

Title of paper:

Hideaki Matsuoka, 2022. "Debt Intolerance: Threshold Level and Composition," *Oxford Bulletin of Economics and Statistics*, vol. 84(4), pages 894-932, August.

1. This paper makes a methodological contribution towards the generalized panel smooth transition regression (GPSTR) model by combining two approaches: the Panel smooth transition regression (PSTR) and the general logistic model (GLM). This code allows estimating the GPSTR model.
2. Computational codes are based on Colletaz and Hurlin (2006) and Fouquau, Hurlin and Rabaud (2008). <http://www.runmycode.org/companion/view/2564>
3. This file combines the MATLAB code for Driscoll and Kraay (1998), standard errors used by Dahlquist, Martinez and Söderlind (2017). I obtained the code from Söderlind's website <http://home.datacomm.ch/paulsoderlind/Software/Software.html>

Reference

Colletaz, G. and Hurlin, C. (2006). Threshold Effects of the Public Capital Productivity: An International Panel Smooth Transition Approach, LEO Working Papers/DR LEO 1669, Orleans Economics Laboratory, University of Orleans, Orleans.

Dahlquist, M., Martinez, J. V. and Söderlind, P. (2017) "Individual Investor Activity and Performance," *Review of Financial Studies*, vol. 30(3), pp. 866-899.

Driscoll, J. C. and Kraay, A. C. (1998). 'Consistent covariance matrix estimation with spatially dependent panel data', *Review of Economics and Statistics*, Vol. 80, pp. 549-560.

Fouquau, J., Hurlin, C. and Rabaud, I. (2008). 'The Feldstein-Horioka puzzle: a panel smooth transition regression approach', *Economic Modelling*, Vol. 25, pp. 284-299.

MATLAB Files

File name	Description
Launch_GPSTR.m	The baseline result for GPSTR (Table2) in the paper can be obtained by running the "Launch_GPSTR.m" file.
GPSTR_Panel.m	Main function for GPSTR model
NLS.m	Non-Linear Least Squared for Panel Smooth Threshold Models
grid_search.m	A grid search obtains the initial values for the slope and location parameters.
centered.m	Return Centered Data on the Individual Mean
Excise.m	Remove rows with missing values.
Figure6.m	After running the "Launch_GPSTR.m" file, running Graph.m replicates the right panel of Figure6.
shadedplot.m	Shade plot for Figure6
Figure5.m	Examples of general logistic model

Excel Files

File name	Description
Data	Launch_GPSTR.m reads this excel file to replicates the baseline result for GPSTR.
resultGPSTR	This includes the coefficients, standard errors, t-values and p-values. This file is used for Figure6.m.
resultslop_location	This includes the slope parameter and location parameters. This file is used for Figure6.m.
resultvcov	This includes the variance and covariance matrix. This file is used for Figure6.m.