```
name: <unnamed>
               /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Tables/impac
         log:
  > t regs.smcl
    log type:
               smcl
   opened on: 20 Jul 2020, 11:57:30
1 .
2 . * LPs
3 \cdot \log 1 = 0
4 . foreach shock in mp1 path lsap {
               local ++j
    2.
    3.
               if `j' == 1 local shk "Target"
               if `j' == 2 local shk "Path"
    5.
               if `j' == 3 local shk "LSAP"
    6.
5.
            foreach group in 0 1 {
                       if `group' == 0 {
    7.
    8.
                               local grp "AE"
                               local vars sftnom sftsyn sftrho sftphi // nom syn
   9.
 > dyp dtp sftdyp sftdtp
   10.
                       }
   11.
                       else {
   12.
                               local grp "EM"
  13.
                               local vars sftnom sftsyn sftrho sftphi // nom dyp
 > dtp usyc syn rho phi
  14.
  15.
                    foreach t in 24 120 { // 3 6 12 24 60 120 {
6.
   16.
                               foreach v in `vars' {
  17.
7.
                                    // variables to store the betas, standard er
 > rors and confidence intervals
8.
                                    capture {
                                       gen b_v''t'm = .
   18.
   19.
                                       gen se_v't'm = .
   20.
                                       gen ll1_v''t'm = .
   21.
                                       gen ull v' t'm = .
                                       gen 112_v''t'm = .
   22.
   23.
                                       gen ul2_v't'm = .
   24.
                                       }
   25.
```



```
9.
                                     // controls
10 .
                                     local ctrl`v'`t'm l(1/`maxlag').d`v'`t'm l(1
  > /`maxlag').fx
   26.
11.
                                     forvalues i = 0/`horizon' {
    27.
                                                // response variables
12 .
                                             capture gen `v'`t'm`i' = (f`i'.`v'`t
  > 'm - 1.\v'\t'm)
   28.
                                             // conditions
13 .
                                             local condition em == `group' & date
14.
  > > td(1jan2004) & date < td(1jan2016) // !inlist(cty,"AUD","NZD") // & regio
  > n == 3
   29.
15 . //
                                             // test for cross-sectional independ
  > ence
16 . //
                                             if inlist(`i',0,30,60,90) {
17 . //
                                                     quiet xtreg `v'`t'm`i' `shoc
  > k' `ctrl`v'`t'm' if `condition', fe // exclude meeting after 9/11
18 . //
                                                     xtcsd, pesaran abs
19 . //
                                             }
20 .
                                             // one regression for each horizon
21 .
                                             if `i' == 0 xtreg `v'`t'm`i' `shock'
  > `ctrl`v'`t'm' if `condition', fe level(95) cluster($id)
  > // report on-impact effect
                                                if `i' == 0 xtscc `v'`t'm`i' `sho
    30. //
  > ck' `ctrl`v'`t'm' if `condition', fe level(95) lag(4)
                                             quiet xtreg `v'`t'm`i' `shock' `ctrl
23 .
  > `v'`t'm' if `condition', fe level(95) cluster($id)
                                                quiet xtscc `v'`t'm`i' `shock' `c
    31. //
  > trl`v'`t'm' if `condition', fe level(95) lag(4)
24 .
                                             capture {
                                                replace b_`v'`t'm = _b[`shock']
    32.
  > if _n == `i'+1
                                                replace se `v'`t'm = se[`shock']
   33.
  > if _n == `i'+1
    34.
```



```
25 .
                                             // confidence intervals
26 .
                                             matrix R = r(table)
                                                replace ll1_`v'`t'm = el(matrix(R
    35.
  > ),rownumb(matrix(R),"ll"),colnumb(matrix(R),"`shock'")) if n == `i'+1
                                                replace ull_`v'`t'm = el(matrix(R
  > ),rownumb(matrix(R),"ul"),colnumb(matrix(R),"`shock'")) if n == `i'+1
   37.
                                                quiet xtreg, level(90) // to get
  > 90% CI
   38. //
                                                quiet xtscc, level(90) // to get
  > 90% CI
27 .
                                             matrix R = r(table)
    39.
                                                replace 112_`v'`t'm = el(matrix(R
  > ),rownumb(matrix(R),"ll"),colnumb(matrix(R),"`shock'")) if _n == `i'+1
                                                replace ul2_`v'`t'm = el(matrix(R
   > ),rownumb(matrix(R),"ul"),colnumb(matrix(R),"`shock'")) if n == `i'+1
    41.
28 .
                                             drop `v'`t'm`i'
    42.
                                                 }
                                                                 // horizon
    43.
                                        }
    44.
29 .
                                     // graph
30 .
                                     twoway (rarea ll1_`v'`t'm ul1_`v'`t'm days,
  > fcolor(gs12) lcolor(white) lpattern(solid)) ///
                                                      (rarea 112_`v'`t'm u12_`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)) ylabel(-1(1)5) xlabel(10(20)90) ///
                                     graphregion(color(white)) plotregion(color(w
  > hite)) ///
                                     legend(off) name('v'`t'm, replace)
                                        graph export $pathfigs/`shk'/`grp'/`v'`t'
    45.
  > m.eps, replace
    46.
```



```
local graphs`shock'`grp'`t' `graphs`shock'`g
31 .
  > rp'`t'' `v'`t'm
                                         drop * `v'`t'm
    47.
   > / b_, se_ and confidence intervals
    48.
                                                         // yield component
    49.
32 .
                     graph combine `graphs`shock'`grp'`t'', rows(1) ycommon ///
                     title("`shock' `grp' `t'm")
                        graph export $pathfigs/`shk'/`grp'/`shk'`grp'`v'`t'm.eps,
    50.
  > replace
    51.
33 .
                     graph drop _all
    52.
                        }
                                                          // tenor
                                                          // AE or EM
    53.
                }
    54. }
                                                          // shock
   Fixed-effects (within) regression
                                                    Number of obs
                                                                              1,030
   Group variable: imf
                                                    Number of groups =
                                                                                 10
  R-sq:
                                                    Obs per group:
        within = 0.0590
                                                                                103
                                                                   min =
        between = 0.1734
                                                                   avg =
                                                                              103.0
        overall = 0.0558
                                                                                103
                                                                   max =
                                                    F(3,9)
                                                                              19.79
   corr(u i, Xb) = -0.0990
                                                    Prob > F
                                                                             0.0003
                                       (Std. Err. adjusted for 10 clusters in imf)
                                 Robust
                                Std. Err.
     sftnom24m0
                                                    P>|t|
                                                               [95% Conf. Interval]
                       Coef.
                                               t
                     .1942655
                                .0419131
                                             4.63
                                                    0.001
                                                               .0994513
                                                                           .2890796
            mp1
     dsftnom24m
                                             1.41
                                                               -.045132
            L1.
                      .074482
                                .0528761
                                                    0.193
                                                                           .1940959
             fx
            L1.
                   -.0058693
                                 .001678
                                            -3.50
                                                    0.007
                                                              -.0096652
                                                                          -.0020734
          _cons
                                                    0.000
                   -.3082439
                                 .034726
                                            -8.88
                                                              -.3867995
                                                                          -.2296883
        sigma u
                    .46258238
        sigma_e
                   4.9641876
                    .00860849
                                (fraction of variance due to u i)
            rho
```

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> AE/sftnom24m.eps written in EPS format)



| Fixed-effects (within) regression | Number of obs | = | 1,030 |
|-----------------------------------|------------------|-----|--------|
| Group variable: imf | Number of groups | = | 10 |
| R-sq: | Obs per group: | | |
| within = 0.4284 | miı | n = | 103 |
| between = 0.2051 | avo | g = | 103.0 |
| overall = 0.4277 | max | ζ = | 103 |
| | F(3,9) | = | 305.44 |
| $corr(u_i, Xb) = -0.0159$ | Prob > F | = | 0.0000 |
| | | | |

(Std. Err. adjusted for 10 clusters in imf)

| sftsyn24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|------------------------------------|---------------------|----------|---------|------------|-----------|
| mp1 | .5764511 | .0397352 | 14.51 | 0.000 | .4865638 | .6663384 |
| dsftsyn24m L1. | 4982708 | .0212505 | -23.45 | 0.000 | 5463428 | 4501989 |
| fx L1. | .0144628 | .0129491 | 1.12 | 0.293 | 0148301 | .0437556 |
| _cons | 5209092 | .1668507 | -3.12 | 0.012 | 8983517 | 1434667 |
| sigma_u sigma_e rho | .55150915 9.0962296 .0036626 | (fraction | of varia | nce due | to u_i) | |

