultural economies through an economic analysis of negative supply shocks and a statistical regression of data relating the Geopolitical Risk Index (GPR Index, associates geopolitical events and their potential risks with number of newspaper reports) to food commodity prices (in this case, the three most popular food crops: rice, corn, wheat). The study found that there is a significant one-way causal relationship with values on the GPR Index severely affecting food commodity prices.

Keywords: International Economics, Russo-Ukrainian Conflict, Trade Deficit