

## Description of Codes and Data

This folder contains all codes and data used for the experiments in the paper. Below is a list with a short description of each:

### Impulse responses

#### Unanticipated Run

- variables\_and\_plots.m  
This script generates figures 3-6 and computes the value of a deviation (See page 31 in the paper). (To generate figure 5 just comment line 6).
- unanticipated\_run.m  
This script creates the paths that are used in variables\_and\_plots.m to generate figure 3-4
- unanticipated.mat  
This is the workspace generated by unanticipated\_run.m
- PF\_level\_loop\_zshock.mod  
This is a dynare file that computes impulse responses to z shocks
- PF\_level\_loop\_convex.mod  
This is a dynare file that computes saddle paths from the period after the run to the steady state

#### Anticipated Run

- anticipated\_run.m  
This script creates the paths that are used in variables\_and\_plots.m to generate figure 5-6 and in spread\_and\_equity\_data.m to generate Figure 7.
- anticipated\_run\_does\_not\_happen.mat  
This is the workspace generated by anticipated\_run.m when the values of actual\_run is bigger than 120. It is used to generate figure 5
- anticipated\_run\_happens\_at\_time\_3.mat  
This is the workspace generated by anticipated\_run.m when the values of actual\_run is 3. It is used to generate figure 6
- anticipated\_run\_happens\_at\_time\_4.mat  
This is the workspace generated by anticipated\_run.m when the values of actual\_run is 4. It is used to generate figure 7

- anticipated\_run\_root.mat

This is a variable belonging to anticipated\_run\_does\_not\_happen.mat and is included to help reproduce results if fsolve has problems finding the root.

- prun\_ss\_endo.m

This script re-computes the steady state in case a run is possible even in steady state. Irrelevant for the calibration in the paper (See page 39).

- residual\_endorun\_afterrun.m

This function takes as input a given guess for the endogenous variables (and a future path of prices and consumption upon a run) and computes the residuals of the equilibrium system of equations determining the saddle path of the economy back to steady state after a run in the anticipated bank run case See Section 7.3.2.

- residual\_endorun

This function does the same as the function above but for a system starting in steady state.

## Comparison between model and data

- GZ.xls

This file contains the time series used to construct figure 7. The first sheet "Foglio 1" contains Gilchrist Zackraszjek spreads and Excess Bond Premia at monthly frequency. The second contains the S&P500 Financial Index.

- spread\_and\_equity\_data.m

This script uses the paths generated in anticipated\_run.m and the data contained in GZ.xls to create figure 7.