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> AE/sftsyn24m.eps written in EPS format)

| Fixed-effects (within) regression | Number of obs | = | 1,030 |
|-----------------------------------|------------------|-----|--------|
| Group variable: imf | Number of groups | = | 10 |
| R-sq: | Obs per group: | | |
| within = 0.1271 | min | _ = | 103 |
| between = 0.1406 | avg | = | 103.0 |
| overall = 0.1254 | max | = | 103 |
| | F(3,9) | _ | 26.07 |
| corr(u i, Xb) = -0.1000 | Prob > F | = | 0.0001 |
| corr(u_i, Xb) = -0.1000 | PIOD > F | _ | 0.0001 |



(Std. Err. adjusted for 10 clusters in imf)

| sftrho24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | [Interval] |
|---------------------------|-----------------------------------|---------------------|----------|-----------|------------|------------|
| mp1 | .2799321 | .0453065 | 6.18 | 0.000 | .1774416 | .3824225 |
| dsftrho24m L1. | 1565159 | .035783 | -4.37 | 0.002 | 2374626 | 0755693 |
| fx L1. | .0175663 | .0049638 | 3.54 | 0.006 | .0063375 | .0287951 |
| _cons | 5613288 | .1010324 | -5.56 | 0.000 | 7898799 | 3327777 |
| sigma_u sigma_e rho | .63087462 6.5737321 .009126 | (fraction | of varia | nce due d | to u_i) | |

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> arget/AE/sftrho24m.eps not found)

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> AE/sftrho24m.eps written in EPS format)

| Fixed-effects (within) regression | Number of obs = | 1,030 |
|-----------------------------------|--------------------|--------|
| Group variable: imf | Number of groups = | 10 |
| R-sq: | Obs per group: | |
| within = 0.4505 | min = | 103 |
| between = 0.0486 | avg = | 103.0 |
| overall = 0.4485 | max = | 103 |
| | F(3,9) = | 287.34 |
| $corr(u_i, Xb) = -0.0436$ | Prob > F = | 0.0000 |

(Std. Err. adjusted for 10 clusters in imf)

| sftphi24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|-------------------|----------|---------------------|--------|-------|------------|-----------|
| mp1 | 2498459 | .0589372 | -4.24 | 0.002 | 3831712 | 1165207 |
| dsftphi24m L1. | 601869 | .0316847 | -19.00 | 0.000 | 6735447 | 5301933 |
| fx L1. | 0172842 | .0111938 | -1.54 | 0.157 | 0426063 | .0080379 |
| _cons | .1360908 | .1222221 | 1.11 | 0.294 | 1403949 | .4125764 |



| | <u></u> | |
|---------|-----------|-----------------------------------|
| sigma u | .6591753 | |
| sigma_e | 8.4332763 | |
| rho | .00607245 | (fraction of variance due to u_i) |

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> arget/AE/sftphi24m.eps not found)

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> AE/sftphi24m.eps written in EPS format)

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> AE/TargetAE24m.eps written in EPS format)

| Fixed-effects (within) regression | Number of obs | = | 1,030 |
|-----------------------------------|------------------|------|--------|
| Group variable: imf | Number of groups | 5 = | 10 |
| | | | |
| R-sq: | Obs per group: | | |
| within = 0.0201 | mi | n = | 103 |
| between = 0.0271 | ar. | 7g = | 103.0 |
| overall = 0.0189 | ma | 4x = | 103 |
| | | | |
| | F(3,9) | = | 27.46 |
| $corr(u_i, Xb) = -0.1569$ | Prob > F | = | 0.0001 |

(Std. Err. adjusted for 10 clusters in imf)

| sftnom120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | <pre>Interval]</pre> |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|----------------------|
| mp1 | .1327032 | .0158896 | 8.35 | 0.000 | .0967586 | .1686479 |
| dsftnom120m | 0167458 | .0540948 | -0.31 | 0.764 | 1391167 | .1056251 |
| fx L1. | 0091057 | .0033397 | -2.73 | 0.023 | 0166606 | 0015509 |
| _cons | 3110325 | .0481164 | -6.46 | 0.000 | 4198794 | 2021857 |
| sigma_u sigma_e rho | .44825882 5.6075384 .00634961 | (fraction | of varia | nce due t | co u_i) | |

(file /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Figures/LPs/Target/
> AE/sftnom120m.eps written in EPS format)

Fixed-effects (within) regression Number of obs = 1,030Group variable: imf Number of groups = 10



| R-sq: | Obs per group: | | |
|---------------------------|----------------|-------|--------|
| within = 0.3898 | 1 | min = | 103 |
| between = 0.0939 | | avg = | 103.0 |
| overall = 0.3879 | i | max = | 103 |
| | F(3,9) | = | 338.65 |
| $corr(u_i, Xb) = -0.0642$ | Prob > F | = | 0.0000 |

(Std. Err. adjusted for 10 clusters in imf)

| sftsyn120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|-------------------------------------|---------------------|----------|---------|------------|-----------|
| mp1 | .1723119 | .023579 | 7.31 | 0.000 | .1189724 | .2256514 |
| dsftsyn120m L1. | 6768955 | .0247782 | -27.32 | 0.000 | 7329477 | 6208434 |
| fx L1. | .0173796 | .012462 | 1.39 | 0.197 | 0108114 | .0455706 |
| _cons | 7808841 | .1491305 | -5.24 | 0.001 | -1.118241 | 4435276 |
| sigma_u sigma_e rho | .68110154 9.9566713 .00465766 | (fraction | of varia | nce due | to u_i) | |

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> AE/sftsyn120m.eps written in EPS format)

| Fixed-effects (within) regression | Number of obs | = | 1,030 |
|-----------------------------------|------------------|---|--------|
| Group variable: imf | Number of groups | = | 10 |
| R-sq: | Obs per group: | | |
| within = 0.1818 | min | = | 103 |
| between = 0.1638 | avg | = | 103.0 |
| overall = 0.1575 | max | = | 103 |
| | F(3,9) | = | 59.40 |
| $corr(u_i, Xb) = -0.2985$ | Prob > F | = | 0.0000 |



(Std. Err. adjusted for 10 clusters in imf)

| sftrho120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | . Interval] |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|-------------|
| mp1 | .3740431 | .034377 | 10.88 | 0.000 | .2962769 | .4518092 |
| dsftrho120m | 170477 | .0433102 | -3.94 | 0.003 | 2684514 | 0725025 |
| fx L1. | 0341339 | .0077608 | -4.40 | 0.002 | 0516901 | 0165777 |
| _cons | .6313981 | .1310373 | 4.82 | 0.001 | .3349712 | .927825 |
| sigma_u sigma_e rho | 1.2891608 6.4467072 .03845118 | (fraction | of varia | nce due t | co u_i) | |

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> arget/AE/sftrho120m.eps not found)

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> AE/sftrho120m.eps written in EPS format)

| Fixed-effects (within) regression | Number of obs | = | 1,030 |
|-----------------------------------|------------------|----------------|--------|
| Group variable: imf | Number of groups | = | 10 |
| R-sq: | Obs per group: | | |
| within = 0.3779 | mir | . = | 103 |
| between = 0.3611 | avo | __ = | 103.0 |
| overall = 0.3751 | max | = | 103 |
| | F(3,9) | = | 629.93 |
| $corr(u_i, Xb) = -0.1046$ | Prob > F | = | 0.0000 |

(Std. Err. adjusted for 10 clusters in imf)

| sftphi120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|--------------------|----------|---------------------|--------|-------|------------|-----------|
| mp1 | 1050888 | .0279646 | -3.76 | 0.004 | 1683492 | 0418284 |
| dsftphi120m L1. | 6074222 | .0158512 | -38.32 | 0.000 | 64328 | 5715644 |
| fx L1. | 0258351 | .0117609 | -2.20 | 0.056 | 0524401 | .0007699 |
| _cons | .4014389 | .1440364 | 2.79 | 0.021 | .0756059 | .7272719 |



| | <u></u> | |
|---------|-----------|-----------------------------------|
| sigma u | .7190572 | |
| sigma_e | 9.2393239 | |
| rho | .00602038 | (fraction of variance due to u_i) |

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> arget/AE/sftphi120m.eps not found)

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> AE/sftphi120m.eps written in EPS format)

