```
1 . xtivreg LTITA_2 Turnover LTFCF_1 LTLeverage LTRevenue LTCash TQ (TQ = TQ_diff_1
> TQ_diff_2), fe

Fixed-effects (within) IV regression            Number of obs     =      3,828
Group variable: FirmID                          Number of groups  =        319

R-sq:                                           Obs per group:
     within  = 0.0211                                         min =         12
     between = 0.0995                                         avg =       12.0
     overall = 0.0574                                         max =         12

                                                Wald chi2(6)      =   26754.28
corr(u_i, Xb)  = 0.0323                         Prob > chi2       =     0.0000

------------------------------------------------------------------------------
     LTITA_2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          TQ |   .0093433   .0118309     0.79   0.430    -.0138448    .0325314
    Turnover |   26.02909    7.16638     3.63   0.000     11.98325    40.07494
     LTFCF_1 |  -.6632632   .2196502    -3.02   0.003     -1.09377   -.2327567
  LTLeverage |   .3146274   .1615589     1.95   0.051    -.0020223    .6312771
   LTRevenue |   1.231944   .1718853     7.17   0.000     .8950552    1.568833
      LTCash |  -.3431614   .4166313    -0.82   0.410    -1.159744     .473421
          TQ |           0  (omitted)
       _cons |  -4.074247   .1225911   -33.23   0.000    -4.314521   -3.833973
-------------+----------------------------------------------------------------
     sigma_u |  1.0367693
     sigma_e |   1.208834
         rho |  .42382429   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F  test that all u_i=0:     F(318,3503) =     8.19        Prob > F    = 0.0000
------------------------------------------------------------------------------
Instrumented:   TQ
Instruments:    Turnover LTFCF_1 LTLeverage LTRevenue LTCash TQ TQ_diff_1
                TQ_diff_2
------------------------------------------------------------------------------

2 . estimates store fix3

3 . xtivreg LTITA_2 Turnover LTFCF_1 LTLeverage LTRevenue LTCash TQ (TQ = TQ_diff_1
> TQ_diff_2), re

G2SLS random-effects IV regression              Number of obs     =      3,828
Group variable: FirmID                          Number of groups  =        319

R-sq:                                           Obs per group:
     within  = 0.0197                                         min =         12
     between = 0.1310                                         avg =       12.0
     overall = 0.0708                                         max =         12

                                                Wald chi2(6)      =     120.71
corr(u_i, X)       = 0 (assumed)                Prob > chi2       =     0.0000
```

LTITA_2	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0212858	.0110315	1.93	0.054	-.0003356	.0429072
Turnover	23.16499	6.800019	3.41	0.001	9.837196	36.49278
LTFCF_1	-.6493858	.2168015	-3.00	0.003	-1.074309	-.2244626
LTLeverage	.0383346	.1540568	0.25	0.803	-.2636111	.3402803
LTRevenue	1.312935	.1361556	9.64	0.000	1.046075	1.579795
LTCash	-.8691681	.3913813	-2.22	0.026	-1.636261	-.1020749
TQ	0	(omitted)				
_cons	-4.020676	.115628	-34.77	0.000	-4.247303	-3.794049
sigma_u	.89994042					
sigma_e	1.208834					
rho	.35659677	(fraction of variance due to u_i)				

Instrumented: TQ
Instruments: Turnover LTFCF_1 LTLeverage LTRevenue LTCash TQ TQ_diff_1 TQ_diff_2

4 . estimates store ran3

5 . hausman fix3 .

	Coefficients (b) fix3	(B) ran3	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
TQ	.0093433	.0212858	-.0119425	.0042749
Turnover	26.02909	23.16499	2.864106	2.262024
LTFCF_1	-.6632632	-.6493858	-.0138774	.0352606
LTLeverage	.3146274	.0383346	.2762928	.0486601
LTRevenue	1.231944	1.312935	-.0809904	.1049105
LTCash	-.3431614	-.8691681	.5260067	.1428368

b = consistent under Ho and Ha; obtained from xtivreg
B = inconsistent under Ha, efficient under Ho; obtained from xtivreg

Test: Ho: difference in coefficients not systematic

chi2(6) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 56.29
Prob>chi2 = 0.0000

6 . xtivreg LTITA_1 Turnover LTFCF_1 LTLeverage LTRevenue LTCash TQ (TQ = TQ_diff_1
> TQ_diff_2), fe

Fixed-effects (within) IV regression Number of obs = 3,828
Group variable: FirmID Number of groups = 319

R-sq: Obs per group:
within = 0.1871 min = 12
between = 0.1087 avg = 12.0
overall = 0.1388 max = 12

Wald chi2(6) = 50910.63
corr(u_i, Xb) = -0.1512 Prob > chi2 = 0.0000

LTITA_1	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0200377	.0092566	2.16	0.030	.0018952	.0381802
Turnover	9.954855	5.607031	1.78	0.076	-1.034723	20.94443
LTFCF_1	-4.04659	.171856	-23.55	0.000	-4.383422	-3.709759
LTLeverage	.2887611	.1264049	2.28	0.022	.041012	.5365103
LTRevenue	2.256065	.1344844	16.78	0.000	1.99248	2.519649
LTCash	-.2648147	.3259755	-0.81	0.417	-.903715	.3740855
TQ	0	(omitted)				
_cons	-4.806199	.0959162	-50.11	0.000	-4.994191	-4.618206
sigma_u	1.0196932					
sigma_e	.94580097					
rho	.53754169	(fraction of variance due to u_i)				

F test that all u_i=0: F(318,3503) = 12.69 Prob > F = 0.0000

Instrumented: TQ
Instruments: Turnover LTFCF_1 LTLeverage LTRevenue LTCash TQ TQ_diff_1 TQ_diff_2

7 . estimates store fixed3

8 . xtivreg LTITA_1 Turnover LTFCF_1 LTLeverage LTRevenue LTCash TQ (TQ = TQ_diff_1
> TQ_diff_2), re

G2SLS random-effects IV regression Number of obs = 3,828
Group variable: FirmID Number of groups = 319

R-sq: Obs per group:
within = 0.1860 min = 12
between = 0.1202 avg = 12.0
overall = 0.1468 max = 12

Wald chi2(6) = 831.28
corr(u_i, X) = 0 (assumed) Prob > chi2 = 0.0000

LTITA_1	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0285837	.0088598	3.23	0.001	.0112188	.0459485
Turnover	9.388688	5.431824	1.73	0.084	-1.257491	20.03487
LTFCF_1	-3.974532	.1708981	-23.26	0.000	-4.309486	-3.639578
LTLeverage	.0970387	.1228686	0.79	0.430	-.1437793	.3378567
LTRevenue	2.063188	.1144913	18.02	0.000	1.838789	2.287587
LTCash	-.5406156	.3136468	-1.72	0.085	-1.155352	.0741208
TQ	0	(omitted)				
_cons	-4.631555	.0993841	-46.60	0.000	-4.826344	-4.436765
sigma_u	.89650833					
sigma_e	.94580097					
rho	.47326324	(fraction of variance due to u_i)				

Instrumented: TQ
Instruments: Turnover LTFCF_1 LTLeverage LTRevenue LTCash TQ TQ_diff_1 TQ_diff_2

```
 9 . estimates store random3

10 . hausman fixed3 .
```

	Coefficients (b) fixed3	(B) random3	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
TQ	**.0200377**	**.0285837**	**-.0085459**	**.002681**
Turnover	**9.954855**	**9.388688**	**.5661677**	**1.390713**
LTFCF_1	**-4.04659**	**-3.974532**	**-.0720584**	**.0181194**
LTLeverage	**.2887611**	**.0970387**	**.1917224**	**.0296904**
LTRevenue	**2.256065**	**2.063188**	**.1928764**	**.0705534**
LTCash	**-.2648147**	**-.5406156**	**.2758009**	**.0888016**

b = consistent under Ho and Ha; obtained from xtivreg
B = inconsistent under Ha, efficient under Ho; obtained from xtivreg

Test: Ho: difference in coefficients not systematic

chi2(**6**) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= **70.14**
Prob>chi2 = **0.0000**

```
11 . xtivreg LTITA_2 Turnover LTFCF_2 LTLeverage LTRevenue LTCash TQ (TQ = TQ_diff_1
> TQ_diff_2), fe
```

Fixed-effects (within) IV regression — Number of obs = **3,509**
Group variable: **FirmID** — Number of groups = **319**

