

# MATLAB Codes and Data for "Half-Panel Jackknife Fixed Effects Estimation of Panels with Weakly Exogenous Regressors"\*

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## 1 Overview

This folder contains the MATLAB codes and data sets for the empirical applications. Under this one there are two folders, "Commercial Imperialism" and "Abortion and Crime".

## 2 Commercial Imperialism

Based on Berger, Easterly, Nunn and Satyanath (2013, *American Economic Review*) "Commercial imperialism? political influence and trade during the cold war", we estimate the effect of the US political influence on the bilateral trades of US and foreign countries during the Cold War. The estimating equation is equation (27) of the paper:

$$\ln \frac{m_{it}^{US}}{Y_{it}} = \mu_i + \delta_t + \beta USinfluence_{it} + \phi \ln \tau_{it}^{US} - \phi (\ln P_t^{US} + \ln P_t^i) + \mathbf{X}_{it}\mathbf{\Gamma} + u_{it}, \quad (1)$$

where the dependent variable,  $\ln(m_{it}^{US}/Y_{it})$ , is the natural log of imports into country  $i$  in year  $t$  from the US normalized by country  $i$ 's total GDP.  $USinfluence_{it}$  is an indicator variable that equals one, in country  $i$  in year  $t$ , if the CIA (Central Intelligence Agency) either successfully installed a foreign leader or provided covert support for the regime once in power.  $\ln \tau_{it}^{US}$  and  $\ln P_t^{US} + \ln P_t^i$  respectively denote the trade costs and the multilateral resistance terms, which are given by the distance between US and country  $i$ , and four indicator variables for US and country  $i$  sharing a common language (English), sharing a border, both being GATT (General Agreement on Tariffs and Trade) participants, and belonging to a regional trade agreement.  $\mathbf{X}_{it}$  is a vector of control variables including the per capita income of country  $i$ , an indicator variable for Soviet interventions (constructed in the same manner as CIA interventions), an indicator variable for the change in leadership, a measure of the tenure of the current leader, and an indicator variable for democracy. As Berger *et al.* (2013), we also estimated the effects of CIA interventions on log normalized imports from the rest of the world, log normalized exports to the US, and log normalized exports to the rest of the world, with estimating equations derived in an analogous manner as equation (1).

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There are eight files in the folder "Commercial Imperialism" .

CPY_ImportUS.m	The codes estimating the effect on imports from the US. The results are reported in Table 4, column 1.b.
CPY_ImportUS_data.mat	The data set used in CPY_ImportUS.m.
CPY_ImportWorld.m	The codes estimating the effect on imports from the rest of the world. The results are reported in Table 4, column 2.b.
CPY_ImportWorld_data.mat	The data set used in CPY_ImportWorld.m.
CPY_ExportUS.m	The codes estimating the effect on exports to the US. The results are reported in Table 4, column 3.b.
CPY_ExportUS_data.mat	The data set used in CPY_ExportUS.m.
CPY_ExportWorld.m	The codes estimating the effect on exports to the rest of the world. The results are reported in Table 4, column 4.b.
CPY_ExportWorld_data.mat	The data set used in CPY_ExportWorld.m.

### 3 Abortion and Crime

Based on Donohue and Levitt (2001, *Quarterly Journal of Economics*) "The impact of legalized abortion on crime", we estimate the effect of legalized abortion on crimes in the US. There are two estimating equations. The first estimating equation is equation (29) of the paper:

$$y_{it} = \ln(\text{crime}_{it}) = \mu_i + \delta_t + \beta_1 ABORT_{it} + \boldsymbol{\psi}' \mathbf{x}_{it} + u_{it}, \quad (2)$$

where  $\ln(\text{crime}_{it})$  is the logarithm of the crime rate per capita in state  $i$  and year  $t$ . Donohue and Levitt (2001) considered three types of crimes: violent crime, property crime and murders.  $ABORT_{it}$ , the "effective" legalized abortion rate, and is computed as a weighted average of the abortion rates in which the weights are determined by the fraction of arrests from different age groups.  $\mathbf{x}_{it}$  is a vector of control variables, including lagged prisoners and police per capita, a number of variables for state economic conditions, the lagged state welfare generosity, the concealed handgun laws, and per capita beer consumption.

The second estimating equation is equation (30) of the paper:

$$\ln(\text{crime}_{it}) = \mu_i + \delta_t + \lambda \ln(\text{crime}_{i,t-1}) + \beta_1 (1 - \lambda) ABORT_{it} + (1 - \lambda) \boldsymbol{\psi}' \mathbf{x}_{it} + u_{it}, \quad (3)$$

where  $\ln(\text{crime}_{i,t-1})$  is the lagged logarithm of crime rate per capita.

The data set is from Belloni, Chernozhukov and Hansen (2014, *Review of Economic Studies*) "Inference on treatment effects after selection among high-dimensional controls". There are five files in the folder "Abortion and Crime" .

CPY_crime.m	The codes estimating equation (29) of the paper The results are reported in Table 6.
CPY_crime_long.m	The codes estimating equation (30) of the paper The results are reported in Table 7.
CPY_crime_data.dat	The data set used in CPY_crime.m and CPY_crime_long.m. The data set is from Belloni <i>et al.</i> (2014).
dummy.m	The codes written by Belloni <i>et al.</i> (2014) to create dummies.
recode.m	The codes written by Belloni <i>et al.</i> (2014) to recode the data.