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> AE/TargetAE120m.eps written in EPS format)

| Fixed-effects (within) regression Group variable: imf | Number of obs Number of groups | | 1,400 15 |
|---|-----------------------------------|------------|-------------|
| R-sq: | Obs per group: | | |
| within = 0.0205 | min | ı = | 44 |
| between = 0.3856 | avg | s = | 93.3 |
| overall = 0.0146 | max | = | 103 |
| | F(3,14) | = | 463.94 |
| $corr(u_i, Xb) = -0.9270$ | Prob > F | = | 0.0000 |

(Std. Err. adjusted for 15 clusters in imf)

| sftnom24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|-----------|
| mp1 | .2094668 | .0439058 | 4.77 | 0.000 | .1152982 | .3036353 |
| dsftnom24m | 0996548 | .1333481 | -0.75 | 0.467 | 3856581 | .1863486 |
| fx L1. | 0023422 | .0000868 | -26.99 | 0.000 | 0025283 | 002156 |
| _cons | 2.390572 | .0985374 | 24.26 | 0.000 | 2.179231 | 2.601914 |
| sigma_u sigma_e rho | 5.1960607 12.824348 .14101448 | (fraction | of varia | nce due 1 | to u_i) | |

(file /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Figures/LPs/Target/
> EM/sftnom24m.eps written in EPS format)

Fixed-effects (within) regression Number of obs = 1,385Group variable: imf Number of groups = 15



| R-sq: | Obs per group: | | |
|---------------------------|----------------|-------|---------|
| within = 0.1118 | I | nin = | 77 |
| between = 0.5754 | ć | avg = | 92.3 |
| overall = 0.0377 | I | max = | 103 |
| | F(3,14) | = | 1162.26 |
| $corr(u_i, Xb) = -0.9413$ | Prob > F | = | 0.0000 |

(Std. Err. adjusted for 15 clusters in imf)

| sftsyn24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|-------------------------------------|---------------------|----------|---------|------------|-----------|
| mp1 | 1.300213 | .3729514 | 3.49 | 0.004 | .500312 | 2.100114 |
| dsftsyn24m L1. | .3058934 | .3920822 | 0.78 | 0.448 | 5350393 | 1.146826 |
| fx L1. | 0111579 | .0005753 | -19.40 | 0.000 | 0123917 | 0099241 |
| _cons | 10.72753 | .4389524 | 24.44 | 0.000 | 9.786074 | 11.66899 |
| sigma_u sigma_e rho | 26.391754 28.935922 .45411338 | (fraction | of varia | nce due | to u_i) | |

(file /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Figures/LPs/Target/
> EM/sftsyn24m.eps written in EPS format)

| Fixed-effects (within) regression Group variable: imf | Number of obs Number of group | | 1,385 15 |
|---|----------------------------------|-------|-------------|
| R-sq: | Obs per group: | | |
| within = 0.1451 | n | nin = | 77 |
| between = 0.6010 | á | ıvg = | 92.3 |
| overall = 0.0573 | n | nax = | 103 |
| | F(3,14) | = | 2575.31 |
| corr(u i, Xb) = -0.9174 | Prob > F | = | 0.0000 |



(Std. Err. adjusted for 15 clusters in imf)

| sftrho24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | [Interval] |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|------------|
| mp1 | .7306942 | .2845785 | 2.57 | 0.022 | .120334 | 1.341054 |
| dsftrho24m | .4787077 | .397512 | 1.20 | 0.248 | 3738708 | 1.331286 |
| fx L1. | 0095365 | .0006974 | -13.68 | 0.000 | 0110322 | 0080408 |
| _cons | 8.24345 | .4108771 | 20.06 | 0.000 | 7.362206 | 9.124694 |
| sigma_u sigma_e rho | 22.253171 25.933013 .42407563 | (fraction | of varia | nce due t | to u_i) | |

(file /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Figures/LPs/Target/
> EM/sftrho24m.eps written in EPS format)

| Number of obs | = | 1,327 |
|------------------|--|--|
| Number of groups | = | 15 |
| Obs per group: | | |
| mi | n = | 44 |
| av | rg = | 88.5 |
| ma | x = | 103 |
| F(3,14) | = | 322.14 |
| Prob > F | = | 0.0000 |
| | Number of groups Obs per group: mi av ma | <pre>Number of groups = Obs per group: min = avg = max = F(3,14) =</pre> |

(Std. Err. adjusted for 15 clusters in imf)

| sftphi24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf | . Interval] |
|-------------------|-----------|---------------------|--------|-------|-----------|-------------|
| mp1 | 8690326 | .2232024 | -3.89 | 0.002 | -1.347754 | 3903111 |
| dsftphi24m L1. | .0688104 | .2323873 | 0.30 | 0.771 | 4296108 | .5672317 |
| fx L1. | .0090785 | .0004126 | 22.00 | 0.000 | .0081936 | .0099634 |
| _cons | -8.656709 | .3871477 | -22.36 | 0.000 | -9.487058 | -7.826359 |
| sigma_u | 21.930521 | | | | | |



sigma_e 25.984706 rho .41598982 (fraction of variance due to u_i)

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> EM/TargetEM24m.eps written in EPS format)

| Fixed-effects (within) regression Group variable: imf | Number of obs Number of groups | | 1,400 15 |
|--|-----------------------------------|-----|-------------|
| Gloup variable. Imi | Number of groups | _ | 13 |
| R-sq: | Obs per group: | | |
| within = 0.0508 | mir | n = | 44 |
| between = 0.3362 | avo | g = | 93.3 |
| overall = 0.0523 | max | ζ = | 103 |
| | F(3,14) | = | 6.15 |
| $corr(u_i, Xb) = 0.0213$ | Prob > F | = | 0.0069 |

(Std. Err. adjusted for 15 clusters in imf)

| sftnom120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|-----------|
| mp1 | .1898102 | .0621726 | 3.05 | 0.009 | .0564632 | .3231572 |
| dsftnom120m L1. | 1858145 | .1549694 | -1.20 | 0.250 | 5181908 | .1465617 |
| fx L1. | .000189 | .0002298 | 0.82 | 0.424 | 0003037 | .0006818 |
| _cons | 1905601 | .1488105 | -1.28 | 0.221 | 5097269 | .1286066 |
| sigma_u sigma_e rho | .95010625 15.819787 .00359401 | (fraction | of varia | nce due t | to u_i) | |

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> EM/sftnom120m.eps written in EPS format)

| Fixed-effects (within) regression Group variable: imf | Number of obs Number of groups | | 1,385 15 |
|--|-----------------------------------|---|-------------|
| Group variable: Imi | Number of groups | _ | 15 |
| R-sq: | Obs per group: | | |
| within = 0.2230 | min | = | 77 |
| between = 0.4637 | avg | = | 92.3 |
| overall = 0.1299 | max | = | 103 |



(Std. Err. adjusted for 15 clusters in imf)

| sftsyn120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | . Interval] |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|-------------|
| mp1 | .4289551 | .121157 | 3.54 | 0.003 | .1690991 | .6888111 |
| dsftsyn120m L1. | 5245314 | .1477595 | -3.55 | 0.003 | 8414439 | 2076189 |
| fx L1. | 0054157 | .0010117 | -5.35 | 0.000 | 0075856 | 0032457 |
| _cons | 5.092031 | 1.236778 | 4.12 | 0.001 | 2.439405 | 7.744657 |
| sigma_u sigma_e rho | 12.452987 23.145015 .22449904 | (fraction | of varia | nce due t | co u_i) | |

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> EM/sftsyn120m.eps written in EPS format)

| Fixed-effects (within) regression | Number of obs | = | 1,385 |
|-----------------------------------|------------------|-----|--------|
| Group variable: imf | Number of groups | = | 15 |
| R-sq: | Obs per group: | | |
| within = 0.1444 | min | _ = | 77 |
| between = 0.4680 | avg | = | 92.3 |
| overall = 0.0773 | max | = | 103 |
| | F(3,14) | = | 137.71 |
| $corr(u_i, Xb) = -0.8215$ | Prob > F | = | 0.0000 |

(Std. Err. adjusted for 15 clusters in imf)

| sftrho120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | . Interval] |
|-------------|----------|---------------------|-------|-------|------------|-------------|
| mp1 | .4603953 | .0925078 | 4.98 | 0.000 | .2619859 | .6588047 |
| dsftrho120m | 3615389 | .1685074 | -2.15 | 0.050 | 7229512 | 0001265 |
| fx L1. | 0048779 | .0008079 | -6.04 | 0.000 | 0066106 | 0031451 |



| _cons | 5.519816 | .8276336 | 6.67 | 0.000 | 3.744719 | 7.294914 |
|---------------------------|------------------------------------|-----------|----------|-----------|----------|----------|
| sigma_u sigma_e rho | 11.017143 20.975075 .2162314 | (fraction | of varia | nce due t | o u_i) | |