R-sq:
within = **0.1768**
between = **0.1136**
overall = **0.1376**

Obs per group:
min = **11**
avg = **11.0**
max = **11**

Wald chi2(**6**) = **40734.44**
corr(u_i, Xb) = **-0.1287** — Prob > chi2 = **0.0000**

LTITA_2	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	**.0089549**	**.0100597**	**0.89**	**0.373**	**-.0107617**	**.0286715**
Turnover	**13.71592**	**6.285329**	**2.18**	**0.029**	**1.396899**	**26.03494**
LTFCF_2	**-3.409862**	**.1653336**	**-20.62**	**0.000**	**-3.73391**	**-3.085814**
LTLeverage	**.3781087**	**.1423943**	**2.66**	**0.008**	**.0990209**	**.6571965**
LTRevenue	**2.266715**	**.1520347**	**14.91**	**0.000**	**1.968733**	**2.564698**
LTCash	**-1.22512**	**.362194**	**-3.38**	**0.001**	**-1.935007**	**-.5152325**
TQ	**0**	(omitted)				
_cons	**-4.740518**	**.1084062**	**-43.73**	**0.000**	**-4.95299**	**-4.528046**
sigma_u	**1.0812251**					
sigma_e	**.9927736**					
rho	**.54257036**	(fraction of variance due to u_i)				

F test that all u_i=0: F(**318,3184**) = **11.94** — Prob > F = **0.0000**

Instrumented: TQ
Instruments: Turnover LTFCF_2 LTLeverage LTRevenue LTCash TQ TQ_diff_1
TQ_diff_2

```
12 . estimates store fix4

13 . xtivreg LTITA_2 Turnover LTFCF_2 LTLeverage LTRevenue LTCash TQ (TQ = TQ_diff_1
> TQ_diff_2), re

G2SLS random-effects IV regression              Number of obs     =      3,509
Group variable: FirmID                          Number of groups  =        319

R-sq:                                           Obs per group:
     within  = 0.1756                                         min =         11
     between = 0.1275                                         avg =       11.0
     overall = 0.1465                                         max =         11

                                                Wald chi2(6)      =     716.15
corr(u_i, X)       = 0 (assumed)                Prob > chi2       =     0.0000

------------------------------------------------------------------------------
     LTITA_2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          TQ |   .0208209   .0095869     2.17   0.030      .002031    .0396109
    Turnover |   11.86287   6.059428     1.96   0.050    -.0133863    23.73913
     LTFCF_2 |  -3.351507   .1642065   -20.41   0.000    -3.673345   -3.029668
  LTLeverage |   .1592072    .138197     1.15   0.249    -.1116539    .4300682
   LTRevenue |   2.103276   .1267019    16.60   0.000     1.854945    2.351608
      LTCash |  -1.418325   .3468411    -4.09   0.000    -2.098121   -.7385292
          TQ |           0  (omitted)
       _cons |  -4.579464   .1094374   -41.85   0.000    -4.793957   -4.364971
-------------+----------------------------------------------------------------
     sigma_u |  .95365668
     sigma_e |   .9927736
         rho |  .47991136   (fraction of variance due to u_i)
------------------------------------------------------------------------------
Instrumented:   TQ
Instruments:    Turnover LTFCF_2 LTLeverage LTRevenue LTCash TQ TQ_diff_1
                TQ_diff_2
------------------------------------------------------------------------------

14 . estimates store ran4

15 . hausman fix4 .

                 ---- Coefficients ----
                |      (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
                |      fix4         ran4       Difference          S.E.
----------------+----------------------------------------------------------------
          TQ    |   .0089549     .0208209       -.011866        .0030478
    Turnover    |   13.71592     11.86287       1.853044         1.66994
     LTFCF_2    |  -3.409862    -3.351507      -.0583551        .0192728
  LTLeverage    |   .3781087     .1592072       .2189015        .0343184
   LTRevenue    |   2.266715     2.103276       .1634388        .0840308
      LTCash    |   -1.22512    -1.418325       .1932054         .104335
----------------------------------------------------------------------------------

                    b = consistent under Ho and Ha; obtained from xtivreg
         B = inconsistent under Ha, efficient under Ho; obtained from xtivreg

    Test:  Ho:  difference in coefficients not systematic

                  chi2(6) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =       64.00
                Prob>chi2 =      0.0000
```

```
16 . xtivreg LTITA_1 Amihud AmihudXHigh_FLR LTFCF_1 LTLeverage LTRevenue LTCash TQ (T
> Q = TQ_diff_1 TQ_diff_2), fe

Fixed-effects (within) IV regression            Number of obs     =      3,828
Group variable: FirmID                          Number of groups  =        319

R-sq:                                           Obs per group:
     within  = 0.1880                                         min =         12
     between = 0.1050                                         avg =       12.0
     overall = 0.1365                                         max =         12

                                                Wald chi2(7)      =   50960.44
corr(u_i, Xb)  = -0.1588                        Prob > chi2       =     0.0000

------------------------------------------------------------------------------
      LTITA_1 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
--------------+---------------------------------------------------------------
           TQ |   .0199464   .0092528     2.16   0.031     .0018112    .0380816
      Amihud |   .0149616   .0120794     1.24   0.215    -.0087136    .0386369
AmihudXHigh_FLR |   .0447206   .0247195     1.81   0.070    -.0037288      .09317
      LTFCF_1 |  -4.038206   .1716979   -23.52   0.000    -4.374727   -3.701684
   LTLeverage |   .2526939    .127088     1.99   0.047     .0036059    .5017818
    LTRevenue |   2.273663   .1345694    16.90   0.000     2.009912    2.537414
       LTCash |  -.3069104   .3255898    -0.94   0.346    -.9450548    .3312339
           TQ |          0  (omitted)
        _cons |  -4.778917    .094429   -50.61   0.000    -4.963994   -4.593839
--------------+---------------------------------------------------------------
      sigma_u |  1.0237805
      sigma_e |  .94537708
          rho |   .5397527   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F  test that all u_i=0:     F(318,3502) =    12.68        Prob > F    = 0.0000
------------------------------------------------------------------------------
Instrumented:   TQ
Instruments:    Amihud AmihudXHigh_FLR LTFCF_1 LTLeverage LTRevenue LTCash TQ
                TQ_diff_1 TQ_diff_2
------------------------------------------------------------------------------

17 . estimates store fix5

18 . xtivreg LTITA_1 Amihud AmihudXHigh_FLR LTFCF_1 LTLeverage LTRevenue LTCash TQ (T
> Q = TQ_diff_1 TQ_diff_2), re

G2SLS random-effects IV regression              Number of obs     =      3,828
Group variable: FirmID                          Number of groups  =        319

R-sq:                                           Obs per group:
     within  = 0.1868                                         min =         12
     between = 0.1172                                         avg =       12.0
     overall = 0.1452                                         max =         12

                                                Wald chi2(7)      =     831.98
corr(u_i, X)       = 0 (assumed)                Prob > chi2       =     0.0000
```

LTITA_1	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.028552	.008859	3.22	0.001	.0111885	.0459154
Amihud	.0086073	.0120401	0.71	0.475	-.0149909	.0322056
AmihudXHigh_FLR	.0398517	.024859	1.60	0.109	-.008871	.0885744
LTFCF_1	-3.965191	.1709833	-23.19	0.000	-4.300312	-3.63007
LTLeverage	.0673398	.1236927	0.54	0.586	-.1750934	.309773
LTRevenue	2.0684	.1143357	18.09	0.000	1.844307	2.292494
LTCash	-.5799639	.3134372	-1.85	0.064	-1.19429	.0343618
TQ	0	(omitted)				
_cons	-4.599914	.0974947	-47.18	0.000	-4.791	-4.408828
sigma_u	.88377855					
sigma_e	.94537708					
rho	.46636221	(fraction of variance due to u_i)				

Instrumented: TQ
Instruments: Amihud AmihudXHigh_FLR LTFCF_1 LTLeverage LTRevenue LTCash TQ
TQ_diff_1 TQ_diff_2

19 . estimates store ran5

20 . hausman fix5 .

