Replication files for: "Central Bank Information Effects and Transatlantic Spillovers" by Marek Jarociński, September 3, 2022

This Readme file gives an overview of the folder tree and provides instructions to replicate each table and figure in the paper. The results in the paper were generated with Matlab R2021b.

1 Folders

`data` - Source data and Stata and Matlab programs used for the construction of some derived variables, such as interest rate surprises, broad dollar excluding Euro, Europe-exposed and US-exposed stock indices.

`workm_lp` - Matlab programs that estimate local projections.

`workm_var` - Matlab programs that estimate Bayesian VARs.

2 Replicating the results in the paper

Some of the replication scripts start with a preamble enclosed between lines

```
%%%%% Preamble %%%%%
...
%%%%% End of the preamble %%%%%
```

and containing lines of code commented out with `%`. Before running these scripts with Matlab, first uncomment the appropriate lines in the preamble, depending on the table/figure to be replicated. The following instructions provide, for each figure and table, the name of the script and, if needed, the lines to be uncommented. All the lines in the preamble that are not mentioned explicitly should remain commented.

2.1 Main paper

Figure 1: Run the script `data\shocks\plots_and_stats\main2.m`

Figure 2: Run the script `workm_lp\main2.m` uncommenting the lines

```
shockspec = 'ecb_mpd_me_njt'; % ECB shocks
varlist = {'sveny01_d','sveny10_d','sp500_d','bofaml_us_hyld_oas_d',...
   'eurusd_d','broadexea_usd_d'};
```

Note that this will also compute and print out the results for the lines "Share β^{MP} significant" and "Share β^{CBI} significant" in Table 2.

Figure 3: Run the script `workm_var\main.m` uncommenting the lines

```
specid = 'us_gdp';
shocksrc = 'ecb';
shockid = 'sgnm2';
```

Figure 4: Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'macro_releases'; % Macro release surprises
shocktype = 'z_ea_bcs_confind'; Xnames = {shocktype};
varlist = {'sveny01_d','sveny10_d','sp500_d','bofaml_us_hyld_oas_d',...
   'eurusd_d','broadexea_usd_d'};
```

Figure 5: Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'macro_releases'; % Macro release surprises
shocktype = 'z_ea_unemp'; Xnames = {shocktype};
varlist = {'sveny01_d','sveny10_d','sp500_d','bofaml_us_hyld_oas_d',...
   'eurusd_d','broadexea_usd_d'};
```

Figure 6: 1) Run the script `workm_lp\main2.m` uncommenting the lines

```
shockspec = 'ecb_mpd_me_njt'; % ECB shocks
varlist = {'sp500geo_eu0w_d','sp500geo_us0w_d',...
```

```
      'sp500fin_d', 'sp500exfin_d','willsmlcap_d', 'willlrgcap_d'};
```

This will replicate the first column.

2) Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'macro_releases'; % Macro release surprises
shocktype = 'z_ea_bcs_confind'; Xnames = {shocktype};
varlist = {'sp500geo_eu0w_d','sp500geo_us0w_d',...
      'sp500fin_d', 'sp500exfin_d','willsmlcap_d', 'willlrgcap_d'};
```

This will replicate the second column.

3) Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'macro_releases'; % Macro release surprises
shocktype = 'z_ea_unemp'; Xnames = {shocktype};
varlist = {'sp500geo_eu0w_d','sp500geo_us0w_d',...
      'sp500fin_d', 'sp500exfin_d','willsmlcap_d', 'willlrgcap_d'};
```

This will replicate the third column.

Figure 7: 1) Run the script `workm_var\main.m` uncommenting the lines

```
specid = 'us_ff';
shocksrc = 'ecb';
shockid = 'sgnm2';
```

This will replicate the first plot.

2) Run the script `workm_var\main.m` uncommenting the lines

```
specid = 'us_wx';
shocksrc = 'ecb';
shockid = 'sgnm2';
```

This will replicate the second plot.

3) Run the script `workm_var\main.m` uncommenting the lines

```
specid = 'us_kr';
shocksrc = 'ecb';
shockid = 'sgnm2';
```

This will replicate the third plot.

Figure 8: 1) Run the script `workm_var\main.m` uncommenting the lines

```
specid = 'us_gdp';
shocksrc = 'fed';
shockid = 'sgnm2';
```

This will replicate the first column.

2) Run the script `workm_var\main.m` uncommenting the lines

```
specid = 'ea_gdp';
shocksrc = 'ecb';
shockid = 'sgnm2';
```

This will replicate the second column.

Figure 9: Run the script `workm_lp\main2.m` uncommenting the lines

```
shockspec = 'fed_gssipa_me_99njt';
varlist = {'bund1y_d','bund10y_d','stoxx50_d','bofaml_ea_hyld_oas_d',...
    'eurusd_d','broadexea_usd_d'};
```

Figure 10: Run the script `workm_var\main.m` uncommenting the lines

```
specid = 'ea_gdp';
shocksrc = 'fed';
shockid = 'sgnm2';
```

Table 1: 1) Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'ecb_mpd_me_njt'; % ECB shocks
shocktype = 'median'; Xnames = {'MP_median','CBI_median'};
varlist = {'sveny01_d','bund1y_d'};
```

This will replicate the results for the median shocks (the upper parts of both panels).

2) Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'ecb_mpd_me_njt'; % ECB shocks
shocktype = 'pm'; Xnames = {'MP_pm','CBI_pm'};
varlist = {'sveny01_d','bund1y_d'};
```

This will replicate the results for the "simple" ("poor man") shocks (the lower parts of both panels).