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> EM/sftrho120m.eps written in EPS format)

| Fixed-effects (within) regression Group variable: imf | Number of obs Number of groups | | 1,327 15 |
|---|-----------------------------------|---|-------------|
| R-sq: | Obs per group: | | |
| within = 0.1941 | min | = | 44 |
| between = 0.7000 | avg | = | 88.5 |
| overall = 0.1223 | max | = | 103 |
| | F(3,14) | = | 262.41 |
| $corr(u_i, Xb) = -0.8041$ | Prob > F | = | 0.0000 |

(Std. Err. adjusted for 15 clusters in imf)

| sftphi120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|-------------------------------------|---------------------|----------|---------|------------|-----------|
| mp1 | 3798348 | .0797458 | -4.76 | 0.000 | 5508726 | 208797 |
| dsftphi120m L1. | 3803533 | .0835022 | -4.56 | 0.000 | 5594477 | 2012589 |
| fx L1. | .0057053 | .0009951 | 5.73 | 0.000 | .0035711 | .0078395 |
| _cons | -6.316187 | 1.086368 | -5.81 | 0.000 | -8.646214 | -3.98616 |
| sigma_u sigma_e rho | 12.176042 22.653229 .22414642 | (fraction | of varia | nce due | to u_i) | |

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> EM/TargetEM120m.eps written in EPS format)

Fixed-effects (within) regression Number of obs = 1,030 Group variable: imf Number of groups = 10



| R-sq: | Obs per group | : | |
|---------------------------|-----------------|-------|--------|
| within = 0.0495 | | min = | 103 |
| between = 0.1698 | | avg = | 103.0 |
| overall = 0.0436 | | max = | 103 |
| | F(3,9) | = | 11.30 |
| $corr(u_i, Xb) = -0.1945$ | Prob > F | = | 0.0021 |

(Std. Err. adjusted for 10 clusters in imf)

| sftnom24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | . Interval] |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|-------------|
| path | .1261296 | .0479163 | 2.63 | 0.027 | .0177355 | .2345237 |
| dsftnom24m L1. | .1135681 | .0589461 | 1.93 | 0.086 | 0197772 | .2469135 |
| fx L1. | 0095351 | .0030877 | -3.09 | 0.013 | 01652 | 0025503 |
| _cons | 4816937 | .0557596 | -8.64 | 0.000 | 6078307 | 3555566 |
| sigma_u sigma_e rho | .54890844 4.9894197 .01195845 | (fraction | of varia | nce due t | co u_i) | |

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| Fixed-effects (within) regression | Number of obs | = | 1,030 |
|-----------------------------------|------------------|-----|--------|
| Group variable: imf | Number of groups | = | 10 |
| D. am. | Oha non anoun. | | |
| R-sq: | Obs per group: | | |
| within = 0.4367 | mir | n = | 103 |
| between = 0.1954 | avo | J = | 103.0 |
| overall = 0.4361 | max | = | 103 |
| | | | |
| | F(3,9) | = | 409.05 |
| $corr(u_i, Xb) = 0.0033$ | Prob > F | = | 0.0000 |



(Std. Err. adjusted for 10 clusters in imf)

| sftsyn24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|-----------|
| path | .4571631 | .0304334 | 15.02 | 0.000 | .3883179 | .5260083 |
| dsftsyn24m L1. | 4649359 | .0296614 | -15.67 | 0.000 | 5320346 | 3978371 |
| fx L1. | .0036581 | .0053375 | 0.69 | 0.510 | 0084161 | .0157323 |
| _cons | -1.09694 | .0578733 | -18.95 | 0.000 | -1.227859 | 9660218 |
| sigma_u sigma_e rho | .53527665 9.0296057 .00350183 | (fraction | of varia | nce due 1 | to u_i) | |

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| Fixed-effects (within) regression | Number of obs | = | 1,030 |
|-----------------------------------|------------------|---|--------|
| Group variable: imf | Number of groups | = | 10 |
| _ | | | |
| R-sq: | Obs per group: | | |
| within = 0.0850 | min | = | 103 |
| between = 0.1621 | avg | = | 103.0 |
| overall = 0.0852 | max | = | 103 |
| | | | |
| | F(3,9) | = | 40.91 |
| $corr(u_i, Xb) = -0.0372$ | Prob > F | = | 0.0000 |
| | | | |

(Std. Err. adjusted for 10 clusters in imf)

| sftrho24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|-------------------|----------|---------------------|--------|-------|------------|-----------|
| path | .0722633 | .0359341 | 2.01 | 0.075 | 0090252 | .1535518 |
| dsftrho24m L1. | 200376 | .0532381 | -3.76 | 0.004 | 3208089 | 0799431 |
| fx L1. | .0120272 | .0031642 | 3.80 | 0.004 | .0048694 | .019185 |
| _cons | 7373061 | .0719468 | -10.25 | 0.000 | 900061 | 5745512 |



| | .55365769 | |
|---------|-----------|-----------------------------------|
| sigma_e | 6.7303666 | |
| rho | .00672165 | (fraction of variance due to u_i) |

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| Fixed-effects (within) regression | Number of obs | = | 1,030 |
|-----------------------------------|------------------|---|--------|
| Group variable: imf | Number of groups | = | 10 |
| R-sq: | Obs per group: | | |
| within = 0.4717 | min | = | 103 |
| between = 0.0549 | avg | = | 103.0 |
| overall = 0.4703 | max | = | 103 |
| | F(3,9) | = | 282.87 |
| $corr(u_i, Xb) = -0.0241$ | Prob > F | = | 0.0000 |
| | | | |

(Std. Err. adjusted for 10 clusters in imf)

| sftphi24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|------------------------------------|---------------------|----------|---------|------------|-----------|
| path | 2887177 | .055092 | -5.24 | 0.001 | 4133444 | 164091 |
| dsftphi24m L1. | 5648116 | .0319825 | -17.66 | 0.000 | 6371611 | 4924621 |
| fx L1. | 0126141 | .0063125 | -2.00 | 0.077 | 0268941 | .0016659 |
| _cons | .4318233 | .08649 | 4.99 | 0.001 | .2361694 | .6274772 |
| sigma_u sigma_e rho | .5747701 8.2692991 .00480793 | (fraction | of varia | nce due | to u_i) | |

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| Fixed-effects (within) regression | Number of obs = | 1,030 |
|-----------------------------------|--------------------|--------|
| Group variable: imf | Number of groups = | 10 |
| R-sq: | Obs per group: | |
| within = 0.0896 | min = | 103 |
| between = 0.0268 | avg = | 103.0 |
| overall = 0.0870 | max = | 103 |
| | F(3,9) = | 15.35 |
| $corr(u_i, Xb) = -0.1189$ | Prob > F = | 0.0007 |

(Std. Err. adjusted for ${f 10}$ clusters in imf)

| sftnom120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|-------------------------------------|---------------------|----------|---------|------------|-----------|
| path | .2039425 | .0557585 | 3.66 | 0.005 | .077808 | .330077 |
| dsftnom120m L1. | 0199138 | .0513395 | -0.39 | 0.707 | 1360519 | .0962242 |
| fx L1. | 0114734 | .0029119 | -3.94 | 0.003 | 0180605 | 0048862 |
| _cons | 4992519 | .0551724 | -9.05 | 0.000 | 6240605 | 3744433 |
| sigma_u sigma_e rho | .48911035 5.4048649 .00812273 | (fraction | of varia | nce due | to u_i) | |

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| Fixed-effects (within) regression | Number of obs | = | 1,030 |
|-----------------------------------|------------------|----------------|--------|
| Group variable: imf | Number of groups | = | 10 |
| R-sq: | Obs per group: | | |
| within = 0.4930 | min | . = | 103 |
| between = 0.0084 | avg | ₁ = | 103.0 |
| overall = 0.4923 | max | = | 103 |
| | F(3,9) | = | 389.40 |
| $corr(u_i, Xb) = -0.0108$ | Prob > F | = | 0.0000 |



(Std. Err. adjusted for 10 clusters in imf)

| sftsyn120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|------------------------------------|---------------------|----------|-----------|------------|-----------|
| path | .5467471 | .0264301 | 20.69 | 0.000 | .4869581 | .606536 |
| dsftsyn120m L1. | 5580824 | .021038 | -26.53 | 0.000 | 6056735 | 5104912 |
| fx L1. | .0023517 | .006755 | 0.35 | 0.736 | 0129292 | .0176326 |
| _cons | 9712286 | .079195 | -12.26 | 0.000 | -1.15038 | 7920771 |
| sigma_u sigma_e rho | .47575529 9.0757048 .0027404 | (fraction | of varia | nce due 1 | to u_i) | |