	Coefficients (b) fix5	(B) ran5	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
TQ	.0199464	.028552	-.0086056	.0026706
Amihud	.0149616	.0086073	.0063543	.0009736
AmihudXHi~LR	.0447206	.0398517	.0048689	.
LTFCF_1	-4.038206	-3.965191	-.0730145	.0156483
LTLeverage	.2526939	.0673398	.1853541	.0291803
LTRevenue	2.273663	2.0684	.2052628	.0709667
LTCash	-.3069104	-.5799639	.2730535	.088124

b = consistent under Ho and Ha; obtained from xtivreg
B = inconsistent under Ha, efficient under Ho; obtained from xtivreg

Test: Ho: difference in coefficients not systematic

chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 98.77
Prob>chi2 = 0.0000
(V_b-V_B is not positive definite)

21 . xtivreg LTITA_2 Amihud AmihudXHigh_FLR LTFCF_2 LTLeverage LTRevenue LTCash TQ (T
> Q = TQ_diff_1 TQ_diff_2), fe

Fixed-effects (within) IV regression Number of obs = 3,509
Group variable: FirmID Number of groups = 319

R-sq: Obs per group:
within = 0.1757 min = 11
between = 0.1148 avg = 11.0
overall = 0.1376 max = 11

Wald chi2(7) = 40664.70
corr(u_i, Xb) = -0.1312 Prob > chi2 = 0.0000

LTITA_2	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0089908	.0100682	0.89	0.372	-.0107425	.0287242
Amihud	.0054695	.0128386	0.43	0.670	-.0196938	.0306328
AmihudXHigh_FLR	.0123509	.0263378	0.47	0.639	-.0392702	.063972
LTFCF_2	-3.417014	.1654466	-20.65	0.000	-3.741283	-3.092745
LTLeverage	.3633064	.1435538	2.53	0.011	.0819461	.6446668
LTRevenue	2.281296	.1522995	14.98	0.000	1.982795	2.579798
LTCash	-1.274496	.362122	-3.52	0.000	-1.984242	-.5647497
TQ	0	(omitted)				
_cons	-4.706309	.1073247	-43.85	0.000	-4.916662	-4.495957
sigma_u	1.0809946					
sigma_e	.99357409					
rho	.54206444	(fraction of variance due to u_i)				

F test that all u_i=0: F(318,3183) = 11.85 Prob > F = 0.0000

Instrumented: TQ
Instruments: Amihud AmihudXHigh_FLR LTFCF_2 LTLeverage LTRevenue LTCash TQ
TQ_diff_1 TQ_diff_2

22 . estimates store fix6

23 . xtivreg LTITA_1 Turnover TurnoverXHigh_FLR LTFCF_1 LTLeverage LTRevenue LTCash T
> Q (TQ = TQ_diff_1 TQ_diff_2), fe

Fixed-effects (within) IV regression Number of obs = 3,828
Group variable: FirmID Number of groups = 319

R-sq: Obs per group:
within = 0.1890 min = 12
between = 0.1095 avg = 12.0
overall = 0.1399 max = 12

Wald chi2(7) = 51024.75
corr(u_i, Xb) = -0.1532 Prob > chi2 = 0.0000

LTITA_1	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0200124	.009247	2.16	0.030	.0018887	.0381361
Turnover	.3655432	6.517332	0.06	0.955	-12.40819	13.13928
TurnoverXHig~LR	24.76544	8.605183	2.88	0.004	7.89959	41.63129
LTFCF_1	-4.033801	.1717351	-23.49	0.000	-4.370396	-3.697206
LTLeverage	.2287403	.1279844	1.79	0.074	-.0221045	.4795851
LTRevenue	2.28343	.1346809	16.95	0.000	2.019461	2.5474
LTCash	-.2937879	.3257928	-0.90	0.367	-.93233	.3447542
TQ	0	(omitted)				
_cons	-4.79536	.0958907	-50.01	0.000	-4.983303	-4.607418
sigma_u	1.0197641					
sigma_e	.94481935					
rho	.53809247	(fraction of variance due to u_i)				

F test that all u_i=0: F(318,3502) = 12.70 Prob > F = 0.0000

Instrumented: TQ
Instruments: Turnover TurnoverXHigh_FLR LTFCF_1 LTLeverage LTRevenue LTCash TQ
TQ_diff_1 TQ_diff_2

```
24 . estimates store fix7

25 . xtivreg LTITA_2 Amihud AmihudXHigh_FLR LTFCF_2 LTLeverage LTRevenue LTCash TQ (T
   > Q = TQ_diff_1 TQ_diff_2), re

G2SLS random-effects IV regression              Number of obs     =      3,509
Group variable: FirmID                          Number of groups  =        319

R-sq:                                           Obs per group:
     within  = 0.1744                                         min =         11
     between = 0.1292                                         avg =       11.0
     overall = 0.1469                                         max =         11

                                                Wald chi2(7)      =     710.86
corr(u_i, X)       = 0 (assumed)                Prob > chi2       =     0.0000
```

LTITA_2	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0209202	.0095932	2.18	0.029	.0021179	.0397226
Amihud	-.0002997	.0127698	-0.02	0.981	-.025328	.0247286
AmihudXHigh_FLR	.0086496	.0264902	0.33	0.744	-.0432701	.0605694
LTFCF_2	-3.357033	.1644422	-20.41	0.000	-3.679334	-3.034732
LTLeverage	.1516769	.1394005	1.09	0.277	-.1215431	.4248969
LTRevenue	2.102766	.1266113	16.61	0.000	1.854612	2.350919
LTCash	-1.457104	.3468044	-4.20	0.000	-2.136828	-.7773798
TQ	0	(omitted)				
_cons	-4.543398	.1077454	-42.17	0.000	-4.754575	-4.332221
sigma_u	.94146998					
sigma_e	.99357409					
rho	.47309294	(fraction of variance due to u_i)				

```
Instrumented:   TQ
Instruments:    Amihud AmihudXHigh_FLR LTFCF_2 LTLeverage LTRevenue LTCash TQ
                TQ_diff_1 TQ_diff_2

26 . estimates store ran6

27 . hausman fix6 .
```

	Coefficients (b) fix6	(B) ran6	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
TQ	.0089908	.0209202	-.0119294	.003056
Amihud	.0054695	-.0002997	.0057692	.001328
AmihudXHi~LR	.0123509	.0086496	.0037013	.
LTFCF_2	-3.417014	-3.357033	-.0599808	.018202
LTLeverage	.3633064	.1516769	.2116295	.0342812
LTRevenue	2.281296	2.102766	.1785306	.0846445
LTCash	-1.274496	-1.457104	.1826082	.1042068

```
                b = consistent under Ho and Ha; obtained from xtivreg
     B = inconsistent under Ha, efficient under Ho; obtained from xtivreg

    Test:  Ho:  difference in coefficients not systematic
```

```
                  chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =       83.29
                Prob>chi2 =      0.0000
                (V_b-V_B is not positive definite)
```

```
28 . xtivreg LTITA_1 Turnover TurnoverXHigh_FLR LTFCF_1 LTLeverage LTRevenue LTCash T
   > Q (TQ = TQ_diff_1 TQ_diff_2), re

G2SLS random-effects IV regression              Number of obs     =      3,828
Group variable: FirmID                          Number of groups  =        319

R-sq:                                           Obs per group:
     within  = 0.1879                                         min =         12
     between = 0.1210                                         avg =       12.0
     overall = 0.1480                                         max =         12

                                                Wald chi2(7)      =     841.12
corr(u_i, X)       = 0 (assumed)                Prob > chi2       =     0.0000
```

LTITA_1	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0283611	.0088517	3.20	0.001	.011012	.0457102
Turnover	.026643	6.33094	0.00	0.997	-12.38177	12.43506
TurnoverXHig~LR	24.42553	8.506952	2.87	0.004	7.752213	41.09885
LTFCF_1	-3.962353	.1707864	-23.20	0.000	-4.297088	-3.627618
LTLeverage	.0342399	.1246901	0.27	0.784	-.2101481	.278628
LTRevenue	2.086982	.1146862	18.20	0.000	1.862201	2.311763
LTCash	-.5671063	.3134864	-1.81	0.070	-1.181528	.0473158
TQ	0	(omitted)				
_cons	-4.617889	.0994133	-46.45	0.000	-4.812735	-4.423042
sigma_u	.89581454					
sigma_e	.94481935					
rho	.47339498	(fraction of variance due to u_i)				

```
Instrumented:   TQ
Instruments:    Turnover TurnoverXHigh_FLR LTFCF_1 LTLeverage LTRevenue LTCash TQ
                TQ_diff_1 TQ_diff_2
```

```
29 . estimates store ran7

30 . hausman fix7 .
```

