Data sets for "Measuring the probability of a financial crisis"

Robert F. Engle and Tianyue Ruan

August 2019

Overview

The source of the historical SRISK data is the Volatility Laboratory (V-Lab) at New York University Stern School of Business, available online at https://vlab.stern.nyu.edu/. Specifically, we use the "Systemic Risk Analysis (Global Dynamic MES) of World Financials" data (https://vlab.stern.nyu.edu/analysis/RISK.WORLDFIN-MR.GMES). The SRISK methodology is summarized in the "Excessive Credit Growth" section of the paper and is further described in detail in Section SI-1 in the Supplementary Information.

The Crisis Severity index are based on the article "New Evidence on the Impact of Financial Crises in Advanced Countries" by Christina D. Romer and David H. Romer (*American Economic Review* 107:3072–3118).

Specific files

The "SRISK_all_countries_monthly.dta" file contains the main data set in the Stata data format.

The "tobit_estimates.do" file uses the "SRISK_all_countries_monthly.dta" file to produce the estimation in Table 1. The details of the Tobit model can be found in the "Data and Econometric Specifications" section of the paper.

The "generate_measures.do" file uses the "SRISK_all_countries_monthly.dta" file to produce the Probability of Crisis and SRISK Capacity measures for the 23 countries in our analysis. The "measures_RR_countries.txt" file contains these two measures in the tab-delimited format. Construction of these two measures follows Equations (2) and (3) and is based on the estimation results of Table 1. More details can be found in the "Data and Econometric Specifications" section of the paper. These measures for the U.S. are presented in Figure 1 and 2, respectively.

Contact

With any questions, please contact the authors at rengle@stern.nyu.edu (R.F.E.) and tianyue.ruan@nus.edu.sg (T.R.).