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| <pre>Group variable: imf</pre> | Fixed-effects (within) regression | Number of obs = | 1,030 |
|--|-----------------------------------|--------------------|--------|
| within = 0.0939 min = 103 between = 0.1664 avg = 103.0 overall = 0.0677 max = 103 F(3,9) = 17.13 | Group variable: imf | Number of groups = | 10 |
| between = 0.1664 avg = 103.0 overall = 0.0677 max = 103 | R-sq: | Obs per group: | |
| overall = 0.0677 $max = 103$ $F(3,9) = 17.13$ | within = 0.0939 | min = | 103 |
| F(3,9) = 17.13 | between = 0.1664 | avg = | 103.0 |
| (-,-, | overall = 0.0677 | max = | 103 |
| $corr(u_i, Xb) = -0.4454$ | | F(3,9) = | 17.13 |
| | $corr(u_i, Xb) = -0.4454$ | Prob > F = | 0.0005 |

(Std. Err. adjusted for 10 clusters in imf)

| sftrho120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|--------------------|----------|---------------------|-------|-------|------------|-----------|
| path | 0078237 | .0298081 | -0.26 | 0.799 | 0752543 | .059607 |
| dsftrho120m L1. | 2631004 | .0517191 | -5.09 | 0.001 | 3800971 | 1461036 |
| fx L1. | 0390888 | .0055474 | -7.05 | 0.000 | 0516378 | 0265398 |
| _cons | .4592979 | .1118127 | 4.11 | 0.003 | .2063601 | .7122357 |



| | 1 40006== | |
|---------|-----------|--|
| sigma_u | 1.4292675 | |
| sigma e | 6.784182 | |
| · - | 0404000 | (Second for a Second and a local and a loc |
| rho | .0424983 | (fraction of variance due to u_i) |

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| Fixed-effects (within) regression | Number of obs | = | 1,030 |
|-----------------------------------|------------------|-----|---------|
| Group variable: imf | Number of groups | = | 10 |
| R-sq: | Obs per group: | | |
| within = 0.4315 | mi | n = | 103 |
| between = 0.3498 | ave | g = | 103.0 |
| overall = 0.4306 | ma | x = | 103 |
| | F(3,9) | = | 1166.96 |
| $corr(u_i, Xb) = -0.0524$ | Prob > F | = | 0.0000 |
| (0) 1 7 | | | : :e. |

(Std. Err. adjusted for 10 clusters in imf)

| sftphi120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | <pre>Interval]</pre> |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|----------------------|
| path | 3584595 | .048805 | -7.34 | 0.000 | 468864 | 248055 |
| dsftphi120m L1. | 5330209 | .0201219 | -26.49 | 0.000 | 5785398 | 487502 |
| fx L1. | 0158308 | .0077633 | -2.04 | 0.072 | 0333926 | .001731 |
| _cons | .5159324 | .0996312 | 5.18 | 0.001 | .290551 | .7413138 |
| sigma_u sigma_e rho | .46736656 8.8322988 .00279224 | (fraction | of varia | nce due t | to u_i) | |

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| Number of obs = Number of groups = | • |
|------------------------------------|---|
| Obs per group: | |
| min = | 44 |
| avg = | 93.3 |
| max = | 103 |
| F(3,14) = | 447.16 |
| Prob > F = | 0.0000 |
| | Number of groups = Obs per group: min = avg = max = |

(Std. Err. adjusted for ${f 15}$ clusters in imf)

| sftnom24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|------------------------------------|---------------------|----------|---------|------------|-----------|
| path | .1649079 | .0545526 | 3.02 | 0.009 | .0479041 | .2819117 |
| dsftnom24m | 1015544 | .1313158 | -0.77 | 0.452 | 3831987 | .18009 |
| fx L1. | 002194 | .0001153 | -19.03 | 0.000 | 0024413 | 0019467 |
| _cons | 1.989766 | .1157 | 17.20 | 0.000 | 1.741614 | 2.237918 |
| sigma_u sigma_e rho | 4.8139131 12.815589 .1236507 | (fraction | of varia | nce due | to u_i) | |

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| Fixed-effects (within) regression | Number of obs | = | 1,385 |
|-----------------------------------|------------------|---|---------|
| Group variable: imf | Number of groups | = | 15 |
| R-sq: | Obs per group: | | |
| within = 0.1483 | min | = | 77 |
| between = 0.5788 | avg | = | 92.3 |
| overall = 0.0572 | max | = | 103 |
| | F(3,14) | = | 1467.39 |
| $corr(u_i, Xb) = -0.9081$ | Prob > F | = | 0.0000 |
| | | | |



(Std. Err. adjusted for 15 clusters in imf)

| sftsyn24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|-------------------------------------|---------------------|----------|---------|------------|-----------|
| path | 1.2522 | .3065146 | 4.09 | 0.001 | .5947919 | 1.909609 |
| dsftsyn24m L1. | .355293 | .3967326 | 0.90 | 0.386 | 4956139 | 1.2062 |
| fx L1. | 0099376 | .0007153 | -13.89 | 0.000 | 0114718 | 0084034 |
| _cons | 7.972521 | .3026319 | 26.34 | 0.000 | 7.32344 | 8.621602 |
| sigma_u sigma_e rho | 23.215868 28.334847 .40166972 | (fraction | of varia | nce due | to u_i) | |

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| Fixed-effects (within) regression | Number of obs = | 1,385 |
|-----------------------------------|--------------------|---------|
| Group variable: imf | Number of groups = | 15 |
| R-sq: | Obs per group: | |
| within = 0.1613 | min = | 77 |
| between = 0.6036 | avg = | 92.3 |
| overall = 0.0694 | max = | 103 |
| | F(3,14) = | 2975.08 |
| $corr(u_i, Xb) = -0.8963$ | Prob > F = | 0.0000 |

(Std. Err. adjusted for 15 clusters in imf)

| sftrho24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|-------------------|----------|---------------------|--------|-------|------------|-----------|
| path | .7219344 | .2542834 | 2.84 | 0.013 | .1765508 | 1.267318 |
| dsftrho24m L1. | .5125087 | .403252 | 1.27 | 0.224 | 3523808 | 1.377398 |
| fx L1. | 0088 | .0008527 | -10.32 | 0.000 | 0106287 | 0069712 |
| _cons | 6.60209 | .8806313 | 7.50 | 0.000 | 4.713323 | 8.490856 |



| | | · · · · · · · · · · · · · · · · · · · |
|---------|-----------|---------------------------------------|
| sigma_u | 20.342285 | |
| sigma_e | 25.686569 | |
| rho | .38543717 | (fraction of variance due to u_i) |

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| Fixed-effects (within) regression | Number of obs | = | 1,327 |
|-----------------------------------|------------------|-----|--------|
| Group variable: imf | Number of groups | = | 15 |
| R-sq: | Obs per group: | | |
| within = 0.0876 | min | _ = | 44 |
| between = 0.3240 | avg | = | 88.5 |
| overall = 0.0268 | max | = | 103 |
| | F(3,14) | = | 297.82 |
| $corr(u_i, Xb) = -0.9346$ | Prob > F | = | 0.0000 |
| | | | |

(Std. Err. adjusted for 15 clusters in imf)

| sftphi24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|-----------|
| path | 8768078 | .2197765 | -3.99 | 0.001 | -1.348182 | 4054341 |
| dsftphi24m L1. | .1068344 | .2397239 | 0.45 | 0.663 | 4073222 | .6209909 |
| fx L1. | .0082316 | .0004869 | 16.90 | 0.000 | .0071872 | .009276 |
| _cons | -6.74558 | .3751988 | -17.98 | 0.000 | -7.550301 | -5.940859 |
| sigma_u sigma_e rho | 19.723743 25.587931 .37271306 | (fraction | of varia | nce due † | to u_i) | |

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| | | 1,400 15 |
|----------------|--|------------------------------|
| Obs per group: | | |
| mir | n = | 44 |
| avo | g = | 93.3 |
| max | ζ = | 103 |
| F(3,14) | = | 8.73 |
| Prob > F | = | 0.0016 |
| | Number of groups Obs per group: min avg max F(3,14) | min = avg = max = F(3,14) = |