	Coefficients (b) fix7	(B) ran7	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
TQ	.0200124	.0283611	-.0083487	.0026745
Turnover	.3655432	.026643	.3389002	1.54752
TurnoverX~LR	24.76544	24.42553	.3399058	1.296509
LTFCF_1	-4.033801	-3.962353	-.0714482	.0180266
LTLeverage	.2287403	.0342399	.1945003	.0288512
LTRevenue	2.28343	2.086982	.1964481	.0706117
LTCash	-.2937879	-.5671063	.2733184	.0886972

```
                    b = consistent under Ho and Ha; obtained from xtivreg
         B = inconsistent under Ha, efficient under Ho; obtained from xtivreg

    Test:  Ho:  difference in coefficients not systematic
```

```
                  chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =       72.51
                Prob>chi2 =      0.0000

31 . xtivreg LTITA_2 Turnover TurnoverXHigh_FLR LTFCF_2 LTLeverage LTRevenue LTCash T
   > Q (TQ = TQ_diff_1 TQ_diff_2), fe

Fixed-effects (within) IV regression            Number of obs     =      3,509
Group variable: FirmID                          Number of groups  =        319

R-sq:                                           Obs per group:
     within  = 0.1770                                         min =         11
     between = 0.1135                                         avg =       11.0
     overall = 0.1375                                         max =         11

                                                Wald chi2(7)      =   40732.62
corr(u_i, Xb)  = -0.1298                        Prob > chi2       =     0.0000

------------------------------------------------------------------------------
      LTITA_2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
--------------+---------------------------------------------------------------
           TQ |    .008942     .01006     0.89   0.374    -.0107753    .0286592
     Turnover |    10.4297   7.285634     1.43   0.152    -3.849879    24.70928
TurnoverXHig~LR |   8.591611   9.631838     0.89   0.372    -10.28644    27.46967
      LTFCF_2 |   -3.415581   .1654632   -20.64   0.000    -3.739883   -3.091279
   LTLeverage |    .3562577   .1444906     2.47   0.014     .0730614    .6394541
    LTRevenue |    2.275804   .1523806    14.93   0.000     1.977143    2.574464
       LTCash |   -1.236927   .3624475    -3.41   0.001    -1.947311   -.5265431
           TQ |            0  (omitted)
        _cons |   -4.736081   .1085237   -43.64   0.000    -4.948784   -4.523378
--------------+---------------------------------------------------------------
      sigma_u |   1.0815371
      sigma_e |   .99280546
          rho |   .54269767   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F  test that all u_i=0:     F(318,3183) =    11.94        Prob > F    = 0.0000
------------------------------------------------------------------------------
Instrumented:   TQ
Instruments:    Turnover TurnoverXHigh_FLR LTFCF_2 LTLeverage LTRevenue LTCash TQ
                TQ_diff_1 TQ_diff_2
------------------------------------------------------------------------------

32 . estimates store fix8

33 . xtivreg LTITA_2 Turnover TurnoverXHigh_FLR LTFCF_2 LTLeverage LTRevenue LTCash T
   > Q (TQ = TQ_diff_1 TQ_diff_2), re

G2SLS random-effects IV regression              Number of obs     =      3,509
Group variable: FirmID                          Number of groups  =        319

R-sq:                                           Obs per group:
     within  = 0.1758                                         min =         11
     between = 0.1273                                         avg =       11.0
     overall = 0.1464                                         max =         11

                                                Wald chi2(7)      =     716.75
corr(u_i, X)       = 0 (assumed)                Prob > chi2       =     0.0000
```

LTITA_2	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0207287	.0095878	2.16	0.031	.001937	.0395204
Turnover	9.024415	7.05377	1.28	0.201	-4.80072	22.84955
TurnoverXHig~LR	7.479865	9.501472	0.79	0.431	-11.14268	26.10241
LTFCF_2	-3.356648	.1643236	-20.43	0.000	-3.678716	-3.034579
LTLeverage	.139311	.1406037	0.99	0.322	-.1362672	.4148891
LTRevenue	2.110601	.1270551	16.61	0.000	1.861578	2.359625
LTCash	-1.427202	.3470594	-4.11	0.000	-2.107426	-.746978
TQ	0	(omitted)				
_cons	-4.574971	.1096572	-41.72	0.000	-4.789896	-4.360047
sigma_u	.95494733					
sigma_e	.99280546					
rho	.48057052	(fraction of variance due to u_i)				

Instrumented: TQ
Instruments: Turnover TurnoverXHigh_FLR LTFCF_2 LTLeverage LTRevenue LTCash TQ TQ_diff_1 TQ_diff_2

34 . estimates store ran8

35 . hausman fix8 .

	Coefficients (b) fix8	(B) ran8	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
TQ	.008942	.0207287	-.0117868	.003046
Turnover	10.4297	9.024415	1.405285	1.8234
TurnoverX~LR	8.591611	7.479865	1.111746	1.579345
LTFCF_2	-3.415581	-3.356648	-.0589329	.019386
LTLeverage	.3562577	.139311	.2169468	.0332887
LTRevenue	2.275804	2.110601	.1652022	.084124
LTCash	-1.236927	-1.427202	.1902749	.1044889

b = consistent under Ho and Ha; obtained from xtivreg
B = inconsistent under Ha, efficient under Ho; obtained from xtivreg

Test: Ho: difference in coefficients not systematic

chi2(**7**) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= **64.51**
Prob>chi2 = **0.0000**

36 . xtivreg LTITA_1 Amihud AmihudXHigh_PR LTFCF_1 LTLeverage LTRevenue LTCash TQ (TQ
> = TQ_diff_1 TQ_diff_2), fe

Fixed-effects (within) IV regression Number of obs = **3,828**
Group variable: **FirmID** Number of groups = **319**

R-sq: Obs per group:
within = **0.1875** min = **12**
between = **0.1059** avg = **12.0**
overall = **0.1369** max = **12**

Wald chi2(**7**) = **50925.08**
corr(u_i, Xb) = **-0.1579** Prob > chi2 = **0.0000**

LTITA_1	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0199466	.0092567	2.15	0.031	.0018038	.0380895
Amihud	.0227048	.0113061	2.01	0.045	.0005452	.0448643
AmihudXHigh_PR	-.1631945	.1633955	-1.00	0.318	-.4834438	.1570548
LTFCF_1	-4.039444	.171767	-23.52	0.000	-4.376101	-3.702787
LTLeverage	.2540482	.1271273	2.00	0.046	.0048834	.5032131
LTRevenue	2.273268	.1346586	16.88	0.000	2.009342	2.537194
LTCash	-.3048835	.3256939	-0.94	0.349	-.9432319	.3334648
TQ	0	(omitted)				
_cons	-4.778085	.0944661	-50.58	0.000	-4.963235	-4.592935
sigma_u	1.0229743					
sigma_e	.94568406					
rho	.53919992	(fraction of variance due to u_i)				

F test that all u_i=0: F(318,3502) = 12.67 Prob > F = 0.0000

Instrumented: TQ
Instruments: Amihud AmihudXHigh_PR LTFCF_1 LTLeverage LTRevenue LTCash TQ
TQ_diff_1 TQ_diff_2

37 . estimates store fix9

38 . xtivreg LTITA_1 Amihud AmihudXHigh_PR LTFCF_1 LTLeverage LTRevenue LTCash TQ (TQ
> = TQ_diff_1 TQ_diff_2), re

G2SLS random-effects IV regression Number of obs = 3,828
Group variable: FirmID Number of groups = 319

R-sq: Obs per group:
within = 0.1863 min = 12
between = 0.1182 avg = 12.0
overall = 0.1456 max = 12

Wald chi2(7) = 829.67
corr(u_i, X) = 0 (assumed) Prob > chi2 = 0.0000

LTITA_1	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0285853	.0088619	3.23	0.001	.0112163	.0459542
Amihud	.0156365	.0112303	1.39	0.164	-.0063746	.0376475
AmihudXHigh_PR	-.1546223	.1640797	-0.94	0.346	-.4762127	.166968
LTFCF_1	-3.966435	.1710784	-23.18	0.000	-4.301742	-3.631128
LTLeverage	.0675262	.1237287	0.55	0.585	-.1749776	.31003
LTRevenue	2.066567	.1143097	18.08	0.000	1.842524	2.290609
LTCash	-.5803898	.3135148	-1.85	0.064	-1.194867	.0340879
TQ	0	(omitted)				
_cons	-4.597897	.0974005	-47.21	0.000	-4.788798	-4.406995
sigma_u	.88080441					
sigma_e	.94568406					
rho	.46452324	(fraction of variance due to u_i)				

