```
      name:  <unnamed>
       log:  /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Tables/impac
> t_regs.smcl
  log type:  smcl
 opened on:  26 Jul 2020, 22:26:11

1 .
2 . * LPs
3 . local j = 0

4 . foreach shock in mp1 path lsap {
  2.         local ++j
  3.         if `j' == 1 {
  4.                 local shk "Target"
  5.                 local datecond date > td(1jan2000) & date < td(1jan2009)
  6.         }
  7.         if `j' == 2 {
  8.                 local shk "Path"
  9.                 local datecond date > td(1jan2000) & date < td(1jan2020)
 10.         }
 11.         if `j' == 3 {
 12.                 local shk "LSAP"
 13.                 local datecond date > td(1jan2009) & date < td(1jan2020)
 14.         }
 15.
5 .         foreach group in 1 { // 0 1 {
 16.                 if `group' == 0 {
 17.                         local grp "AE"
 18.                         local vars sftnom sftsyn sftrho sftphi // nom syn
>  dyp dtp sftdyp sftdtp
 19.                         local region regionae
 20.                 }
 21.                 else {
 22.                         local grp "EM"
 23.                         local vars sftnom sftsyn sftrho sftphi // nom dyp
>  dtp usyc syn rho phi
 24.                         local region regionem
 25.                 }
 26.
```

```
 6 .                 foreach t in 24 120 { // 3 6 12 24 60 120  {
  27.                           foreach v in `vars' {
  28.
 7 .                                 // variables to store the betas, standard er
   > rors and confidence intervals
 8 .                                 capture {
  29.                                    gen b_`v'`t'm   = .
  30.                                    gen se_`v'`t'm  = .
  31.                                    gen ll1_`v'`t'm = .
  32.                                    gen ul1_`v'`t'm = .
  33.                                    gen ll2_`v'`t'm = .
  34.                                    gen ul2_`v'`t'm = .
  35.                                    }
  36.
 9 .                                 // controls
10 .                                 local ctrl`v'`t'm l(2).`v'`t'm l(1).fx  // l
   > (1/`maxlag').d`v'`t'm l(1/`maxlag').fx
  37.
11 .                                 forvalues i = 0/`horizon' {
  38.                                            // response variables
12 .                                       capture gen `v'`t'm`i' = (f`i'.`v'`t
   > 'm - l.`v'`t'm)
  39.
13 .                                       // conditions
14 .                                       local condition em == `group' & `dat
   > econd' & `region' == 4 // & region == 3
  40.
15 . //                                    // test for cross-sectional independ
   > ence
16 . //                                    if inlist(`i',0) {
17 . //                                           quiet xtreg `v'`t'm`i' `shoc
   > k' `ctrl`v'`t'm' if `condition' & fomc, fe
18 . //                                           xtcsd, pesaran abs
19 . //                                    }
20 .
21 .                                       // one regression for each horizon
22 .                                       if `i' == 0 xtreg `v'`t'm`i' `shock'
   >  `ctrl`v'`t'm' if `condition', fe level(95) cluster($id)
   > // report on-impact effect
  41. //                                      if `i' == 0 xtscc `v'`t'm`i' `sho
   > ck' `ctrl`v'`t'm' if `condition', fe level(95) lag(3)
```

```
23 .                                        quiet xtreg `v'`t'm`i' `shock' `ctrl
   > `v'`t'm' if `condition', fe level(95) cluster($id)
    42. //                                     quiet xtscc `v'`t'm`i' `shock' `c
   > trl`v'`t'm' if `condition', fe level(95) lag(3)
24 .                                        capture {
    43.                                        replace b_`v'`t'm  = _b[`shock']
   > if _n == `i'+1
    44.                                        replace se_`v'`t'm = _se[`shock']
   >  if _n == `i'+1
    45.
25 .                                        // confidence intervals
26 .                                        matrix R = r(table)
    46.                                        replace ll1_`v'`t'm = el(matrix(R
   > ),rownumb(matrix(R),"ll"),colnumb(matrix(R),"`shock'")) if _n == `i'+1
    47.                                        replace ul1_`v'`t'm = el(matrix(R
   > ),rownumb(matrix(R),"ul"),colnumb(matrix(R),"`shock'")) if _n == `i'+1
    48.                                        quiet xtreg, level(90)  // to get
   >  90% CI
    49. //                                     quiet xtscc, level(90)  // to get
   >  90% CI
27 .                                        matrix R = r(table)
    50.                                        replace ll2_`v'`t'm = el(matrix(R
   > ),rownumb(matrix(R),"ll"),colnumb(matrix(R),"`shock'")) if _n == `i'+1
    51.                                        replace ul2_`v'`t'm = el(matrix(R
   > ),rownumb(matrix(R),"ul"),colnumb(matrix(R),"`shock'")) if _n == `i'+1
    52.
28 .                                        drop `v'`t'm`i'
    53.                                        }
    54.                                  }                     // horizon
    55.
29 .                                  // graph
30 .                                  twoway  (rarea ll1_`v'`t'm ul1_`v'`t'm days,
   >  fcolor(gs12) lcolor(white) lpattern(solid)) ///
   >                                                 (rarea ll2_`v'`t'm ul2_`v'`t
   > 'm days, fcolor(gs10) lcolor(white) lpattern(solid)) ///
   >                                                 (line b_`v'`t'm days, lcolor