(Std. Err. adjusted for ${f 15}$ clusters in imf)

| sftnom120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | . Interval] |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|-------------|
| path | .341197 | .1046495 | 3.26 | 0.006 | .1167461 | .5656479 |
| dsftnom120m | 1859956 | .1510781 | -1.23 | 0.239 | 5100259 | .1380347 |
| fx L1. | .0005236 | .0001962 | 2.67 | 0.018 | .0001027 | .0009445 |
| _cons | 8309546 | .1586726 | -5.24 | 0.000 | -1.171273 | 4906358 |
| sigma_u sigma_e rho | 1.0101971 15.611155 .00416992 | (fraction | of varia | nce due t | to u_i) | |

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| Fixed-effects (within) regression | Number of obs | = | 1,385 |
|-----------------------------------|------------------|---|--------|
| Group variable: imf | Number of groups | = | 15 |
| R-sq: | Obs per group: | | |
| within = 0.2913 | min | = | 77 |
| between = 0.4626 | avg | = | 92.3 |
| overall = 0.2029 | max | = | 103 |
| | F(3,14) | = | 129.01 |
| $corr(u_i, Xb) = -0.6507$ | Prob > F | = | 0.0000 |
| | | | |



(Std. Err. adjusted for 15 clusters in imf)

| sftsyn120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | . Interval] |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|-------------|
| path | .9290345 | .0687589 | 13.51 | 0.000 | .7815614 | 1.076508 |
| dsftsyn120m L1. | 4506651 | .147202 | -3.06 | 0.008 | 7663819 | 1349482 |
| fx L1. | 0046925 | .0008651 | -5.42 | 0.000 | 0065478 | 0028371 |
| _cons | 3.790609 | 1.031646 | 3.67 | 0.003 | 1.577949 | 6.003269 |
| sigma_u sigma_e rho | 10.550501 22.104102 .18555137 | (fraction | of varia | nce due 1 | to u_i) | |

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| Fixed-effects (within) regression | Number of obs $=$ | 1,385 |
|-----------------------------------|--------------------|--------|
| Group variable: imf | Number of groups = | 15 |
| R-sq: | Obs per group: | |
| within = 0.1369 | min = | 77 |
| between = 0.4683 | avg = | 92.3 |
| overall = 0.0755 | max = | 103 |
| | F(3,14) = | 57.59 |
| $corr(u_i, Xb) = -0.8157$ | Prob > F = | 0.0000 |

(Std. Err. adjusted for 15 clusters in imf)

| sftrho120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | . Interval] |
|--------------------|----------|---------------------|-------|-------|------------|-------------|
| path | .2676422 | .091072 | 2.94 | 0.011 | .0723121 | .4629723 |
| dsftrho120m L1. | 3498169 | .1753162 | -2.00 | 0.066 | 7258327 | .0261988 |
| fx L1. | 0046677 | .0007295 | -6.40 | 0.000 | 0062324 | 0031031 |
| _cons | 4.793882 | .7133637 | 6.72 | 0.000 | 3.263869 | 6.323895 |



| | | |
|---------|-----------|-----------------------------------|
| sigma u | 10.475951 | |
| sigma_e | 21.066334 | |
| rho | .19826272 | (fraction of variance due to u_i) |

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> /sftrho120m.eps written in EPS format)

| Fixed-effects (within) regression | Number of obs | = | 1,327 |
|-----------------------------------|----------------|--------|-----------|
| Group variable: imf | Number of grou | ips = | 15 |
| R-sq: | Obs per group | 1 | |
| within = 0.2275 | | min = | 44 |
| between = 0.7012 | | avg = | 88.5 |
| overall = 0.1567 | | max = | 103 |
| | F(3,14) | = | 236.90 |
| $corr(u_i, Xb) = -0.7514$ | Prob > F | = | 0.0000 |
| (OL J. D. | | ~1a+ o | ~ :~ :~e\ |

(Std. Err. adjusted for 15 clusters in imf)

| sftphi120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|-----------|
| path | 6423391 | .1110014 | -5.79 | 0.000 | 8804135 | 4042648 |
| dsftphi120m L1. | 3486647 | .0959401 | -3.63 | 0.003 | 5544358 | 1428936 |
| fx L1. | .0052151 | .0008749 | 5.96 | 0.000 | .0033387 | .0070915 |
| _cons | -5.279819 | .9491187 | -5.56 | 0.000 | -7.315476 | -3.244162 |
| sigma_u sigma_e rho | 10.868819 22.178739 .19364896 | (fraction | of varia | nce due - | to u_i) | |

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| Fixed-effects (within) regression | Number of obs | = | 1,030 |
|-----------------------------------|------------------|----------|--------|
| Group variable: imf | Number of groups | = | 10 |
| R-sq: | Obs per group: | | |
| within = 0.0083 | mir | n = | 103 |
| between = 0.1671 | avo | J = | 103.0 |
| overall = 0.0043 | max | = | 103 |
| | F(3,9) | = | 10.44 |
| $corr(u_i, Xb) = -0.3903$ | Prob > F | = | 0.0027 |
| | | | |

(Std. Err. adjusted for 10 clusters in imf)

| sftnom24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf | . Interval] |
|---------------------------|-------------------------------------|---------------------|----------|-----------|-----------|-------------|
| lsap | .0277311 | .0431047 | 0.64 | 0.536 | 0697785 | .1252408 |
| dsftnom24m | .1006727 | .056237 | 1.79 | 0.107 | 0265443 | .2278898 |
| fx L1. | 0088977 | .0021212 | -4.19 | 0.002 | 0136961 | 0040992 |
| _cons | 4232783 | .0278191 | -15.22 | 0.000 | 4862095 | 3603471 |
| sigma_u sigma_e rho | .53245856 5.0962975 .01079809 | (fraction | of varia | nce due t | to u_i) | |

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> /sftnom24m.eps written in EPS format)

| <pre>Group variable: imf</pre> | Fixed-effects (within) regression | Number of obs | = | 1,030 |
|---|-----------------------------------|------------------|---|--------|
| within = 0.3660 min = 103 between = 0.2340 avg = 103.0 overall = 0.3657 max = 103 | Group variable: imf | Number of groups | = | 10 |
| between = 0.2340 avg = 103.0 overall = 0.3657 max = 103 | R-sq: | Obs per group: | | |
| overall = 0.3657 | within = 0.3660 | min | = | 103 |
| F(3,9) = 460.93 | between = 0.2340 | avg | = | 103.0 |
| | overall = 0.3657 | max | = | 103 |
| $corr(u_i, Xb) = -0.0041$ | | F(3,9) | = | 460.93 |
| | $corr(u_i, Xb) = -0.0041$ | Prob > F | = | 0.0000 |



(Std. Err. adjusted for 10 clusters in imf)

| sftsyn24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | . Interval] |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|-------------|
| lsap | .2363385 | .0731144 | 3.23 | 0.010 | .0709422 | .4017347 |
| dsftsyn24m L1. | 6001736 | .0329921 | -18.19 | 0.000 | 6748069 | 5255403 |
| fx L1. | .010377 | .0079392 | 1.31 | 0.224 | 0075827 | .0283367 |
| _cons | 9658244 | .0943034 | -10.24 | 0.000 | -1.179154 | 7524953 |
| sigma_u sigma_e rho | .51819144 9.5795552 .00291757 | (fraction | of varia | nce due t | co u_i) | |

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| Fixed-effects (within) regression | Number of obs | = | 1,030 |
|-----------------------------------|------------------|-----|--------|
| Group variable: imf | Number of groups | = | 10 |
| R-sq: | Obs per group: | | |
| within = 0.0832 | miı | n = | 103 |
| between = 0.1918 | ave | g = | 103.0 |
| overall = 0.0839 | max | к = | 103 |
| | F(3,9) | = | 35.77 |
| $corr(u_i, Xb) = -0.0014$ | Prob > F | = | 0.0000 |

(Std. Err. adjusted for 10 clusters in imf)

| . Interval] | [95% Conf. | P> t | t | Robust Std. Err. | Coef. | sftrho24m0 |
|-------------|------------|-------|-------|---------------------|----------|-------------------|
| .0591755 | 2707732 | 0.181 | -1.45 | .0729279 | 1057989 | lsap |
| 1306777 | 3697506 | 0.001 | -4.74 | .0528418 | 2502141 | dsftrho24m L1. |
| .0200209 | 0023314 | 0.107 | 1.79 | .0049405 | .0088447 | fx L1. |
| 4484216 | 8457359 | 0.000 | -7.37 | .0878176 | 6470787 | _cons |



| sigma_u | .52994622 | |
|---------|-----------|-----------------------------------|
| sigma_e | 6.7368114 | |
| rho | .00615001 | (fraction of variance due to u_i) |

