The Adverse Consequences of Global Harvest and Weather Disruptions on Economic Activity

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Datasets

- *Paneldata_food.xlsx*: contains all data that has been used to estimate the VAR-IV and LP-IV models (except the weather shocks, which are included in the dataset below). There is a separate sheet "Legend" that provides an overview of the series.

- *WeatherShocks.xlsx*: contains the weather shocks in other regions of the world for all countries (temp, temp2, precip, precip2).

- *UsefulData.xlsx*: contains some data series that could be useful for other applications:

   - Quarterly data: global agricultural production index of De Winne and Peersman (2016), global agricultural price index, the deflator (US CPI), the narrative global agricultural market shocks of De Winne and Peersman (2016), the estimated global harvest shocks of the paper (shown in Figure A1 of the appendix) and the global weather shocks (shown in Figure A1).

   - Monthly data: global weather shocks at the monthly frequency over the period 1901-2017. These are the underlying series that have been used to calculate the above quarterly data.

Programs

All programs are in RATS (Estima). For the robustness checks shown in the supplementary appendix, the programs below can easily be adjusted (e.g. by replacing one of the variables).

- *VAR_Baseline.RPF:* code to run the baseline VAR-IV models (using the harvest and narrative shocks as external instruments), including the differences across country groups depending on characteristics (income per capita, size agricultural sector, …).

- *VAR_Weather.RPF:* same code to run the VAR-IV models for the weather shocks.

- *VAR_Cholesky.RPF:* code for the average price (shown in Figure 2).

- *VAR_Cholesky_Difference.RPF*: calculates the differences with the average price shifts (shown in bottom row of Figure 2).

- *VAR_Extra.RPF:* estimates the effects on the additional variables that are not included in the baseline SVAR-IV model (shown in Figure 3). The code is ready to use for "Domestic consumer prices". Only this variable has to be replaced by another variable to obtain the other results.

- *LP_Baseline.RPF:* code to estimate the panel LP-IV models shown in Figure 6.

WeatherShocks

This directory contains the code to calculate the weather shocks that are used in the paper. This code is in Matlab. Some input data is read from the excel files that are included in the directory. Notice that this code also has to read the gridded weather data (temperature and precipitation) and the gridded crop calendars, which should be downloaded from the internet.

- *Code_to_construct_weather_shocks.m:* matlab code to calculate the weather shocks.

- *Input_data.xlsx:* input data for the matlab code (e.g. weights of four crops).

- *FAOSTAT_dataset_11-10-2020.xls:* harvest volumes (export and production), which are used in Input_data.xlsx.

- The weather data of the University of East Anglia Climatic Research Unit can be downloaded at: [Dataset Collection Record: Climatic Research Unit (CRU): Time-series (TS) datasets of variations in climate with variations in other phenomena v3 (ceda.ac.uk)](#)

- The crop calendar datasets can be downloaded at: [Center for Sustainability and the Global Environment | SAGE | University of Wisconsin-Madison](#)