

“Crowding in” Effect of Public Investment on Private Investment Revisited

Guide to data and replication code

Overview

This folder contains the Stata code to replicate ““Crowding in” Effect of Public Investment on Private Investment Revisited.” We are grateful to Aart Kraay for providing Stata code on which this is partially based.

The main do file is *FKR_2024_CrowdingIn.do*. The code is annotated to provide guidance on the variables and their definitions. The code generates excel files and figures as labeled in the paper (see also list of exhibits below).

The folder *Dataset_construction* contains main do-file that constructs the final dataset (*FKR2024_CrowdingIn.dta*). Note that the loan-level data from the World Bank’s Debtor Reporting System, used to create the instrumental variable, are confidential. Therefore, only country-year level aggregates are included in the file *Aggregated_DRS.dta*, which will be made available in the coming months.

The package starts with intermediate data (*Aggregated_DRS.dta*), temporarily embargoed by the authors but expected to be released publicly in the future. The code used to generate this intermediate data is confidential and, therefore, not shared; it was virtually verified by the reproducibility team.

Data Availability

Original datasets are stored in the folder *Dataset_construction*. The following section will describe the sources as well as other information about the data.

The public and private investment data are from the IMF’s Investment and Capital Stock Dataset. The data can be downloaded at <https://data.imf.org/ICSD> [accessed August 2023]. The original dataset is *IMFInvestmentandCapitalStockDataset2021.xlsx*. Latest update date when downloaded was 06/15/2022.

The financial development index data are from the IMF’s Financial Development Index database. The data can be downloaded at <https://data.imf.org/fdindex> [accessed August 2023]. The original dataset is *FD_Database_STATA.dta*. Latest update date when downloaded was 07/26/2023.

The Chinn-Ito financial openness data can be downloaded at https://web.pdx.edu/~ito/Chinn-Ito_website.htm [accessed November 2023]. The original dataset is *kaopen_2021.dta*.

GDP data are from the IMF's World Economic Outlook database. The data can be downloaded at <https://www.imf.org/en/Publications/SPROLLS/world-economic-outlook-databases> [Accessed November 2023]. The data is based on the October 2023 vintage. The original dataset is in *WEO_Data.xlsx*.

Regional, income, and IDA classifications are based on the World Bank's classifications of countries can be downloaded at <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups> [accessed November 2023]. They are based on fiscal year 2024 classifications. The classifications are saved in *ida_wdi_2024.xlsx*, *regional_dummy.dta*, and *wdi_income_classifications_2024.xlsx*.

The loan-level data available from the World Bank's Debtor Reporting System used to create the instrumental variable are confidential, and hence, only country-year level aggregates are included in the file "*Aggregated_DRS.dta*", which will be made available in the coming months.

Instructions for Replicators

The following steps are required to run this code:

1. Open *FKR_2024_CrowdingIn.do*
2. Ensure that the working directory aligns to where you saved the folder on your computer (you can check using the command *pwd*). This may require changing the file path in the main do file.
3. Install packages *grstyle*, *palettes*, *asdoc*, *colrspace*, *xtscc*, *xtcd2*, *ivreg2*, *kinkyreg*, *rivtest*, and *ranktest*.
4. Run *FKR_2024_CrowdingIn.do*.

List of exhibits

The table below provides information about all the exhibits in the working paper.

Exhibit name	Output filename	Note
Figure 1	Not replicated	Please see " <i>World Bank Group. 2022. Climate and Development: An Agenda for Action - Emerging Insights from World Bank Group 2021-22 Country Climate and Development Reports. Washington, DC: World Bank.</i> " and " <i>Kose, M.A. and Ohnsorge, F. eds., 2024. Falling long-term growth prospects: trends, expectations, and policies. World Bank Publications.</i> "
Figure 2	Not replicated	Based on confidential World Bank Debtor Reporting System (DRS) loan-level data.

Exhibit name	Output filename	Note
Figure 3	Fig3_Panel_A.xls; Fig3_Panel_B.xls; Fig3_Panel_C.xls; Fig3_Panel_D.xls; Fig3_Panel_E.xls; Fig3_Panel_F.xls	
Figure 4	Fig4_Panel_A.xls; Fig4_Panel_B.xls; Fig4_Panel_C.xls; Fig4_Panel_D.xls; Fig4_Panel_E.xls; Fig4_Panel_F.xls	
Table 1	Table1.doc	
Table 2	Table_2_Panel_A.xls; Table_2_Panel_B.xls	The Andersen-Rubin instrument consistent 95 percent confidence intervals in panel B can be produced using the command <i>rivtest</i> on lines 241, 248, 255, 262, 269 and 275. Panel C results can be found in the log-file “FKU2024_CrowdingIn.smcl” under the heading “First-stage regressions” using lines 237, 244, 251, 258, 265, and 272.
Table 3	Table_3_IDA.xls; Table_3_LICs.xls; Table_3_SSA.xls	
Table 4	Table_4_cce_high.xls; Table_4_cce_low.xls	
Table 5	Table_5_FD_high.xls; Table_5_FD_low.xls	
Table 6	Table6_Panel_A.xls; Table6_Panel_B.xls	
Table 7	Table7.xls	
Table B1	Not replicated	Based on confidential World Bank Debtor Reporting System (DRS) loan-level data.
Table C1	Table_C1_Panel_A.xls; Table_C1_Panel_B.xls; Table_C1_Panel_C.xls	
Table C2	Table_C2_Panel_A.xls; Table_C2_Panel_B.xls	
Table D1	Table_D1_Panel_A.xls; Table_D2_Panel_A.xls	