Instrumented: TQ
Instruments: Amihud AmihudXHigh_PR LTFCF_1 LTLeverage LTRevenue LTCash TQ
TQ_diff_1 TQ_diff_2

```
39 . estimates store ran9

40 . hausman fix9 .
```

	Coefficients (b) fix9	(B) ran9	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
TQ	**.0199466**	**.0285853**	**-.0086386**	**.0026748**
Amihud	**.0227048**	**.0156365**	**.0070683**	**.0013066**
AmihudXHi~PR	**-.1631945**	**-.1546223**	**-.0085722**	**.**
LTFCF_1	**-4.039444**	**-3.966435**	**-.0730093**	**.0153652**
LTLeverage	**.2540482**	**.0675262**	**.186522**	**.0291983**
LTRevenue	**2.273268**	**2.066567**	**.2067015**	**.0711775**
LTCash	**-.3048835**	**-.5803898**	**.2755063**	**.0882327**

b = consistent under Ho and Ha; obtained from xtivreg
B = inconsistent under Ha, efficient under Ho; obtained from xtivreg

Test: Ho: difference in coefficients not systematic

chi2(**7**) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= **93.15**
Prob>chi2 = **0.0000**
(V_b-V_B is not positive definite)

```
41 . xtivreg LTITA_2 Amihud AmihudXHigh_PR LTFCF_2 LTLeverage LTRevenue LTCash TQ (TQ
>  = TQ_diff_1 TQ_diff_2), fe
```

Fixed-effects (within) IV regression — Number of obs = **3,509**
Group variable: **FirmID** — Number of groups = **319**

R-sq:
within = **0.1756**
between = **0.1150**
overall = **0.1377**

Obs per group:
min = **11**
avg = **11.0**
max = **11**

Wald chi2(**7**) = **40661.93**
corr(u_i, Xb) = **-0.1310** — Prob > chi2 = **0.0000**

LTITA_2	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	**.0090106**	**.0100697**	**0.89**	**0.371**	**-.0107256**	**.0287468**
Amihud	**.0076277**	**.0119804**	**0.64**	**0.524**	**-.0158534**	**.0311089**
AmihudXHigh_PR	**-.0236809**	**.1725263**	**-0.14**	**0.891**	**-.3618262**	**.3144644**
LTFCF_2	**-3.41597**	**.1655301**	**-20.64**	**0.000**	**-3.740403**	**-3.091537**
LTLeverage	**.3629222**	**.1435558**	**2.53**	**0.011**	**.0815579**	**.6442864**
LTRevenue	**2.280879**	**.1523599**	**14.97**	**0.000**	**1.982259**	**2.579499**
LTCash	**-1.274033**	**.3621381**	**-3.52**	**0.000**	**-1.983811**	**-.5642554**
TQ	**0**	(omitted)				
_cons	**-4.70581**	**.1073376**	**-43.84**	**0.000**	**-4.916188**	**-4.495433**
sigma_u	**1.0808113**					
sigma_e	**.99360547**					
rho	**.54196455**	(fraction of variance due to u_i)				

F test that all u_i=0: F(**318,3183**) = **11.85** Prob > F = **0.0000**

Instrumented: TQ
Instruments: Amihud AmihudXHigh_PR LTFCF_2 LTLeverage LTRevenue LTCash TQ
TQ_diff_1 TQ_diff_2

```
42 . estimates store fix10

43 . xtivreg LTITA_2 Amihud AmihudXHigh_PR LTFCF_2 LTLeverage LTRevenue LTCash TQ (TQ
   >  = TQ_diff_1 TQ_diff_2), re

G2SLS random-effects IV regression              Number of obs     =      3,509
Group variable: FirmID                          Number of groups  =        319

R-sq:                                           Obs per group:
     within  = 0.1744                                         min =         11
     between = 0.1294                                         avg =       11.0
     overall = 0.1470                                         max =         11

                                                Wald chi2(7)      =     710.61
corr(u_i, X)       = 0 (assumed)                Prob > chi2       =     0.0000
```

LTITA_2	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0209878	.0095946	2.19	0.029	.0021828	.0397929
Amihud	.0012007	.01188	0.10	0.919	-.0220838	.0244852
AmihudXHigh_PR	-.0185831	.1730618	-0.11	0.914	-.357778	.3206118
LTFCF_2	-3.356013	.1645476	-20.40	0.000	-3.678521	-3.033506
LTLeverage	.150349	.1394134	1.08	0.281	-.1228963	.4235943
LTRevenue	2.101682	.1265633	16.61	0.000	1.853622	2.349742
LTCash	-1.457929	.3468204	-4.20	0.000	-2.137684	-.7781733
TQ	0	(omitted)				
_cons	-4.542269	.1076402	-42.20	0.000	-4.75324	-4.331298
sigma_u	.93855376					
sigma_e	.99360547					
rho	.47153079	(fraction of variance due to u_i)				

```
Instrumented:   TQ
Instruments:    Amihud AmihudXHigh_PR LTFCF_2 LTLeverage LTRevenue LTCash TQ
                TQ_diff_1 TQ_diff_2

44 . estimates store ran10

45 . hausman fix10 .
```

	Coefficients (b) fix10	(B) ran10	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
TQ	.0090106	.0209878	-.0119772	.0030565
Amihud	.0076277	.0012007	.006427	.0015473
AmihudXHi~PR	-.0236809	-.0185831	-.0050978	.
LTFCF_2	-3.41597	-3.356013	-.0599568	.0180082
LTLeverage	.3629222	.150349	.2125732	.0342371
LTRevenue	2.280879	2.101682	.1791968	.0848249
LTCash	-1.274033	-1.457929	.1838956	.1042096

```
                b = consistent under Ho and Ha; obtained from xtivreg
     B = inconsistent under Ha, efficient under Ho; obtained from xtivreg

    Test:  Ho:  difference in coefficients not systematic
```

```
                  chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =       78.71
                Prob>chi2 =      0.0000
                (V_b-V_B is not positive definite)
```

```
46 . xtivreg LTITA_1 Turnover TurnoverXHigh_PR LTFCF_1 LTLeverage LTRevenue LTCash TQ
   >  (TQ = TQ_diff_1 TQ_diff_2), fe

Fixed-effects (within) IV regression            Number of obs     =      3,828
Group variable: FirmID                          Number of groups  =        319

R-sq:                                           Obs per group:
     within  = 0.1871                                         min =         12
     between = 0.1087                                         avg =       12.0
     overall = 0.1387                                         max =         12

                                                Wald chi2(7)      =   50896.17
corr(u_i, Xb)  = -0.1513                        Prob > chi2       =     0.0000
```

LTITA_1	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0200322	.0092582	2.16	0.030	.0018865	.038178
Turnover	10.05437	5.784127	1.74	0.082	-1.282314	21.39105
TurnoverXHig~PR	-.6430611	9.158077	-0.07	0.944	-18.59256	17.30644
LTFCF_1	-4.04646	.1718905	-23.54	0.000	-4.383359	-3.70956
LTLeverage	.2885978	.1264443	2.28	0.022	.0407715	.5364241
LTRevenue	2.255925	.1345181	16.77	0.000	1.992275	2.519576
LTCash	-.2651677	.3260606	-0.81	0.416	-.9042347	.3738993
TQ	0	(omitted)				
_cons	-4.805921	.0960113	-50.06	0.000	-4.9941	-4.617742
sigma_u	1.0197055					
sigma_e	.94593534					
rho	.53747702	(fraction of variance due to u_i)				

```
F  test that all u_i=0:     F(318,3502) =    12.68        Prob > F    = 0.0000

Instrumented:   TQ
Instruments:    Turnover TurnoverXHigh_PR LTFCF_1 LTLeverage LTRevenue LTCash TQ
                TQ_diff_1 TQ_diff_2
```

```
47 . estimates store fix11

48 . xtivreg LTITA_1 Turnover TurnoverXHigh_PR LTFCF_1 LTLeverage LTRevenue LTCash TQ
   >  (TQ = TQ_diff_1 TQ_diff_2), re

G2SLS random-effects IV regression              Number of obs     =      3,828
Group variable: FirmID                          Number of groups  =        319

R-sq:                                           Obs per group:
     within  = 0.1860                                         min =         12
     between = 0.1202                                         avg =       12.0
     overall = 0.1468                                         max =         12

                                                Wald chi2(7)      =     831.17
corr(u_i, X)       = 0 (assumed)                Prob > chi2       =     0.0000
```