   > (black) lpattern(solid) lwidth(thick)) ///
   >                                                 (line zero days, lcolor(blac
   > k)), ///
   >                                  title(`: variable label `v'`t'm', color(blac
   > k) size(medium)) ///
   >                                  ytitle("Basis Points", size(medsmall)) xtitl
   > e("Days", size(medsmall)) xlabel(0 15 30 45 60 75 90) ///
   >                                  graphregion(color(white)) plotregion(color(w
   > hite)) ///
   >                                  legend(off) name(`v'`t'm, replace)
    56. //                                   graph export $pathfigs/`shk'/`grp'/`v'`t'
   > m.eps, replace
```

```
31 .
32 .                                 local graphs`shock'`grp'`t' `graphs`shock'`g
   > rp'`t'' `v'`t'm
    57.                                    drop *_`v'`t'm                        /
   > / b_, se_ and confidence intervals
    58.                             }                       // yield component
    59.
33 .                  graph combine `graphs`shock'`grp'`t'', rows(1) ycommon ///
   >                  title("`shock' `grp' `t'm")
    60.                   graph export $pathfigs/`shk'/`grp'/`shk'`grp'`v'`t'm.eps,
   >  replace
    61.
34 .                  graph drop _all
    62.                   }                                 // tenor
    63.          }                                          // AE or EM
    64. }                                                   // shock

Fixed-effects (within) regression               Number of obs     =      5,230
Group variable: imf                             Number of groups  =          3

R-sq:                                           Obs per group:
     within  = 0.0045                                         min =        940
     between = 0.9900                                         avg =    1,743.3
     overall = 0.0008                                         max =      2,249

                                                F(2,2)            =          .
corr(u_i, Xb)  = -0.8806                        Prob > F          =          .

                                    (Std. Err. adjusted for 3 clusters in imf)
------------------------------------------------------------------------------
             |               Robust
  sftnom24m0 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         mp1 |   .1919416   .1126553     1.70   0.231    -.2927751    .6766583
             |
   sftnom24m |
         L2. |  -.0023257   .0005588    -4.16   0.053    -.0047301    .0000786
             |
          fx |
         L1. |  -.0023165   .0000686   -33.74   0.001    -.0026119   -.0020211
             |
       _cons |   2.409419   .3495616     6.89   0.020     .9053766    3.913461
-------------+----------------------------------------------------------------
     sigma_u |  1.3420331
     sigma_e |  7.8167524
         rho |  .02863238   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

Fixed-effects (within) regression — Number of obs = **4,152**
Group variable: **imf** — Number of groups = **3**

R-sq: — Obs per group:
within = **0.0144** — min = **599**
between = **0.4030** — avg = **1,384.0**
overall = **0.0122** — max = **1,830**

F(2,2) = **.**
corr(u_i, Xb) = **-0.3141** — Prob > F = **.**

(Std. Err. adjusted for **3** clusters in imf)

sftsyn24m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
mp1	**1.0324**	**.1347131**	**7.66**	**0.017**	**.452776**	**1.612023**
sftsyn24m L2.	**-.0023904**	**.0007768**	**-3.08**	**0.091**	**-.0057328**	**.0009519**
fx L1.	**-.0000883**	**.0000978**	**-0.90**	**0.462**	**-.000509**	**.0003324**
_cons	**1.253824**	**.5126836**	**2.45**	**0.134**	**-.9520755**	**3.459724**
sigma_u	**.94373124**					
sigma_e	**14.909288**					
rho	**.00399067**	(fraction of variance due to u_i)				

Fixed-effects (within) regression — Number of obs = **4,155**
Group variable: **imf** — Number of groups = **3**

R-sq: — Obs per group:
within = **0.0061** — min = **600**
between = **0.9423** — avg = **1,385.0**
overall = **0.0012** — max = **1,831**

F(2,2) = **.**
corr(u_i, Xb) = **-0.8511** — Prob > F = **.**

(Std. Err. adjusted for **3** clusters in imf)

sftrho24m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
mp1	**.504893**	**.1251472**	**4.03**	**0.056**	**-.033572**	**1.043358**
sftrho24m L2.	**-.0024092**	**.0013838**	**-1.74**	**0.224**	**-.0083634**	**.003545**
fx L1.	**.0018557**	**.0007981**	**2.33**	**0.146**	**-.0015784**	**.0052898**
_cons	**-.1606015**	**.043616**	**-3.68**	**0.066**	**-.3482659**	**.0270629**
sigma_u	**1.7991119**					
sigma_e	**12.239263**					
rho	**.02115055**	(fraction of variance due to u_i)				

Fixed-effects (within) regression — Number of obs = **4,152**
Group variable: **imf** — Number of groups = **3**

R-sq:
within = **0.0091**
between = **0.5172**
overall = **0.0026**

Obs per group:
min = **599**
avg = **1,384.0**
max = **1,830**

F(2,2) = **.**
corr(u_i, Xb) = **-0.8139** — Prob > F = **.**

(Std. Err. adjusted for **3** clusters in imf)

sftphi24m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
mp1	**-.7382031**	**.0723814**	**-10.20**	**0.009**	**-1.049635**	**-.4267709**
sftphi24m L2.	**-.005096**	**.0017268**	**-2.95**	**0.098**	**-.0125257**	**.0023338**
fx L1.	**-.0029313**	**.0001766**	**-16.60**	**0.004**	**-.0036909**	**-.0021716**
_cons	**1.663045**	**.0204337**	**81.39**	**0.000**	**1.575126**	**1.750964**
sigma_u	**2.2393722**					
sigma_e	**14.084953**					
rho	**.02465472**	(fraction of variance due to u_i)				

