
```

        name: <unnamed>
        log: /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Tables/impac
> t_regs.smcl
    log type: smcl
    opened on: 16 Jul 2020, 17:31:19

```

```

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

4 . foreach shock in mp1 { // path lsap {
    2.         local ++j
    3.         if `j' == 1 local shk "Target"
    4.         if `j' == 2 local shk "Path"
    5.         if `j' == 3 local shk "LSAP"
    6.
5 .     foreach group in 0 { // 0 1 {
    7.         if `group' == 0 {
    8.             local grp "AE"
    9.             local vars nom dyp dtp
    10.        }
    11.        else {
    12.            local grp "EM"
    13.            local vars nom dyp dtp // usyc syn usyc rho phi
    14.        }
    15.
6 .        foreach t in 24 120 { // 120 { // 3 6 12 24 60 120 {
    16.            foreach v in `vars' {
    17.
7 .                // variables to store the betas, standard er
> rors and confidence intervals
8 .                capture {
    18.                    gen b_`v'`t'm = .
    19.                    gen se_`v'`t'm = .
    20.                    gen l11_`v'`t'm = .
    21.                    gen ul1_`v'`t'm = .
    22.                    gen l12_`v'`t'm = .
    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.
13 .                                    // conditions
14 .                                    local condition em == `group' // & r
    > egion == 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 .
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($id)
    > // report on-impact effect
    30. //                                if `i' == 0 xtscd `v'`t'm`i' `sho
    > ck' `ctrl`v'`t'm' if `condition', fe level(95) lag(4)
23 .                                    quiet xtreg `v'`t'm`i' `shock' `ctrl
    > `v'`t'm' if `condition', fe level(95) cluster($id)
    31. //                                quiet xtscd `v'`t'm`i' `shock' `c
    > trl`v'`t'm' if `condition', fe level(95) lag(4)
24 .                                    capture {
    32.                                        replace b_`v'`t'm = _b[`shock']
    > if _n == `i'+1
    33.                                        replace se_`v'`t'm = _se[`shock']
    > if _n == `i'+1
    34.

```

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25 .                                // confidence intervals
26 .                                matrix R = r(table)
    35.                                replace l11_`v'`t'm = el(matrix(R
> ),rownumb(matrix(R),"l1"),colnumb(matrix(R),"`shock'")) if _n == `i'+1
    36.                                replace ul1_`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 xtsc, level(90) // to get
> 90% CI
27 .                                matrix R = r(table)
    39.                                replace l12_`v'`t'm = el(matrix(R
> ),rownumb(matrix(R),"l1"),colnumb(matrix(R),"`shock'")) if _n == `i'+1
    40.                                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.                                }
    43.                                } // horizon
    44.
29 .                                // graph
30 .                                twoway (rarea l11_`v'`t'm ul1_`v'`t'm days,
> fcolor(gs12) lcolor(white) lpattern(solid)) ///
>                                (rarea l12_`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)) ylabel(-1(1)5) xlabel(10(20)90) ///
>                                graphregion(color(white)) plotregion(color(w
> hite)) ///
>                                legend(off) name(`v'`t'm, replace)
    45.                                graph export $pathfigs/`shk'/'grp'/'v'`t'
> m.eps, replace
    46.

```

```

31 .                                local graphs`shock'`grp'`t' `graphs`shock'`g
> rp'`t' `v'`t'm
47.                                drop *_`v'`t'm                                /
> / b_, se_ and confidence intervals
48.                                }                                // yield component
49.
32 .                                graph combine `graphs`shock'`grp'`t', rows(1) ycommon ///
>                                title("`shock' `grp' `t'm")
50.                                graph export $pathfigs/`shk'/'`grp'/'`shk'`grp'`v'`t'm.eps,
> replace
51.
33 .                                graph drop _all
52.                                }                                // tenor
53.                                }                                // AE or EM
54. }                                // shock

```

```

Fixed-effects (within) regression                                Number of obs      =      1,620
Group variable: imf                                           Number of groups   =       10

```

```

R-sq:                                                         Obs per group:
    within  = 0.0360                                           min =      162
    between = 0.0810                                           avg  =     162.0
    overall  = 0.0332                                           max  =      162

```