LTITA_1	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0285608	.0088611	3.22	0.001	.0111935	.0459282
Turnover	9.398089	5.623002	1.67	0.095	-1.622792	20.41897
TurnoverXHig~PR	-.050124	9.123547	-0.01	0.996	-17.93195	17.8317
LTFCF_1	-3.974712	.1709196	-23.25	0.000	-4.309708	-3.639715
LTLeverage	.0975366	.122911	0.79	0.427	-.1433645	.3384377
LTRevenue	2.063597	.114546	18.02	0.000	1.839091	2.288103
LTCash	-.5398813	.3137055	-1.72	0.085	-1.154733	.0749702
TQ	0	(omitted)				
_cons	-4.631945	.0995067	-46.55	0.000	-4.826975	-4.436915
sigma_u	.89805041					
sigma_e	.94593534					
rho	.47404933	(fraction of variance due to u_i)				

Instrumented: TQ
Instruments: Turnover TurnoverXHigh_PR LTFCF_1 LTLeverage LTRevenue LTCash TQ
TQ_diff_1 TQ_diff_2

```
49 . estimates store ran11

50 . hausman fix11 .
```

	Coefficients (b) fix11	(B) ran11	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
TQ	.0200322	.0285608	-.0085286	.0026825
Turnover	10.05437	9.398089	.6562774	1.355718
TurnoverX~PR	-.6430611	-.050124	-.5929371	.7945222
LTFCF_1	-4.04646	-3.974712	-.0717478	.0182435
LTLeverage	.2885978	.0975366	.1910612	.0296825
LTRevenue	2.255925	2.063597	.1923284	.0705289
LTCash	-.2651677	-.5398813	.2747136	.0889065

b = consistent under Ho and Ha; obtained from xtivreg
B = inconsistent under Ha, efficient under Ho; obtained from xtivreg

Test: Ho: difference in coefficients not systematic

chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 70.17
Prob>chi2 = 0.0000

```
51 . xtivreg LTITA_2 Turnover TurnoverXHigh_PR LTFCF_2 LTLeverage LTRevenue LTCash TQ
>  (TQ = TQ_diff_1 TQ_diff_2), fe

Fixed-effects (within) IV regression            Number of obs     =      3,509
Group variable: FirmID                          Number of groups  =        319

R-sq:                                           Obs per group:
     within  = 0.1768                                         min =         11
     between = 0.1136                                         avg =       11.0
     overall = 0.1376                                         max =         11

                                                Wald chi2(7)      =   40722.71
corr(u_i, Xb)  = -0.1289                        Prob > chi2       =     0.0000
```

LTITA_2	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.008935	.0100614	0.89	0.375	-.010785	.0286549
Turnover	14.10942	6.443624	2.19	0.029	1.480152	26.73869
TurnoverXHig~PR	-2.909402	10.46513	-0.28	0.781	-23.42067	17.60187
LTFCF_2	-3.410438	.1653706	-20.62	0.000	-3.734558	-3.086317
LTLeverage	.3775291	.1424302	2.65	0.008	.098371	.6566872
LTRevenue	2.266633	.152057	14.91	0.000	1.968607	2.564659
LTCash	-1.225846	.362256	-3.38	0.001	-1.935855	-.5158377
TQ	0	(omitted)				
_cons	-4.739582	.1084741	-43.69	0.000	-4.952188	-4.526977
sigma_u	1.0812792					
sigma_e	.99291749					
rho	.54252327	(fraction of variance due to u_i)				

F test that all u_i=0:   F(318,3183) =   11.94   Prob > F   = 0.0000

Instrumented: TQ
Instruments: Turnover TurnoverXHigh_PR LTFCF_2 LTLeverage LTRevenue LTCash TQ
               TQ_diff_1 TQ_diff_2

52 . estimates store fix12

53 . xtivreg LTITA_2 Turnover TurnoverXHigh_PR LTFCF_2 LTLeverage LTRevenue LTCash TQ
> (TQ = TQ_diff_1 TQ_diff_2), re

G2SLS random-effects IV regression Number of obs   =   3,509
Group variable: FirmID   Number of groups =   319

R-sq: Obs per group:
     within = 0.1756   min =   11
     between = 0.1274   avg =   11.0
     overall = 0.1464   max =   11

                                    Wald chi2(7)   =   716.07
corr(u_i, X)   = 0 (assumed)   Prob > chi2   =   0.0000

LTITA_2	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0207865	.0095883	2.17	0.030	.0019938	.0395791
Turnover	12.18726	6.235567	1.95	0.051	-.0342238	24.40875
TurnoverXHig~PR	-2.271235	10.41548	-0.22	0.827	-22.6852	18.14273
LTFCF_2	-3.351964	.1642198	-20.41	0.000	-3.673829	-3.030099
LTLeverage	.1591467	.1382346	1.15	0.250	-.1117882	.4300816
LTRevenue	2.103516	.1267527	16.60	0.000	1.855085	2.351947
LTCash	-1.41813	.3468875	-4.09	0.000	-2.098017	-.7382428
TQ	0	(omitted)				
_cons	-4.579093	.1095445	-41.80	0.000	-4.793796	-4.364389
sigma_u	.95510086					
sigma_e	.99291749					
rho	.48059444	(fraction of variance due to u_i)				

Instrumented: TQ
Instruments: Turnover TurnoverXHigh_PR LTFCF_2 LTLeverage LTRevenue LTCash TQ
               TQ_diff_1 TQ_diff_2

```
54 . estimates store ran12

55 . hausman fix12 .
```

	Coefficients (b) fix12	(B) ran12	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
TQ	**.008935**	**.0207865**	**-.0118515**	**.0030491**
Turnover	**14.10942**	**12.18726**	**1.922161**	**1.624192**
TurnoverX~PR	**-2.909402**	**-2.271235**	**-.6381665**	**1.018186**
LTFCF_2	**-3.410438**	**-3.351964**	**-.0584741**	**.019475**
LTLeverage	**.3775291**	**.1591467**	**.2183824**	**.0343156**
LTRevenue	**2.266633**	**2.103516**	**.1631166**	**.0839946**
LTCash	**-1.225846**	**-1.41813**	**.1922835**	**.1043955**

b = consistent under Ho and Ha; obtained from xtivreg
B = inconsistent under Ha, efficient under Ho; obtained from xtivreg

Test: Ho: difference in coefficients not systematic

chi2(**7**) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= **64.77**
Prob>chi2 = **0.0000**

```
56 . xtivreg LTITA_1 Amihud AmihudXHigh_KZ LTFCF_1 LTLeverage LTRevenue LTCash TQ (TQ
>  = TQ_diff_1 TQ_diff_2), fe
```

Fixed-effects (within) IV regression — Number of obs = **3,828**
Group variable: **FirmID** — Number of groups = **319**

R-sq:
within = **0.1873**
between = **0.1059**
overall = **0.1368**

Obs per group:
min = **12**
avg = **12.0**
max = **12**

Wald chi2(**7**) = **50909.94**
corr(u_i, Xb) = **-0.1573** — Prob > chi2 = **0.0000**

LTITA_1	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	**.0201952**	**.009277**	**2.18**	**0.029**	**.0020126**	**.0383778**
Amihud	**.0226489**	**.0113087**	**2.00**	**0.045**	**.0004842**	**.0448136**
AmihudXHigh_KZ	**-.020195**	**.1329074**	**-0.15**	**0.879**	**-.2806887**	**.2402987**
LTFCF_1	**-4.037517**	**.1717863**	**-23.50**	**0.000**	**-4.374212**	**-3.700822**
LTLeverage	**.2550797**	**.1273438**	**2.00**	**0.045**	**.0054903**	**.504669**
LTRevenue	**2.268604**	**.1346189**	**16.85**	**0.000**	**2.004756**	**2.532452**
LTCash	**-.3060226**	**.3258053**	**-0.94**	**0.348**	**-.9445894**	**.3325441**
TQ	**0**	(omitted)				
_cons	**-4.776433**	**.0944689**	**-50.56**	**0.000**	**-4.961588**	**-4.591277**
sigma_u	**1.0228143**					
sigma_e	**.94581562**					
rho	**.53905306**	(fraction of variance due to u_i)				