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| Fixed-effects (within) regression | Number of obs | = | 1,030 |
|-----------------------------------|------------------|---|--------|
| Group variable: imf | Number of groups | = | 10 |
| R-sq: | Obs per group: | | |
| within = 0.4446 | min | = | 103 |
| between = 0.0473 | avg | = | 103.0 |
| overall = 0.4421 | max | = | 103 |
| | F(3,9) | = | 304.32 |
| $corr(u_i, Xb) = -0.0536$ | Prob > F | = | 0.0000 |
| | | | |

(Std. Err. adjusted for 10 clusters in imf)

| sftphi24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|-------------------------------------|---------------------|----------|---------|------------|-----------|
| lsap | 2555713 | .0895587 | -2.85 | 0.019 | 458167 | 0529755 |
| dsftphi24m L1. | 6418506 | .0319722 | -20.08 | 0.000 | 7141767 | 5695246 |
| fx L1. | 0195197 | .0079453 | -2.46 | 0.036 | 0374931 | 0015462 |
| _cons | .3318614 | .0915896 | 3.62 | 0.006 | .1246712 | .5390515 |
| sigma_u sigma_e rho | .70645106 8.4788407 .00689424 | (fraction | of varia | nce due | to u_i) | |

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| Fixed-effects (within) regression Group variable: imf | Number of obs Number of groups | = = | 1,030 10 |
|---|-----------------------------------|------------|-------------|
| R-sq: | Obs per group: | | |
| within = 0.0399 | mir | ı = | 103 |
| between = 0.0267 | avo | s = | 103.0 |
| overall = 0.0398 | max | = | 103 |
| | | | |
| | F(3,9) | = | 11.72 |
| $corr(u_i, Xb) = -0.0161$ | Prob > F | = | 0.0018 |
| | | | |

(Std. Err. adjusted for 10 clusters in imf)

| sftnom120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|-----------|
| lsap | .2821681 | .1031061 | 2.74 | 0.023 | .0489259 | .5154103 |
| dsftnom120m L1. | 0068703 | .0614888 | -0.11 | 0.913 | 1459675 | .1322269 |
| fx L1. | 0040059 | .0043747 | -0.92 | 0.384 | 0139022 | .0058904 |
| _cons | 4284851 | .0406964 | -10.53 | 0.000 | 5205467 | 3364236 |
| sigma_u sigma_e rho | .39567004 5.5504938 .00505594 | (fraction | of varia | nce due t | to u_i) | |

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| Fixed-effects (within) regression Group variable: imf | Number of obs Number of groups | | 1,030 10 |
|---|-----------------------------------|-----|-------------|
| R-sq: | Obs per group: | | |
| within = 0.4580 | mi | n = | 103 |
| between = 0.1221 | av | g = | 103.0 |
| overall = 0.4540 | ma | x = | 103 |
| | F(3,9) | = | 613.18 |
| corr(u i, Xb) = -0.0939 | Prob > F | = | 0.0000 |



(Std. Err. adjusted for 10 clusters in imf)

| sftsyn120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf | . Interval] |
|---------------------------|-------------------------------------|---------------------|----------|---------|-----------|-------------|
| lsap | .9672136 | .0499024 | 19.38 | 0.000 | .8543264 | 1.080101 |
| dsftsyn120m L1. | 5561504 | .0269477 | -20.64 | 0.000 | 6171104 | 4951905 |
| fx L1. | .0275037 | .0087827 | 3.13 | 0.012 | .0076359 | .0473715 |
| _cons | 7981533 | .1119682 | -7.13 | 0.000 | -1.051443 | 5448637 |
| sigma_u sigma_e rho | .90065257 9.3841294 .00912734 | (fraction | of varia | nce due | to u_i) | |

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| Fixed-effects (within) regression | Number of obs | = | 1,030 |
|-----------------------------------|------------------|-----|--------|
| Group variable: imf | Number of groups | = | 10 |
| R-sq: | Obs per group: | | |
| within = 0.1013 | miı | n = | 103 |
| between = 0.1666 | ave | g = | 103.0 |
| overall = 0.0711 | max | K = | 103 |
| | | | |
| | F(3,9) | = | 14.23 |
| $corr(u_i, Xb) = -0.4675$ | Prob > F | = | 0.0009 |
| | | | |

(Std. Err. adjusted for 10 clusters in imf)

| sftrho120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|--------------------|----------|---------------------|-------|-------|------------|-----------|
| lsap | 171325 | .0550498 | -3.11 | 0.012 | 2958563 | 0467937 |
| dsftrho120m L1. | 294454 | .0543946 | -5.41 | 0.000 | 4175032 | 1714049 |
| fx L1. | 0429154 | .0066888 | -6.42 | 0.000 | 0580464 | 0277843 |
| _cons | .4944547 | .1186709 | 4.17 | 0.002 | .2260025 | .7629069 |



| sigma_u | 1.5416977 | |
|---------|-----------|-----------------------------------|
| sigma_e | 6.7564375 | |
| rho | .04949023 | (fraction of variance due to u_i) |

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| Fixed-effects (within) regression | Number of obs | = | 1,030 |
|-----------------------------------|-----------------|-------|--------|
| Group variable: imf | Number of grou | ıps = | 10 |
| R-sq: | Obs per group: | | |
| within = 0.4332 | | min = | 103 |
| between = 0.3621 | | avg = | 103.0 |
| overall = 0.4280 | | max = | 103 |
| | F(3,9) | = | 942.40 |
| $corr(u_i, Xb) = -0.1301$ | Prob > F | = | 0.0000 |
| | | | |

(Std. Err. adjusted for 10 clusters in imf)

| sftphi120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | <pre>Interval]</pre> |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|----------------------|
| lsap | 7713414 | .1081172 | -7.13 | 0.000 | -1.01592 | 5267634 |
| dsftphi120m L1. | 5170372 | .0190544 | -27.13 | 0.000 | 5601413 | 473933 |
| fx L1. | 0343327 | .0087313 | -3.93 | 0.003 | 0540844 | 0145811 |
| _cons | .3914451 | .1053874 | 3.71 | 0.005 | .1530423 | .6298478 |
| sigma_u sigma_e rho | .94253123 8.8185413 .01129445 | (fraction | of varia | nce due t | to u_i) | |

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> /LSAPAE120m.eps written in EPS format)



| Fixed-effects (within) regression | Number of obs | = | 1,400 |
|-----------------------------------|------------------|---|--------|
| Group variable: imf | Number of groups | = | 15 |
| R-sq: | Obs per group: | | |
| within = 0.0131 | min | = | 44 |
| between = 0.3885 | avg | = | 93.3 |
| overall = 0.0118 | max | = | 103 |
| | F(3,14) | = | 372.62 |
| $corr(u_i, Xb) = -0.9378$ | Prob > F | = | 0.0000 |
| | | | |

(Std. Err. adjusted for ${\bf 15}$ clusters in imf)

| sftnom24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | . Interval] |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|-------------|
| lsap | .1498084 | .047294 | 3.17 | 0.007 | .0483729 | .2512439 |
| dsftnom24m L1. | 1004201 | .1323475 | -0.76 | 0.461 | 3842771 | .183437 |
| fx L1. | 002278 | .0000968 | -23.53 | 0.000 | 0024856 | 0020704 |
| _cons | 2.174424 | .0789338 | 27.55 | 0.000 | 2.005128 | 2.34372 |
| sigma_u sigma_e rho | 5.0300688 12.872825 .13246129 | (fraction | of varia | nce due 1 | to u_i) | |

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| Fixed-effects (within) regression | Number of obs = | 1,385 |
|-----------------------------------|--------------------|---------|
| Group variable: imf | Number of groups = | 15 |
| R-sq: | Obs per group: | |
| within = 0.0730 | min = | · 77 |
| between = 0.5739 | avg = | 92.3 |
| overall = 0.0263 | max = | 103 |
| | F(3,14) = | 1545.57 |
| $corr(u_i, Xb) = -0.9554$ | Prob > F = | 0.0000 |
| | | |



(Std. Err. adjusted for 15 clusters in imf)

| sftsyn24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|------------------------------------|---------------------|----------|---------|------------|-----------|
| lsap | 1.254893 | .3411221 | 3.68 | 0.002 | .523259 | 1.986527 |
| dsftsyn24m L1. | .2585634 | .3917075 | 0.66 | 0.520 | 5815655 | 1.098692 |
| fx L1. | 010606 | .0006288 | -16.87 | 0.000 | 0119547 | 0092573 |
| _cons | 9.133567 | .1993458 | 45.82 | 0.000 | 8.706013 | 9.561121 |
| sigma_u sigma_e rho | 25.003132 29.561304 .4170415 | (fraction | of varia | nce due | to u_i) | |

