This readme file explains the data used in Liao, Ma, and Zhang, "Identifying Exchange Rate Effects and Spillovers of U.S. Monetary Policy Shocks in the Presence of Time-Varying Instrument Relevance"

- 1. The file "data_main.xlsx" contains the data used for the estimation of the proposed model:
- 1.1 The spreadsheet "IP" contains the industry production for Canada, Germany, Japan, the United Kingdom, and the United States. The sample period is from July 1980 to December 2015. For each country, there are 426 observations. The data can be download from Federal Reserve Bank of St. Louis database. The Series IDs are CANPROINDMISMEI DEUPROINDMISMEI, JPNPROINDMISMEI,

GBRPROINDMISMEI, and USAPROINDMISMEI.

1.2 The spreadsheet "CPI" contains the Consumer Price Index for Canada, Germany, Japan, the United Kingdom, and the United States. The sample period is from July 1980 to December 2015. For each country, there are 426 observations. The data can be download from Federal Reserve Bank of St. Louis database. The Series IDs are CANCPIALLMINMEI, DEUCPIALLMINMEI, JPNCPIALLMINMEI,

GBRCPIALLMINMEI, and USACPIALLMINMEI.

1.3 The spreadsheet "Exchange" contains the exchange rates of national currencies of Canada, Germany, Japan, and the United Kingdom against the US dollar. The sample period is from July 1980 to December 2015. For each country, there are 426 observations. The data can be download from Federal Reserve Bank of St. Louis database. The Series IDs are CCUSSP01CAM650N, CCUSSP01DEM650N,

CCUSSP01JPM650N, and CCUSSP01GBM650N

- 1.4 The spreadsheet "IV" contains the external instrumental variable. We follow the steps outlined in Miranda-Agrippino and Ricco (2021) and construct this informationally-robust instrument. The sample period is from July 1980 to December 2015, for a total of 426 observations.
- 1.5 The spreadsheet "gz" contains the variable excess bond premium (ebp), which is taken from Gilchrist and Zakraj sek (2012). The data can be download from FEDS Notes: https://www.federalreserve.gov/econres/notes/feds-notes/updating-the-recession-risk-and-the-excess-bond-premium-20161006.html
- 1.6 The spreadsheet "Interest Rate" contains two interest rates. The variable "Wu_SSR" is the Wu-Xia shadow rate, which can be download from Jing Cynthia Wu's personal website: https://sites.google.com/view/jingcynthiawu/shadow-rates. The sample period is from July 1980 to December 2015, for a total of 426 observations. The variable "3-Month Treasury Bill" is the yield on the 3-month Treasury bill. The sample period is

from July 1980 to December 2015, for a total of 426 observations. This data can be download from Federal Reserve Bank of St. Louis database. The Series ID is DTB3.

- 2. The file "data_mpi.xlsx" contains the data used to replicate the external instrumental variable MPI.
- 2.1 The spreadsheet "gRGDP" contains Greenbook historical values and projections for Q/Q growth in real GDP, chain weight (annualized percentage points). There are 233 observations for each column. The data can be download from Federal Reserve Bank of Philadelphia database: https://www.philadelphiafed.org/surveys-and-data/real-time-data-research/philadelphia-data-set.
- 2.2 The spreadsheet "gPGDP" contains Greenbook historical values and projections for Q/Q growth in price index for GDP, chain weight (annualized percentage points). There are 233 observations for each column. The data can be download from Federal Reserve Bank of Philadelphia database: https://www.philadelphiafed.org/surveys-and-data/real-time-data-research/philadelphia-data-set.
- 2.3 The spreadsheet "unemp" contains Greenbook historical values and projections for unemployment. There are 233 observations for each column. The data can be download from Federal Reserve Bank of Philadelphia database: https://www.philadelphiafed.org/surveys-and-data/real-time-data-research/philadelphia-data-set.
- 2.4 The spreadsheet "ff4" contains surprises in the three-month fed funds futures from Jaroci'nski and Karadi (2020). There are a total of 232 observations. The data can be download from the AEA website: https://www.aeaweb.org/articles?id=10.1257/mac.20180090.