

README

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This document contains the guidelines to replicate the results in Fernández, Rebucci, and Uribe (2015) "Are Capital Controls Countercyclical?", *Journal of Monetary Economics*, 76, 1-14. The replication also includes the results reported in the Online Appendix.

INSTRUCTIONS

To replicate all results, both from the article as well as those in the online appendix, it suffices to run the script **USER_FRU_JME.m**. Once this is done, the user will be prompted to select, first, what type of operating system it is being used (Windows or Mac), and then select the table/figure of interest, either from the published article or the Online Appendix. Further details on each file of the zip folder are provided below.

Warning: Note that some figures might take up several minutes to appear. In particular, Figures 5.A.1 through 5.A.8, might take up to 10 minutes in a 3 cores processor computer. Be aware that some versions of Excel may pop windows asking you to save changes while running certain figures, if so, please select "No".

INPUTS

EXCEL FILES WITH DATA (see Article and Online Appendix for sources)

- 1) Chinn_Ito_index.xls: contains annual data for the Chinn-Ito index
- 2) current_account.xls: contains annual data for the current account
- 3) exchange_rate_regime.xls: contains annual classification of countries in according with the adopted exchange regime
- 4) NFA.xls: contains annual NFA/GDP data as measure of indebtedness
- 5) Quinn_index.xls: contains annual data of the Quinn index
- 6) REER.xls: contains annual data on the real effective exchange rate
- 7) FRU_dataset.xls: contains annual data on capital controls updating Schindler (2009)
- 8) WDI_GDP.xls: contains annual data on the real GDP and growth rate for 88 countries in the original Schindler

MATLAB SCRIPTS

- 1) main_script_CA.m: reproduces all figures/tables with current account and FRU-Schindler index
- 2) main_script_Chinn.m: reproduce all figures/tables with output gap and Chinn-Ito index
- 3) main_script_GDP.m: reproduces all figures/tables with output gap and FRU-Schindler index and writes the tables in the excel file
- 4) main_script_growth.m: reproduces all figures/tables with GDP growth rates and FRU-schindeler index in first differences
- 5) main_script_Quinn.m: reproduces all figures/tables with output gap and Quinn index

6) **main_script_REER.m**: reproduces all figures/tables with real effective exchange rate and FRU-Schindler index

MATLAB FUNCTIONS

- 1) **aggregate_correlation.m**: calculates the correlation between output gap (or growth rates) and the FRU-Schindler index at time $t=0$
- 2) **aggregate_group.m**: aggregates a variable by income group
- 3) **aggregate_group_one.m**: creates lags/leads of an aggregated variable by income group
- 4) **aggregate_group_one_grate.m**: same as **aggregate_group_one.m** but used when first differences are applied for detrending.
- 5) **aggregate_group_one_special_bond.m**: same as **aggregate_group_one.m** but used for bonds only (different start date in Schindler's index).
- 6) **aggregate_group_special_bond.m**: same as **aggregate_group.m** but used for bonds only (different start date in Schindler's index).
- 7) **all_boom_bust_country.m**: produces and saves in pdf figures for boom/bust episodes by country
- 8) **average_boom_bust.m**: calculates average and two standard deviation interval in boom/bust episodes in the period of the boom/bust up to two periods before and after the episodes
- 9) **average_boom_bust_country_group.m**: calculates the averages, standard deviation and confidence interval for the indexes at different time horizons for boom/bust episodes in each country group
- 10) **average_boom_bust_grate.m**: calculates average and two standard deviation interval in boom/bust episodes in the period of the boom/bust one and up to two periods before and after the episodes when growth rate are used
- 11) **average_boom_bust_Quinn.m**: calculates average and two standard deviation interval in boom/bust episodes in the period of the boom/bust one and up to two periods before and after the episodes when Quinn index is used
- 12) **average_country_correlation.m**: calculates the averages, standard deviation and confidence interval for the correlations between index and output gap at different time horizons in each country group
- 13) **confidence_int_average_corr.m**: creates the confidence interval for the correlation calculating an average of the country specific correlations

- 14) **country_correlation.m**: calculates the country specific correlation and p-values between output gap and the indexes
- 15) **country_groups.m**: divides a variable into income groups
- 16) **country_groups_boom_bust1.m**: creates matrices for boom/bust episodes divided by income groups
- 17) **country_groups_boom_bust.m**: creates matrices for boom/bust episodes divided by country groups for output gap and growth rate
- 18) **debt_exercise.m**: identifies boom/bust episodes in case of highly and not highly indebted countries, creates the matrix containing all episodes and calculates the averages and the confidence intervals
- 19) **des_statistics.m**: calculates standard deviation and contemporary correlation for output gap, real effective exchange rate and current account.
- 20) **exchange_regime_exercise.m**: identifies boom/bust episodes in different exchange rate regimes, creates the matrix containing all episodes and calculates the averages and the confidence intervals
- 21) **identify_boom_bust.m**: identifies boom/bust episodes
- 22) **linear_trend.m**: linearly detrends the variable of interest (FKRSU index) and returns the cyclical component
- 23) **plot_xt_index.m**: plots all countries cyclical component of the overall index and the output gap divided by income groups
- 24) **quadratic_trend.m**: calculates the cyclical component of GDP, REER and CA using a quadratic detrend. Plots the trend and actual data.
- 25) **roundTo.m**: approximates values to a fixed number of decimals
- 26) **star_one.m**: assigns stars to different significance levels of the country lag and lead correlations
- 27) **star_zero.m**: assigns stars to different significance levels of the country correlations and orders them in according to sign and p-value
- 28) **subindex_corr_group.m**: calculates the correlation for the subindex in the different income groups

OUTPUT

The main scripts returns two different types of output files:

- 1) case
- 2) Result

In the workspaces case are saved all variables that are recalled in different parts of the code or in different scripts/functions. The name case is followed by the name of the main script and the number of the task that creates these variables, unless otherwise specified. In the workspaces result some additional results are stores.