```
(note: file /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Figures/LPs/T
> arget/EM/TargetEM24m.eps not found)
(file /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Figures/LPs/Target/
> EM/TargetEM24m.eps written in EPS format)

Fixed-effects (within) regression               Number of obs     =      5,230
Group variable: imf                             Number of groups  =          3

R-sq:                                           Obs per group:
     within  = 0.0018                                         min =        940
     between = 0.0716                                         avg =    1,743.3
     overall = 0.0010                                         max =      2,249

                                                F(2,2)            =          .
corr(u_i, Xb)  = -0.6888                        Prob > F          =          .

                                    (Std. Err. adjusted for 3 clusters in imf)
------------------------------------------------------------------------------
             |               Robust
  sftnom120m0 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         mp1 |   .0530623   .1425941     0.37   0.746    -.5604706    .6665952

  sftnom120m |
        L2. |  -.0024701   .0010448    -2.36   0.142    -.0069655    .0020252

          fx |
        L1. |  -.0010236   .0004377    -2.34   0.144     -.002907    .0008598

       _cons |   2.076023   .5936846     3.50   0.073    -.4783958    4.630442
-------------+----------------------------------------------------------------
     sigma_u |  .56129706
     sigma_e |  9.3240708
         rho |   .0036108   (fraction of variance due to u_i)
------------------------------------------------------------------------------

Fixed-effects (within) regression               Number of obs     =      4,152
Group variable: imf                             Number of groups  =          3

R-sq:                                           Obs per group:
     within  = 0.0094                                         min =        599
     between = 0.0219                                         avg =    1,384.0
     overall = 0.0032                                         max =      1,830