F test that all u_i=0: F(**318,3502**) = **12.66** Prob > F = **0.0000**

Instrumented: TQ
Instruments: Amihud AmihudXHigh_KZ LTFCF_1 LTLeverage LTRevenue LTCash TQ
TQ_diff_1 TQ_diff_2

```
57 . estimates store fix13

58 . xtivreg LTITA_1 Amihud AmihudXHigh_KZ LTFCF_1 LTLeverage LTRevenue LTCash TQ (TQ
>  = TQ_diff_1 TQ_diff_2), re

G2SLS random-effects IV regression              Number of obs     =      3,828
Group variable: FirmID                          Number of groups  =        319

R-sq:                                           Obs per group:
     within  = 0.1860                                         min =         12
     between = 0.1183                                         avg =       12.0
     overall = 0.1456                                         max =         12

                                                Wald chi2(7)      =     828.24
corr(u_i, X)       = 0 (assumed)                Prob > chi2       =     0.0000
```

LTITA_1	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0288757	.0088797	3.25	0.001	.0114719	.0462796
Amihud	.0154709	.0112349	1.38	0.169	-.0065491	.0374909
AmihudXHigh_KZ	-.0181685	.1328972	-0.14	0.891	-.2786422	.2423052
LTFCF_1	-3.963893	.1711545	-23.16	0.000	-4.29935	-3.628437
LTLeverage	.0668261	.1239376	0.54	0.590	-.1760871	.3097393
LTRevenue	2.061803	.1141716	18.06	0.000	1.838031	2.285575
LTCash	-.5841049	.3136261	-1.86	0.063	-1.198801	.030591
TQ	0	(omitted)				
_cons	-4.595564	.0972562	-47.25	0.000	-4.786183	-4.404945
sigma_u	.87633535					
sigma_e	.94581562					
rho	.46192445	(fraction of variance due to u_i)				

```
Instrumented:   TQ
Instruments:    Amihud AmihudXHigh_KZ LTFCF_1 LTLeverage LTRevenue LTCash TQ
                TQ_diff_1 TQ_diff_2

59 . estimates store ran13

60 . hausman fix13 .
```

	Coefficients (b) fix13	(B) ran13	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
TQ	.0201952	.0288757	-.0086805	.0026859
Amihud	.0226489	.0154709	.007178	.0012902
AmihudXHig~Z	-.020195	-.0181685	-.0020266	.0016461
LTFCF_1	-4.037517	-3.963893	-.0736233	.0147197
LTLeverage	.2550797	.0668261	.1882535	.0292563
LTRevenue	2.268604	2.061803	.206801	.0713239
LTCash	-.3060226	-.5841049	.2780823	.0882483

```
                    b = consistent under Ho and Ha; obtained from xtivreg
         B = inconsistent under Ha, efficient under Ho; obtained from xtivreg

    Test:  Ho:  difference in coefficients not systematic
```

```
                  chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =       66.63
                Prob>chi2 =      0.0000
                (V_b-V_B is not positive definite)
```

```
61 . xtivreg LTITA_2 Amihud AmihudXHigh_KZ LTFCF_2 LTLeverage LTRevenue LTCash TQ (TQ
   >  = TQ_diff_1 TQ_diff_2), fe

Fixed-effects (within) IV regression            Number of obs     =      3,509
Group variable: FirmID                          Number of groups  =        319

R-sq:                                           Obs per group:
     within  = 0.1756                                         min =         11
     between = 0.1150                                         avg =       11.0
     overall = 0.1377                                         max =         11

                                                Wald chi2(7)      =   40661.67
corr(u_i, Xb)  = -0.1309                        Prob > chi2       =     0.0000
```

LTITA_2	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0090227	.0100906	0.89	0.371	-.0107546	.0288
Amihud	.0076399	.0119841	0.64	0.524	-.0158485	.0311282
AmihudXHigh_KZ	.0025856	.1411689	0.02	0.985	-.2741004	.2792717
LTFCF_2	-3.416508	.165705	-20.62	0.000	-3.741283	-3.091732
LTLeverage	.3627454	.1437986	2.52	0.012	.0809053	.6445856
LTRevenue	2.280291	.1523201	14.97	0.000	1.981749	2.578833
LTCash	-1.274196	.3621725	-3.52	0.000	-1.984041	-.5643513
TQ	0	(omitted)				
_cons	-4.70549	.1073171	-43.85	0.000	-4.915828	-4.495152
sigma_u	1.0807957					
sigma_e	.99360835					
rho	.54195596	(fraction of variance due to u_i)				

```
F  test that all u_i=0:     F(318,3183) =    11.85        Prob > F    = 0.0000

Instrumented:   TQ
Instruments:    Amihud AmihudXHigh_KZ LTFCF_2 LTLeverage LTRevenue LTCash TQ
                TQ_diff_1 TQ_diff_2
```

```
62 . estimates store fix14

63 . xtivreg LTITA_2 Amihud AmihudXHigh_KZ LTFCF_2 LTLeverage LTRevenue LTCash TQ (TQ
   >  = TQ_diff_1 TQ_diff_2), re

G2SLS random-effects IV regression              Number of obs     =      3,509
Group variable: FirmID                          Number of groups  =        319

R-sq:                                           Obs per group:
     within  = 0.1743                                         min =         11
     between = 0.1295                                         avg =       11.0
     overall = 0.1471                                         max =         11

                                                Wald chi2(7)      =     710.38
corr(u_i, X)       = 0 (assumed)                Prob > chi2       =     0.0000
```

LTITA_2	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0210615	.0096134	2.19	0.028	.0022195	.0399035
Amihud	.0011526	.0118848	0.10	0.923	-.0221411	.0244464
AmihudXHigh_KZ	.008787	.1408834	0.06	0.950	-.2673394	.2849133
LTFCF_2	-3.355449	.1647944	-20.36	0.000	-3.678441	-3.032458
LTLeverage	.1481433	.1396435	1.06	0.289	-.1255528	.4218395
LTRevenue	2.100255	.1264079	16.61	0.000	1.8525	2.34801
LTCash	-1.459378	.3468662	-4.21	0.000	-2.139224	-.7795331
TQ	0	(omitted)				
_cons	-4.54087	.1074825	-42.25	0.000	-4.751531	-4.330208
sigma_u	.93405221					
sigma_e	.99360835					
rho	.46913391	(fraction of variance due to u_i)				

Instrumented: TQ
Instruments: Amihud AmihudXHigh_KZ LTFCF_2 LTLeverage LTRevenue LTCash TQ
TQ_diff_1 TQ_diff_2

64 . estimates store ran14

65 . hausman fix14 .

	Coefficients (b) fix14	(B) ran14	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
TQ	.0090227	.0210615	-.0120388	.0030664
Amihud	.0076399	.0011526	.0064872	.0015397
AmihudXHig~Z	.0025856	.008787	-.0062013	.0089745
LTFCF_2	-3.416508	-3.355449	-.0610582	.0173478
LTLeverage	.3627454	.1481433	.2146021	.0343183
LTRevenue	2.280291	2.100255	.1800358	.0849851
LTCash	-1.274196	-1.459378	.185182	.1041765

b = consistent under Ho and Ha; obtained from xtivreg
B = inconsistent under Ha, efficient under Ho; obtained from xtivreg

Test: Ho: difference in coefficients not systematic

chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 43.10
Prob>chi2 = 0.0000
(V_b-V_B is not positive definite)

66 . xtivreg LTITA_1 Turnover TurnoverXHigh_KZ LTFCF_1 LTLeverage LTRevenue LTCash TQ
> (TQ = TQ_diff_1 TQ_diff_2), fe

Fixed-effects (within) IV regression Number of obs = 3,828
Group variable: FirmID Number of groups = 319

R-sq: Obs per group:
within = 0.1872 min = 12
between = 0.1086 avg = 12.0
overall = 0.1388 max = 12

Wald chi2(7) = 50908.60
corr(u_i, Xb) = -0.1506 Prob > chi2 = 0.0000

LTITA_1	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0201646	.0092579	2.18	0.029	.0020194	.0383097
Turnover	12.5818	6.325591	1.99	0.047	.1838646	24.97973
TurnoverXHigh~Z	-7.625636	8.499261	-0.90	0.370	-24.28388	9.03261
LTFCF_1	-4.044237	.1718808	-23.53	0.000	-4.381117	-3.707357
LTLeverage	.2806343	.1267326	2.21	0.027	.032243	.5290255
LTRevenue	2.254872	.1344947	16.77	0.000	1.991267	2.518476
LTCash	-.2704484	.3260451	-0.83	0.407	-.909485	.3685882
TQ	0	(omitted)				
_cons	-4.804418	.0959394	-50.08	0.000	-4.992456	-4.61638
sigma_u	1.0195978					
sigma_e	.9458273					
rho	.53748133	(fraction of variance due to u_i)				