```

                                                         F(3,9)      =      12.99
corr(u_i, Xb) = -0.2523                                     Prob > F      =      0.0013

```

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

nom24m0	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
mp1	.1327461	.0237721	5.58	0.000	.0789699	.1865223
dnom24m						
L1.	-.014274	.0532617	-0.27	0.795	-.1347604	.1062124
fx						
L1.	.012997	.0035739	3.64	0.005	.0049122	.0210818
_cons	-.4462629	.0402733	-11.08	0.000	-.5373675	-.3551582
sigma_u	.49099224					
sigma_e	4.8910133					
rho	.00997693	(fraction of variance due to u_i)				

```

(file /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Figures/LPs/Target/
> AE/nom24m.eps written in EPS format)

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Fixed-effects (within) regression               Number of obs   =       1,620
Group variable: imf                           Number of groups =        10

R-sq:                                         Obs per group:
    within = 0.0436                          min =          162
    between = 0.0990                         avg =       162.0
    overall = 0.0413                         max =          162

                                         F(3,9)          =       11.09
corr(u_i, Xb) = -0.2115                     Prob > F         =       0.0022

```

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

dyp24m0	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
mp1	.1233086	.0244027	5.05	0.001	.0681058	.1785114
ddyp24m L1.	.0105458	.0383775	0.27	0.790	-.0762702	.0973618
fx L1.	.0106683	.0055491	1.92	0.087	-.0018847	.0232212
_cons	-.3680868	.0612528	-6.01	0.000	-.5066503	-.2295234
sigma_u	.40635355					
sigma_e	4.1433409					
rho	.00952685	(fraction of variance due to u_i)				

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> arget/AE/dyp24m.eps not found)
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> AE/dyp24m.eps written in EPS format)

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```

Fixed-effects (within) regression               Number of obs   =       1,620
Group variable: imf                           Number of groups =        10

R-sq:                                         Obs per group:
    within = 0.0065                          min =          162
    between = 0.0115                         avg =       162.0
    overall = 0.0039                         max =          162

                                         F(3,9)          =       5.80
corr(u_i, Xb) = -0.5343                     Prob > F         =       0.0173

```

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

dtp24m0	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
mp1	.0134759	.0100897	1.34	0.214	-.0093485	.0363004
ddtp24m						
L1.	.0743054	.0612684	1.21	0.256	-.0642932	.2129041
fx						
L1.	.0045746	.0011667	3.92	0.004	.0019354	.0072139
_cons	-.074647	.01634	-4.57	0.001	-.1116107	-.0376833
sigma_u	.1751988					
sigma_e	1.8767518					
rho	.00863933	(fraction of variance due to u_i)				

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> arget/AE/dtp24m.eps not found)

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> AE/dtp24m.eps written in EPS format)

(file /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Figures/LPs/Target/
> AE/TargetAE24m.eps written in EPS format)

Fixed-effects (within) regression

Number of obs = 1,620

Group variable: imf

Number of groups = 10

R-sq:

Obs per group:

within = 0.0081

min = 162

between = 0.1344

avg = 162.0

overall = 0.0084

max = 162

corr(u_i, Xb) = 0.0212

F(3,9) = 4.47

Prob > F = 0.0349

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

nom120m0	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
mp1	.0321152	.019815	1.62	0.140	-.0127095	.07694
dnom120m						
L1.	-.1060021	.0429891	-2.47	0.036	-.2032501	-.0087541
fx						
L1.	.0010265	.0040411	0.25	0.805	-.008115	.010168

R-sq:		Obs per group:	
within	= 0.0021	min	= 162
between	= 0.0230	avg	= 162.0
overall	= 0.0010	max	= 162
		F(3,9)	= 5.33
corr(u_i, Xb)	= -0.6491	Prob > F	= 0.0219

F(3,9)	=	5.33
Prob > F	=	0.0219

	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
dtpl120m0						
mpl	-.0258867	.0198027	-1.31	0.224	-.0706836	.0189101
ddtpl120m						
L1.	-.0305108	.0368729	-0.83	0.429	-.1139232	.0529016
fx						
L1.	-.0100388	.0026956	-3.72	0.005	-.0161366	-.003941
_cons	-.0349541	.0424722	-0.82	0.432	-.131033	.0611247
sigma_u	.37280206					
sigma_e	4.5430784					
rho	.0066887	(fraction of variance due to u_i)				

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(file /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Figures/LPs/Target/
> AE/TargetAE120m.eps written in EPS format)
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```
34 .
35 . log close
      name: <unnamed>
      log: /Users/Pavel/Documents/GitHub/Book/Ch_Synthetic/Docs/Tables/impac
> t_regs.smcl
      log type: smcl
closed on: 16 Jul 2020, 17:38:04
```