                                                F(2,2)            =          .
corr(u_i, Xb)  = -0.8072                        Prob > F          =          .
```

(Std. Err. adjusted for **3** clusters in imf)

sftsyn120m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
mp1	**.7438678**	**.2656025**	**2.80**	**0.107**	**-.3989276**	**1.886663**
sftsyn120m L2.	**-.0053037**	**.0032256**	**-1.64**	**0.242**	**-.0191822**	**.0085747**
fx L1.	**.0015164**	**.0008032**	**1.89**	**0.200**	**-.0019396**	**.0049725**
_cons	**2.705239**	**1.79948**	**1.50**	**0.272**	**-5.037301**	**10.44778**
sigma_u	**2.0730711**					
sigma_e	**14.264965**					
rho	**.02068285**	(fraction of variance due to u_i)				

Fixed-effects (within) regression — Number of obs = **4,155**
Group variable: **imf** — Number of groups = **3**

R-sq:
within = **0.0094**
between = **0.1257**
overall = **0.0011**

Obs per group:
min = **600**
avg = **1,385.0**
max = **1,831**

F(2,2) = **.**
corr(u_i, Xb) = **-0.9360** — Prob > F = **.**

(Std. Err. adjusted for **3** clusters in imf)

sftrho120m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
mp1	**.5718716**	**.2641376**	**2.17**	**0.163**	**-.5646209**	**1.708364**
sftrho120m L2.	**-.0066487**	**.0038961**	**-1.71**	**0.230**	**-.0234122**	**.0101147**
fx L1.	**.0034408**	**.0010084**	**3.41**	**0.076**	**-.000898**	**.0077797**
_cons	**-.1358994**	**.3802213**	**-0.36**	**0.755**	**-1.77186**	**1.500061**
sigma_u	**3.4350452**					
sigma_e	**12.151663**					
rho	**.0739957**	(fraction of variance due to u_i)				

```
Fixed-effects (within) regression               Number of obs      =      4,152
Group variable: imf                             Number of groups   =          3

R-sq:                                           Obs per group:
     within  = 0.0109                                         min =        599
     between = 0.0221                                         avg =    1,384.0
     overall = 0.0018                                         max =      1,830

                                                F(2,2)             =          .
corr(u_i, Xb)  = -0.9045                        Prob > F           =          .

                                    (Std. Err. adjusted for 3 clusters in imf)
```

sftphi120m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
mp1	-.643053	.2595435	-2.48	0.132	-1.759778	.4736725
sftphi120m L2.	-.021765	.0067517	-3.22	0.084	-.050815	.0072851
fx L1.	-.0044813	.0004552	-9.84	0.010	-.0064399	-.0025227
_cons	2.78336	.4368341	6.37	0.024	.9038148	4.662906
sigma_u	3.5476616					
sigma_e	14.232449					
rho	.05849868	(fraction of variance due to u_i)				

```
(note: file /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Figures/LPs/T
> arget/EM/TargetEM120m.eps not found)
(file /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Figures/LPs/Target/
> EM/TargetEM120m.eps written in EPS format)

Fixed-effects (within) regression               Number of obs      =     12,793
Group variable: imf                             Number of groups   =          3

R-sq:                                           Obs per group:
     within  = 0.0030                                         min =      3,461
     between = 0.0422                                         avg =    4,264.3
     overall = 0.0006                                         max =      4,770