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> SAP/EM/sftsyn24m.eps not found)

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> /sftsyn24m.eps written in EPS format)

| Fixed-effects (within) regression | Number of obs | = | 1,385 |
|-----------------------------------|------------------|---|---------|
| Group variable: imf | Number of groups | = | 15 |
| R-sq: | Obs per group: | | |
| within = 0.1271 | min | = | 77 |
| between = 0.6003 | avg | = | 92.3 |
| overall = 0.0509 | max | = | 103 |
| | F(3,14) | = | 2989.09 |
| $corr(u_i, Xb) = -0.9228$ | Prob > F | = | 0.0000 |

(Std. Err. adjusted for 15 clusters in imf)

| sftrho24 | 1m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf | . Interval] |
|---------------|------------|----------|---------------------|--------|-------|-----------|-------------|
| ls | sap | .6070231 | .2384132 | 2.55 | 0.023 | .0956777 | 1.118368 |
| dsftrho2 I | 24m 21. | .4532903 | .3944356 | 1.15 | 0.270 | 39269 | 1.299271 |
| I | fx L1. | 0093036 | .0007427 | -12.53 | 0.000 | 0108965 | 0077108 |
| _cc | ons | 7.440858 | .6566968 | 11.33 | 0.000 | 6.032384 | 8.849333 |



| sigma_u | 21.67105 | |
|---------|-----------|-----------------------------------|
| sigma_e | 26.204476 | |
| rho | .4061496 | (fraction of variance due to u_i) |

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| Fixed-effects (within) regression | Number of obs | = | 1,327 |
|-----------------------------------|------------------|---|--------|
| Group variable: imf | Number of groups | = | 15 |
| R-sq: | Obs per group: | | |
| within = 0.0383 | min | _ | 44 |
| between = 0.3206 | avg | = | 88.5 |
| overall = 0.0119 | max | = | 103 |
| | F(3,14) | = | 332.33 |
| $corr(u_i, Xb) = -0.9693$ | Prob > F | = | 0.0000 |
| | | | |

(Std. Err. adjusted for 15 clusters in imf)

| sftphi24m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|------------------------------------|---------------------|----------|-----------|------------|-----------|
| lsap | 8830004 | .2085031 | -4.23 | 0.001 | -1.330195 | 4358057 |
| dsftphi24m L1. | .0485677 | .2335396 | 0.21 | 0.838 | 452325 | .5494603 |
| fx L1. | .0086694 | .0004233 | 20.48 | 0.000 | .0077614 | .0095774 |
| _cons | -7.593693 | .318385 | -23.85 | 0.000 | -8.276561 | -6.910825 |
| sigma_u sigma_e rho | 20.88826 26.269616 .38735326 | (fraction | of varia | nce due t | to u_i) | |

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| Fixed-effects (within) regression Group variable: imf | Number of obs Number of groups | • | 400 15 |
|---|-----------------------------------|-------|-----------|
| R-sq: | Obs per group: | | |
| within = 0.0529 | min | = | 44 |
| between = 0.4795 | avg | = 9 | 3.3 |
| overall = 0.0551 | max | = | 103 |
| | F(3,14) | = 7 | .40 |
| $corr(u_i, Xb) = -0.0500$ | Prob > F | = 0.0 | 033 |

(Std. Err. adjusted for 15 clusters in imf)

| sftnom120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|-------------------------------------|---------------------|----------|-----------|------------|-----------|
| lsap | .3376576 | .1304291 | 2.59 | 0.021 | .0579149 | .6174002 |
| dsftnom120m L1. | 1899387 | .1542378 | -1.23 | 0.238 | 5207458 | .1408684 |
| fx L1. | .0003577 | .0002137 | 1.67 | 0.116 | 0001007 | .0008162 |
| _cons | 4536995 | .1458176 | -3.11 | 0.008 | 7664472 | 1409518 |
| sigma_u sigma_e rho | .85868927 15.802203 .00294413 | (fraction | of varia | nce due · | to u_i) | |

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| | Fixed- | effects (within) regression | Number of obs | = | 1,385 |
|---|--------|-----------------------------|------------------|---|--------|
| <pre>within = 0.2505 between = 0.4656 overall = 0.1646</pre> min = avg = max = F(3,14) = 2 | Group | variable: imf | Number of groups | = | 15 |
| between = 0.4656 avg = overall = 0.1646 max = | R-sq: | | Obs per group: | | |
| overall = 0.1646 | W | within = 0.2505 | min | = | 77 |
| F(3,14) = 2 | b | petween = 0.4656 | avg | = | 92.3 |
| | 0 | overall = 0.1646 | max | = | 103 |
| corr(u i, Xb) = -0.6907 Prob > F = 0 | | | F(3,14) | = | 211.82 |
| \cdot $ \cdot$ \cdot | corr(u | n_i, Xb) = -0.6907 | Prob > F | = | 0.0000 |



(Std. Err. adjusted for 15 clusters in imf)

| sftsyn120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|------------------------------------|---------------------|----------|---------|------------|-----------|
| lsap | 1.253817 | .3899434 | 3.22 | 0.006 | .4174714 | 2.090162 |
| dsftsyn120m L1. | 4944228 | .1635823 | -3.02 | 0.009 | 8452719 | 1435737 |
| fx L1. | 0048256 | .0008183 | -5.90 | 0.000 | 0065806 | 0030705 |
| _cons | 4.398068 | 1.06469 | 4.13 | 0.001 | 2.114535 | 6.681601 |
| sigma_u sigma_e rho | 10.957111 22.73175 .18853647 | (fraction | of varia | nce due | to u_i) | |

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> /sftsyn120m.eps written in EPS format)

| Fixed-effects (within) regression | Number of obs = | 1,385 |
|-----------------------------------|--------------------|--------|
| Group variable: imf | Number of groups = | 15 |
| R-sq: | Obs per group: | |
| within = 0.1287 | min = | 77 |
| between = 0.4686 | avg = | 92.3 |
| overall = 0.0670 | max = | 103 |
| | F(3,14) = | 68.68 |
| $corr(u_i, Xb) = -0.8375$ | Prob > F = | 0.0000 |

(Std. Err. adjusted for 15 clusters in imf)

| sftrho120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf | . Interval] |
|--------------------|----------|---------------------|-------|-------|-----------|-------------|
| lsap | 0535566 | .3495543 | -0.15 | 0.880 | 803276 | .6961628 |
| dsftrho120m L1. | 3895577 | .174463 | -2.23 | 0.042 | 7637435 | 0153718 |
| fx L1. | 0049076 | .0007239 | -6.78 | 0.000 | 0064602 | 003355 |
| _cons | 5.100727 | .7637507 | 6.68 | 0.000 | 3.462645 | 6.738809 |



| sigma_u | 11.110092 | |
|---------|-----------|-----------------------------------|
| sigma_e | 21.167299 | |
| rho | .21598704 | (fraction of variance due to u_i) |

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| Fixed-effects (within) regression | Number of obs | = | 1,327 |
|-----------------------------------|---------------------|--------|-----------|
| Group variable: imf | Number of grou | ps = | 15 |
| R-sq: | Obs per group: | | |
| within = 0.2132 | | min = | 44 |
| between = 0.7004 | | avg = | 88.5 |
| overall = 0.1446 | | max = | 103 |
| | F(3,14) | = | 368.09 |
| $corr(u_i, Xb) = -0.7647$ | Prob > F | = | 0.0000 |
| (GL) T | lww addugted for 15 | ~1a+ o | ~ :~ :~E\ |

(Std. Err. adjusted for 15 clusters in imf)

| sftphi120m0 | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
|---------------------------|-----------------------------------|---------------------|----------|---------|------------|-----------|
| lsap | -1.03385 | .3321241 | -3.11 | 0.008 | -1.746185 | 3215147 |
| dsftphi120m L1. | 3594164 | .0988162 | -3.64 | 0.003 | 5713559 | 1474768 |
| fx L1. | .0052488 | .0008298 | 6.33 | 0.000 | .003469 | .0070287 |
| _cons | -5.726057 | .9809979 | -5.84 | 0.000 | -7.830089 | -3.622026 |
| sigma_u sigma_e rho | 11.00424 22.382192 .1946663 | (fraction | of varia | nce due | to u_i) | |

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