# Nonlinear Transmission of Financial Shocks:
# Some New Evidence

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# 1 Readme for matlab codes

The following codes perform Tables and Figures in the main text.

- FGMS_simu.m performs the Monte Carlo simulations of Section 2.4 and produces four figures which correspond to the four panels of Figure 1.

- FGMS_Main_square.m estimates the baseline empirical model using our two-step procedure and produces the values of Table 1 and Figures 2, 3, 4, 5.

- FGMS_Main_test.m produces the entries of Table 2, thus performing the likelihood ratio test for the baseline model. The value for the model with absolute value (second row of table 2) are obtained by uncommenting, within the Matlab code, lines 44 and 47.

- FGMS_Main_state.m estimates the baseline model augmented with the high uncertainty state, and produces Figure 6.

- FGMS_Main_abs.m estimates the model with absolute value and produces Figure 7.

- FGMS_Main_absandsquare.m estimates the model with both the square and the absolute value of the financial shock, and produces Figure 8.

The following codes perform Tables and Figures in the Online Appendix.

- FGMS_simucoverage.m computes the coverage rates of our bootstrap procedure and produces Figure A.1.

- FGMS_simuabsandsquare.m performs the Monte Carlo exercise when we use both the square and the absolute value of the financial shock, and produces panels (a) and (b) of Figure A.2.

- FGMS_Main_state.m estimates the baseline model augmented with the different state values introduced in the text. For tight financial conditions (column 1 of Figure A.3) uncomment lines 45-46 in the code. For tightening cycles (column 2 of Figure A.3) uncomment lines 48-49. For Recession (column 3 of Figure A.3) uncomment lines 51-52.

- FGMS_Main_disentangle.m estimates the baseline model with the absolute value of financial shocks and the difference between square and absolute value to disentangle sign from size effects, and produces Figure A.4.

- FGMS_Main_NFCI.m estimates the baseline model considering the NFCI shock instead, and produces Figure A.5.

- FGMS_Main_square_lagssquare.m includes lags for the nonlinear term and produces Figure A.6.

- FGMS_Main_square.m estimates the baseline model. If you uncomment line 66, it will estimate the baseline model with no restriction on the square term, and it will produce Figures A.7 and A.8.

- FGMS_Main_noNFCI estimates the baseline model without the NFCI index, and produces Figure A.9.

- FGMS_Main_ordering estimates the model with NFCI ordered before the excess bond premium, and produces Figure A.10.

- FGMS_Main_excess estimates the baseline model with excess returns, instead of stock prices, and adding the 10-year government bond yield, and produces Figure A.11.

- FGMS_Main_cpilevel.m estimates the baseline model with the CPI index in log-levels, and produces Figure A.12.

- FGMS_Main_diff.m estimates the baseline model with industrial production and stock prices in first differences, and produces Figure A.13.

- FMGS_Main_covid.m estimates the baseline model including data up to 2021:M12, and produces Figures A.14 and A.15.

- FGMS_LP.m estimates local projections using the financial shock and its square, and produces Figure A.16.