                                                F(2,2)             =          .
corr(u_i, Xb)  = -0.8919                        Prob > F           =          .
```

(Std. Err. adjusted for **3** clusters in imf)

sftnom24m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
path	**.2086391**	**.108173**	**1.93**	**0.194**	**-.2567916**	**.6740699**
sftnom24m L2.	**-.0011846**	**.0003815**	**-3.11**	**0.090**	**-.0028261**	**.0004569**
fx L1.	**-.0015905**	**.0000759**	**-20.96**	**0.002**	**-.0019169**	**-.0012641**
_cons	**1.114072**	**.1713537**	**6.50**	**0.023**	**.3767966**	**1.851348**
sigma_u	**.9822577**					
sigma_e	**7.2391524**					
rho	**.01807808**	(fraction of variance due to u_i)				

Fixed-effects (within) regression — Number of obs = **11,715**
Group variable: **imf** — Number of groups = **3**

R-sq:
within = **0.0148**
between = **0.1626**
overall = **0.0091**

Obs per group:
min = **3,120**
avg = **3,905.0**
max = **4,351**

F(2,2) = **.**
corr(u_i, Xb) = **-0.6077** — Prob > F = **.**

(Std. Err. adjusted for **3** clusters in imf)

sftsyn24m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
path	**.8126469**	**.1403313**	**5.79**	**0.029**	**.20885**	**1.416444**
sftsyn24m L2.	**-.0018378**	**.000355**	**-5.18**	**0.035**	**-.0033651**	**-.0003105**
fx L1.	**.0012139**	**.0002563**	**4.74**	**0.042**	**.0001112**	**.0023166**
_cons	**.1350895**	**.2430817**	**0.56**	**0.634**	**-.9108067**	**1.180986**
sigma_u	**1.2171994**					
sigma_e	**10.812078**					
rho	**.01251513**	(fraction of variance due to u_i)				

```
Fixed-effects (within) regression               Number of obs      =     11,718
Group variable: imf                             Number of groups   =          3

R-sq:                                           Obs per group:
     within  = 0.0037                                         min =      3,121
     between = 0.3777                                         avg =    3,906.0
     overall = 0.0003                                         max =      4,352

                                                F(2,2)             =          .
corr(u_i, Xb)  = -0.9351                        Prob > F           =          .

                                    (Std. Err. adjusted for 3 clusters in imf)
```

sftrho24m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
path	.299854	.1241477	2.42	0.137	-.2343104	.8340184
sftrho24m L2.	-.0019056	.0006986	-2.73	0.112	-.0049114	.0011001
fx L1.	.0020719	.0000781	26.53	0.001	.0017358	.0024079
_cons	-.4711507	.1289296	-3.65	0.067	-1.02589	.0835884
sigma_u	1.7369906					
sigma_e	9.0576003					
rho	.03547183	(fraction of variance due to u_i)				

```
Fixed-effects (within) regression               Number of obs      =     11,715
Group variable: imf                             Number of groups   =          3

R-sq:                                           Obs per group:
     within  = 0.0081                                         min =      3,120
     between = 0.3421                                         avg =    3,905.0
     overall = 0.0025                                         max =      4,351