F test that all u_i=0: F(318,3502) = 12.69 Prob > F = 0.0000

Instrumented: TQ
Instruments: Turnover TurnoverXHigh_KZ LTFCF_1 LTLeverage LTRevenue LTCash TQ
TQ_diff_1 TQ_diff_2

67 . estimates store fix15

68 . xtivreg LTITA_1 Turnover TurnoverXHigh_KZ LTFCF_1 LTLeverage LTRevenue LTCash TQ
> (TQ = TQ_diff_1 TQ_diff_2), re

G2SLS random-effects IV regression Number of obs = 3,828
Group variable: FirmID Number of groups = 319

R-sq: Obs per group:
within = 0.1862 min = 12
between = 0.1201 avg = 12.0
overall = 0.1469 max = 12

Wald chi2(7) = 831.95
corr(u_i, X) = 0 (assumed) Prob > chi2 = 0.0000

LTITA_1	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	.0287204	.0088609	3.24	0.001	.0113534	.0460874
Turnover	11.98962	6.148178	1.95	0.051	-.0605922	24.03982
TurnoverXHigh~Z	-7.586504	8.394555	-0.90	0.366	-24.03953	8.866522
LTFCF_1	-3.972834	.1709285	-23.24	0.000	-4.307848	-3.637821
LTLeverage	.0897446	.1231037	0.73	0.466	-.1515342	.3310234
LTRevenue	2.062042	.1144642	18.01	0.000	1.837697	2.286388
LTCash	-.5474066	.3137283	-1.74	0.081	-1.162303	.0674896
TQ	0	(omitted)				
_cons	-4.629962	.0993444	-46.61	0.000	-4.824674	-4.435251
sigma_u	.89505666					
sigma_e	.9458273					
rho	.47244147	(fraction of variance due to u_i)				

Instrumented: TQ
Instruments: Turnover TurnoverXHigh_KZ LTFCF_1 LTLeverage LTRevenue LTCash TQ
TQ_diff_1 TQ_diff_2

```
69 . estimates store ran15

70 . hausman fix15 .
```

	Coefficients (b) fix15	(B) ran15	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
TQ	**.0201646**	**.0287204**	**-.0085558**	**.0026821**
Turnover	**12.5818**	**11.98962**	**.5921798**	**1.487618**
TurnoverXH~Z	**-7.625636**	**-7.586504**	**-.0391315**	**1.329992**
LTFCF_1	**-4.044237**	**-3.972834**	**-.0714027**	**.0180685**
LTLeverage	**.2806343**	**.0897446**	**.1908897**	**.0301103**
LTRevenue	**2.254872**	**2.062042**	**.1928295**	**.0706171**
LTCash	**-.2704484**	**-.5474066**	**.2769582**	**.0887689**

b = consistent under Ho and Ha; obtained from xtivreg
B = inconsistent under Ha, efficient under Ho; obtained from xtivreg

Test: Ho: difference in coefficients not systematic

chi2(**7**) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= **79.46**
Prob>chi2 = **0.0000**

```
71 . xtivreg LTITA_2 Turnover TurnoverXHigh_KZ LTFCF_2 LTLeverage LTRevenue LTCash TQ
>  (TQ = TQ_diff_1 TQ_diff_2), fe
```

Fixed-effects (within) IV regression — Number of obs = **3,509**
Group variable: **FirmID** — Number of groups = **319**

R-sq:
within = **0.1807**
between = **0.1136**
overall = **0.1394**

Obs per group:
min = **11**
avg = **11.0**
max = **11**

Wald chi2(**7**) = **40931.09**
corr(u_i, Xb) = **-0.1263** — Prob > chi2 = **0.0000**

LTITA_2	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
TQ	**.0094439**	**.0100381**	**0.94**	**0.347**	**-.0102305**	**.0291183**
Turnover	**26.82646**	**7.116879**	**3.77**	**0.000**	**12.87763**	**40.77528**
TurnoverXHigh~Z	**-36.51152**	**9.369772**	**-3.90**	**0.000**	**-54.87594**	**-18.14711**
LTFCF_2	**-3.381732**	**.1651245**	**-20.48**	**0.000**	**-3.70537**	**-3.058094**
LTLeverage	**.3376117**	**.1424578**	**2.37**	**0.018**	**.0583996**	**.6168239**
LTRevenue	**2.261663**	**.1517027**	**14.91**	**0.000**	**1.964332**	**2.558995**
LTCash	**-1.247351**	**.361435**	**-3.45**	**0.001**	**-1.95575**	**-.5389511**
TQ	**0**	(omitted)				
_cons	**-4.733392**	**.108181**	**-43.75**	**0.000**	**-4.945423**	**-4.521361**
sigma_u	**1.0808811**					
sigma_e	**.99056959**					
rho	**.54351546**	(fraction of variance due to u_i)				

F test that all u_i=0: F(**318,3183**) = **12.02** — Prob > F = **0.0000**

Instrumented: TQ
Instruments: Turnover TurnoverXHigh_KZ LTFCF_2 LTLeverage LTRevenue LTCash TQ
TQ_diff_1 TQ_diff_2

```
72 . estimates store fix16

73 . xtivreg LTITA_2 Turnover TurnoverXHigh_KZ LTFCF_2 LTLeverage LTRevenue LTCash TQ
   >  (TQ = TQ_diff_1 TQ_diff_2), re

   G2SLS random-effects IV regression              Number of obs     =      3,509
   Group variable: FirmID                          Number of groups  =        319

   R-sq:                                           Obs per group:
        within  = 0.1795                                         min =         11
        between = 0.1269                                         avg =       11.0
        overall = 0.1480                                         max =         11

                                                   Wald chi2(7)      =     734.14
   corr(u_i, X)       = 0 (assumed)                Prob > chi2       =     0.0000

------------------------------------------------------------------------------
      LTITA_2 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
--------------+---------------------------------------------------------------
           TQ |   .0211986   .0095684     2.22   0.027     .0024449    .0399522
     Turnover |   24.65098   6.887898     3.58   0.000     11.15095    38.15102
TurnoverXHigh~Z |  -35.82197    9.24233    -3.88   0.000     -53.9366   -17.70733
      LTFCF_2 |  -3.327835   .1639708   -20.30   0.000    -3.649211   -3.006458
   LTLeverage |   .1270409   .1381745     0.92   0.358    -.1437762     .397858
    LTRevenue |   2.099862   .1265036    16.60   0.000     1.851919    2.347804
       LTCash |   -1.44194   .3462011    -4.17   0.000    -2.120481   -.7633979
           TQ |           0  (omitted)
        _cons |  -4.575231   .1092943   -41.86   0.000    -4.789444   -4.361018
--------------+---------------------------------------------------------------
      sigma_u |  .95353036
      sigma_e |  .99056959
          rho |  .48095479   (fraction of variance due to u_i)
------------------------------------------------------------------------------
   Instrumented:   TQ
   Instruments:    Turnover TurnoverXHigh_KZ LTFCF_2 LTLeverage LTRevenue LTCash TQ
                   TQ_diff_1 TQ_diff_2
------------------------------------------------------------------------------

74 . estimates store ran16

75 . hausman fix16 .

                 ---- Coefficients ----
                |      (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
                |    fix16        ran16       Difference          S.E.
----------------+------------------------------------------------------------
             TQ |   .0094439     .0211986       -.0117547        .0030349
       Turnover |   26.82646     24.65098        2.175471        1.790761
TurnoverXH~Z |  -36.51152    -35.82197       -.6895527        1.540113
       LTFCF_2 |  -3.381732    -3.327835       -.0538976        .0194852
     LTLeverage |   .3376117     .1270409        .2105708        .0346703
      LTRevenue |   2.261663     2.099862        .1618016         .083729
         LTCash |  -1.247351     -1.44194         .194589        .1038268
------------------------------------------------------------------------------
                        b = consistent under Ho and Ha; obtained from xtivreg
             B = inconsistent under Ha, efficient under Ho; obtained from xtivreg

    Test:  Ho:  difference in coefficients not systematic

                  chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =       70.86
                Prob>chi2 =      0.0000
```

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