Table 2: 1) Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'ecb_mpd_me_njt'; % ECB shocks
shocktype = 'q25'; Xnames = {'MP_q25','CBI_q25'};
varlist = {'sveny01_d','bund1y_d'};
```

This will replicate the results for the 25th percentile shocks (the upper part).

2) Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'ecb_mpd_me_njt'; % ECB shocks
shocktype = 'q75'; Xnames = {'MP_q75','CBI_q75'};
varlist = {'sveny01_d','bund1y_d'};
```

This will replicate the results for the 75th percentile shocks (the lower part).

For replicating the lines "Share β^{MP} significant" and "Share β^{CBI} significant" see the instructions for Figure 2.

2.2 Online Appendix

Table A.1, Table A.2, Figure A.1: Run the script `data\shocks\plots_and_stats\main1.m`

Table A.3, Figure A.2, A.3, A.4: Run the script `data\shocks\plots_pconf\main1.m` and `data\shocks\plots_pconf\main2.m`

Table B.1, Figure B.1: Run the script `data\shocks\plots_and_stats\main3.m`

Table C.1: 1) Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'ecb_mpd_me_njt'; % ECB shocks
```

```
varlist = {'sveny01_d','bund1y_d','sveny10_d','bund10y_d'};
shocktype = 'surp'; Xnames = {'pc1eon1_me_njt'};
```

2) Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'ecb_mpd_me_njt'; % ECB shocks
varlist = {'sveny01_d','bund1y_d','sveny10_d','bund10y_d'};
shocktype = 'median'; Xnames = {'MP_median','CBI_median'};
```

3) Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'ecb_mpd_me_njt'; % ECB shocks
varlist = {'sveny01_d','bund1y_d','sveny10_d','bund10y_d'};
shocktype = 'pm'; Xnames = {'MP_pm','CBI_pm'};
```

Table C.2: 1) Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'ecb_mpd_me_njt';
shocktype = 'median'; Xnames = {'MP_median','CBI_median'};
varlist = {'ffn_d','ff3_d','ff6_d'};
```

This will replicate the results for the median shocks (the upper parts of all panels).

2) Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'ecb_mpd_me_njt';
shocktype = 'pm'; Xnames = {'MP_pm','CBI_pm'};
varlist = {'ffn_d','ff3_d','ff6_d'};
```

This will replicate the results for the "simple" ("poor man") shocks (the lower parts of all panels).

Table C.3: 1) Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'ecb_mpd_me_njt';
shocktype = 'median'; Xnames = {'MP_median','CBI_median'};
varlist = {'bund1y_d','bund10y_d','stoxx50_d','bofaml_ea_hyld_oas_d',...
    'eurusd_d','broadexea_usd_d'};
```

This will replicate the results for the median shocks (the upper parts of all panels).

2) Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'ecb_mpd_me_njt';
shocktype = 'pm'; Xnames = {'MP_pm','CBI_pm'};
varlist = {'bund1y_d','bund10y_d','stoxx50_d','bofaml_ea_hyld_oas_d',...
    'eurusd_d','broadexea_usd_d'};
```

This will replicate the results for the "simple" ("poor man") shocks (the lower parts of all panels).

Table C.4: The same as Figure 4.

Table C.5: The same as Figure 5.

Table C.6: Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'ecb_mpd_me_njt';
shocktype = 'median'; Xnames = {'MP_median','CBI_median'};
varlist = {'sp500geo_eu0w_d','sp500geo_us0w_d',...
      'sp500fin_d', 'sp500exfin_d','willsmlcap_d', 'willlrgcap_d'};
```

This will replicate the results for the median shocks (the upper parts of all panels).

2) Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'ecb_mpd_me_njt';
shocktype = 'pm'; Xnames = {'MP_pm','CBI_pm'};
varlist = {'sp500geo_eu0w_d','sp500geo_us0w_d',...
      'sp500fin_d', 'sp500exfin_d','willsmlcap_d', 'willlrgcap_d'};
```

This will replicate the results for the "simple" ("poor man") shocks (the lower parts of all panels).

Table C.7: The same as Figure 6, column 2.

Table C.8: The same as Figure 6, column 3.

Table C.9: Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'fed_gssipa_me_99njt'; % Fed shocks
shocktype = 'median'; Xnames = {'MP_median','CBI_median'};
varlist = {'bund1y_d','bund10y_d','stoxx50_d','bofaml_ea_hyld_oas_d',...
    'eurusd_d','broadexea_usd_d'};
```

This will replicate the results for the median shocks (the upper parts of all panels).

2) Run the script `workm_lp\main.m` uncommenting the lines

```
shockspec = 'fed_gssipa_me_99njt'; % Fed shocks
shocktype = 'pm'; Xnames = {'MP_pm','CBI_pm'};
varlist = {'bund1y_d','bund10y_d','stoxx50_d','bofaml_ea_hyld_oas_d',...
    'eurusd_d','broadexea_usd_d'};
```

This will replicate the results for the "simple" ("poor man") shocks (the lower parts of all panels).

Figure D.1: Run the script `workm_var\main.m` uncommenting the lines

```
specid = 'us_gdp';
shocksrc = 'ecb';
shockid = 'pm';
```

Figure D.2: Run the script `workm_var\main.m` uncommenting the lines

```
specid = 'ea_gdp';
shocksrc = 'ecb';
shockid = 'sgnm2';
```

Figure D.3: Run the script `workm_var\main.m` uncommenting the lines

```
specid = 'us_gdp';
shocksrc = 'fed';
shockid = 'sgnm2';
```