                                                F(2,2)             =          .
corr(u_i, Xb)  = -0.8283                        Prob > F           =          .
```

(Std. Err. adjusted for **3** clusters in imf)

sftphi24m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
path	**-.5750796**	**.0895302**	**-6.42**	**0.023**	**-.9602969**	**-.1898624**
sftphi24m L2.	**-.0051605**	**.0017195**	**-3.00**	**0.095**	**-.0125591**	**.0022381**
fx L1.	**-.0022305**	**.000495**	**-4.51**	**0.046**	**-.0043603**	**-.0001007**
_cons	**1.274171**	**.077941**	**16.35**	**0.004**	**.9388184**	**1.609525**
sigma_u	**1.7575927**					
sigma_e	**10.986571**					
rho	**.02495384**	(fraction of variance due to u_i)				

(note: file /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Figures/LPs/P
> ath/EM/PathEM24m.eps not found)
(file /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Figures/LPs/Path/EM
> /PathEM24m.eps written in EPS format)

Fixed-effects (within) regression — Number of obs = **12,793**
Group variable: **imf** — Number of groups = **3**

R-sq:
within = **0.0016**
between = **0.7050**
overall = **0.0008**

Obs per group:
min = **3,461**
avg = **4,264.3**
max = **4,770**

F(2,2) = **.**
corr(u_i, Xb) = **-0.6853** — Prob > F = **.**

(Std. Err. adjusted for **3** clusters in imf)

sftnom120m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
path	**.1446943**	**.1149018**	**1.26**	**0.335**	**-.3496883**	**.6390769**
sftnom120m L2.	**-.0016574**	**.0004616**	**-3.59**	**0.070**	**-.0036437**	**.0003289**
fx L1.	**-.0005015**	**.0002104**	**-2.38**	**0.140**	**-.0014067**	**.0004037**
_cons	**1.090659**	**.1942354**	**5.62**	**0.030**	**.2549316**	**1.926386**

sigma_u	**.44396871**
sigma_e	**8.6274502**
rho	**.00264114** (fraction of variance due to u_i)

Fixed-effects (within) regression — Number of obs = **11,715**
Group variable: **imf** — Number of groups = **3**

R-sq: — Obs per group:
- within = **0.0126** — min = **3,120**
- between = **0.6186** — avg = **3,905.0**
- overall = **0.0079** — max = **4,351**

F(2,2) = **.**
corr(u_i, Xb) = **-0.5903** — Prob > F = **.**

(Std. Err. adjusted for **3** clusters in imf)

sftsyn120m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
path	**.841612**	**.1238138**	**6.80**	**0.021**	**.308884**	**1.37434**
sftsyn120m L2.	**-.0023039**	**.0005635**	**-4.09**	**0.055**	**-.0047283**	**.0001205**
fx L1.	**.0009796**	**.0001254**	**7.81**	**0.016**	**.00044**	**.0015193**
_cons	**.6934713**	**.3405156**	**2.04**	**0.179**	**-.7716489**	**2.158592**
sigma_u	**1.219431**					
sigma_e	**12.208009**					
rho	**.009879**	(fraction of variance due to u_i)				

Fixed-effects (within) regression — Number of obs = **11,718**
Group variable: **imf** — Number of groups = **3**

R-sq: — Obs per group:
- within = **0.0042** — min = **3,121**
- between = **0.6806** — avg = **3,906.0**
- overall = **0.0004** — max = **4,352**

F(2,2) = **.**
corr(u_i, Xb) = **-0.9402** — Prob > F = **.**

(Std. Err. adjusted for **3** clusters in imf)

sftrho120m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
path	**.3015351**	**.0758043**	**3.98**	**0.058**	**-.0246245**	**.6276947**
sftrho120m L2.	**-.0045443**	**.0018888**	**-2.41**	**0.138**	**-.0126712**	**.0035826**
fx L1.	**.0015049**	**.0000776**	**19.39**	**0.003**	**.001171**	**.0018388**
_cons	**.1881994**	**.3447441**	**0.55**	**0.640**	**-1.295115**	**1.671513**
sigma_u	**2.1143048**					
sigma_e	**9.9115499**					
rho	**.04352374**	(fraction of variance due to u_i)				

Fixed-effects (within) regression — Number of obs = **11,715**
Group variable: **imf** — Number of groups = **3**

R-sq:
within = **0.0088**
between = **0.0007**
overall = **0.0057**

Obs per group:
min = **3,120**
avg = **3,905.0**
max = **4,351**

F(2,2) = **.**
corr(u_i, Xb) = **-0.5945** — Prob > F = **.**

(Std. Err. adjusted for **3** clusters in imf)

sftphi120m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
path	**-.6586317**	**.2074155**	**-3.18**	**0.086**	**-1.551069**	**.2338052**
sftphi120m L2.	**-.0108973**	**.002994**	**-3.64**	**0.068**	**-.0237796**	**.001985**
fx L1.	**-.0009188**	**.0003282**	**-2.80**	**0.107**	**-.0023309**	**.0004933**
_cons	**1.027604**	**.0479879**	**21.41**	**0.002**	**.8211287**	**1.234079**
sigma_u	**1.043519**					
sigma_e	**12.784724**					
rho	**.00661811**	(fraction of variance due to u_i)				

```
(note: file /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Figures/LPs/P
> ath/EM/PathEM120m.eps not found)
(file /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Figures/LPs/Path/EM
> /PathEM120m.eps written in EPS format)

Fixed-effects (within) regression               Number of obs     =      7,563
Group variable: imf                             Number of groups  =          3

R-sq:                                           Obs per group:
     within  = 0.0010                                         min =      2,521
     between = 0.7410                                         avg =    2,521.0
     overall = 0.0000                                         max =      2,521

                                                F(2,2)            =          .
corr(u_i, Xb)  = -0.9768                        Prob > F          =          .

                                    (Std. Err. adjusted for 3 clusters in imf)
------------------------------------------------------------------------------
             |               Robust
  sftnom24m0 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        lsap |   .1891984   .0149659    12.64   0.006     .1248055    .2535914

   sftnom24m |
         L2. |  -.0017006   .0007343    -2.32   0.147    -.0048599    .0014588

          fx |
         L1. |   .0015267   .0002515     6.07   0.026     .0004447    .0026087

       _cons |  -.0169463   .1717547    -0.10   0.930    -.7559473    .7220546
-------------+----------------------------------------------------------------
     sigma_u |  1.2528949
     sigma_e |  6.8158506
         rho |  .03268563   (fraction of variance due to u_i)
------------------------------------------------------------------------------

Fixed-effects (within) regression               Number of obs     =      7,563
Group variable: imf                             Number of groups  =          3

R-sq:                                           Obs per group:
     within  = 0.0074                                         min =      2,521
     between = 0.1928                                         avg =    2,521.0
     overall = 0.0007                                         max =      2,521

                                                F(2,2)            =          .
corr(u_i, Xb)  = -0.9560                        Prob > F          =          .
```

(Std. Err. adjusted for **3** clusters in imf)

sftsyn24m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
lsap	**.8042882**	**.1649644**	**4.88**	**0.040**	**.0945037**	**1.514073**
sftsyn24m L2.	**-.0028252**	**.0011642**	**-2.43**	**0.136**	**-.0078342**	**.0021837**
fx L1.	**.0032398**	**.0007788**	**4.16**	**0.053**	**-.0001109**	**.0065906**
_cons	**-.4258445**	**.6212557**	**-0.69**	**0.564**	**-3.098892**	**2.247203**
sigma_u	**2.6390855**					
sigma_e	**7.7222969**					
rho	**.1045783**	(fraction of variance due to u_i)				

Fixed-effects (within) regression — Number of obs = **7,563**
Group variable: **imf** — Number of groups = **3**

R-sq:
within = **0.0018**
between = **0.3563**
overall = **0.0001**

Obs per group:
min = **2,521**
avg = **2,521.0**
max = **2,521**

F(2,2) = **.**
corr(u_i, Xb) = **-0.9900** — Prob > F = **.**

(Std. Err. adjusted for **3** clusters in imf)

sftrho24m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
lsap	**.2632778**	**.1681982**	**1.57**	**0.258**	**-.4604208**	**.9869764**
sftrho24m L2.	**-.0011398**	**.0008457**	**-1.35**	**0.310**	**-.0047787**	**.0024991**
fx L1.	**.0034306**	**.0004837**	**7.09**	**0.019**	**.0013494**	**.0055118**
_cons	**-1.15792**	**.350413**	**-3.30**	**0.081**	**-2.665625**	**.3497859**
sigma_u	**2.3972603**					
sigma_e	**6.6919909**					
rho	**.11373248**	(fraction of variance due to u_i)				

```
Fixed-effects (within) regression               Number of obs      =      7,563
Group variable: imf                             Number of groups   =          3

R-sq:                                           Obs per group:
     within  = 0.0045                                         min =      2,521
     between = 0.9289                                         avg =    2,521.0
     overall = 0.0014                                         max =      2,521

                                                F(2,2)             =          .
corr(u_i, Xb)  = -0.7937                        Prob > F           =          .

                                    (Std. Err. adjusted for 3 clusters in imf)
```

sftphi24m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
lsap	-.6163574	.1573139	-3.92	0.059	-1.293225	.0605097
sftphi24m L2.	-.0072875	.000602	-12.11	0.007	-.0098777	-.0046974
fx L1.	.0020723	.000251	8.26	0.014	.0009923	.0031522
_cons	-.2754652	.0505055	-5.45	0.032	-.4927729	-.0581575
sigma_u	.99394676					
sigma_e	8.851717					
rho	.01245173	(fraction of variance due to u_i)				

```
(note: file /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Figures/LPs/L
> SAP/EM/LSAPEM24m.eps not found)
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> /LSAPEM24m.eps written in EPS format)

Fixed-effects (within) regression               Number of obs      =      7,563
Group variable: imf                             Number of groups   =          3

R-sq:                                           Obs per group:
     within  = 0.0008                                         min =      2,521
     between = 0.3840                                         avg =    2,521.0
     overall = 0.0000                                         max =      2,521

                                                F(2,2)             =          .
corr(u_i, Xb)  = -0.9899                        Prob > F           =          .
```

(Std. Err. adjusted for **3** clusters in imf)

sftnom120m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
lsap	**-.0386899**	**.1905302**	**-0.20**	**0.858**	**-.8584751**	**.7810952**
sftnom120m L2.	**-.0020925**	**.0011099**	**-1.89**	**0.200**	**-.0068681**	**.0026832**
fx L1.	**.0025696**	**.0006786**	**3.79**	**0.063**	**-.00035**	**.0054892**
_cons	**.0320797**	**.3038997**	**0.11**	**0.926**	**-1.275495**	**1.339654**
sigma_u	**2.1182657**					
sigma_e	**8.1161843**					
rho	**.06377319**	(fraction of variance due to u_i)				

Fixed-effects (within) regression — Number of obs = **7,563**
Group variable: **imf** — Number of groups = **3**

R-sq:
- within = **0.0163**
- between = **0.4711**
- overall = **0.0044**

Obs per group:
- min = **2,521**
- avg = **2,521.0**
- max = **2,521**

F(2,2) = **.**
corr(u_i, Xb) = **-0.8393** — Prob > F = **.**

(Std. Err. adjusted for **3** clusters in imf)

sftsyn120m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
lsap	**1.8302**	**.1777577**	**10.30**	**0.009**	**1.06537**	**2.595029**
sftsyn120m L2.	**-.0029709**	**.0014493**	**-2.05**	**0.177**	**-.0092067**	**.003265**
fx L1.	**.0030104**	**.0001237**	**24.34**	**0.002**	**.0024783**	**.0035425**
_cons	**.1125628**	**.5930749**	**0.19**	**0.867**	**-2.439233**	**2.664358**
sigma_u	**2.7065881**					
sigma_e	**10.917182**					
rho	**.05790523**	(fraction of variance due to u_i)				

```
Fixed-effects (within) regression               Number of obs      =      7,563
Group variable: imf                             Number of groups   =          3

R-sq:                                           Obs per group:
     within  = 0.0027                                         min =      2,521
     between = 0.9999                                         avg =    2,521.0
     overall = 0.0001                                         max =      2,521

                                                F(2,2)             =          .
corr(u_i, Xb)  = -0.9355                        Prob > F           =          .

                                    (Std. Err. adjusted for 3 clusters in imf)
```

sftrho120m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
lsap	.2935159	.179676	1.63	0.244	-.4795674	1.066599
sftrho120m L2.	-.0047498	.0026448	-1.80	0.214	-.0161296	.0066299
fx L1.	-.0004812	.0005061	-0.95	0.442	-.0026586	.0016963
_cons	.9458458	.6245403	1.51	0.269	-1.741334	3.633026
sigma_u	1.4958309					
sigma_e	8.417894					
rho	.03060954	(fraction of variance due to u_i)				

```
Fixed-effects (within) regression               Number of obs      =      7,563
Group variable: imf                             Number of groups   =          3

R-sq:                                           Obs per group:
     within  = 0.0155                                         min =      2,521
     between = 0.0402                                         avg =    2,521.0
     overall = 0.0071                                         max =      2,521

                                                F(2,2)             =          .
corr(u_i, Xb)  = -0.7342                        Prob > F           =          .
```

(Std. Err. adjusted for **3** clusters in imf)

sftphi120m0	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
lsap	**-1.873495**	**.3570629**	**-5.25**	**0.034**	**-3.409813**	**-.3371776**
sftphi120m L2.	**-.0109521**	**.0040834**	**-2.68**	**0.115**	**-.0285216**	**.0066174**
fx L1.	**.0037332**	**.0019733**	**1.89**	**0.199**	**-.0047572**	**.0122236**
_cons	**-.6556522**	**.4598986**	**-1.43**	**0.290**	**-2.634436**	**1.323132**
sigma_u	**1.9791284**					
sigma_e	**11.870882**					
rho	**.02704426**	(fraction of variance due to u_i)				

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> SAP/EM/LSAPEM120m.eps not found)
(file /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Figures/LPs/LSAP/EM
> /LSAPEM120m.eps written in EPS format)

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35 .
36 . log close
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> t_regs.smcl
  log type:  smcl
 closed on:  26 Jul 2020, 22:56:40
```