```
1 .  xtfmb exr_lt marketrf smb hml mom liq, verbose
```

Fama-MacBeth (1973) Two-Step procedure

Number of obs	168
Num. time periods	14
F(5, 13)	19.49
Prob > F	0.0000
avg. R-squared	0.8673

exr_lt	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	.9130808	.1037474	8.80	0.000	.6889481	1.137214
smb	-.0008257	.0567396	-0.01	0.989	-.1234042	.1217528
hml	.0570828	.0735118	0.78	0.451	-.1017297	.2158954
mom	.1041485	.0467823	2.23	0.044	.0030814	.2052156
liq	.0009857	.0234576	0.04	0.967	-.0496914	.0516628
_cons	.0022633	.0040604	0.56	0.587	-.0065086	.0110352

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	mom	liq	constant	R2
2006	-.3102249	.2845797	-.2944241	-.0643125	.0546639	-.0166784	.2064246
2007	.8833112	.1048978	.2689345	.1701565	.1039493	.0353187	.9601595
2008	.98994	-.1930505	.4267488	.3074991	.0674791	.0190946	.987398
2009	.7406856	.039178	.2589948	.2508662	.058885	.0101933	.9477841
2010	1.048634	-.2471697	-.0310951	-.0082769	-.154343	.0091351	.9731773
2011	1.212068	-.0256305	.0721496	-.2279106	-.0852985	.0024888	.9671609
2012	.83144	-.1933201	.0524552	.0022453	-.0474518	.0056545	.9366321
2013	1.20572	.3785428	.341042	.2654578	-.0470061	-.0032896	.9704422
2014	.9032329	.1407736	.2544437	.2032592	-.032321	.0058182	.8658435
2015	.8739384	.3083906	-.2910491	-.0895145	.0500853	.0000548	.902192
2016	1.237186	-.1712428	.0773378	-.0135177	-.0890395	.0033486	.9472528
2017	.8733005	-.0925997	.1546026	.0553087	-.0296169	.0014799	.5823839
2018	1.082701	-.1870507	.0674316	.2886918	-.01032	-.0259774	.9497645
2019	1.211199	-.157858	-.5584125	.3181263	.1741338	-.014955	.9451014
Mean	.9130808	-.0008257	.0570828	.1041485	.0009857	.0022633	.8672655
N	14	14	14	14	14	14	14

```
2 .  xtfmb exr_vw_lt marketrf smb hml mom liq, verbose
```

Fama-MacBeth (1973) Two-Step procedure

Number of obs	168
Num. time periods	14
F(5, 13)	47.47
Prob > F	0.0000
avg. R-squared	0.7930

exr_vw_lt	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	1.062257	.0946002	11.23	0.000	.8578857	1.266628
smb	-.2931194	.0873774	-3.35	0.005	-.4818869	-.1043519
hml	-.1118912	.229516	-0.49	0.634	-.6077303	.383948
mom	-.1242872	.1754581	-0.71	0.491	-.5033414	.2547669
liq	.0747038	.0484946	1.54	0.147	-.0300624	.17947
_cons	.0090874	.0061291	1.48	0.162	-.0041538	.0223285

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	mom	liq	constant	R2
2006	1.06043	-.4606698	-.4816304	-.512375	.0053316	.0320528	.4770119
2007	.4874199	.0386022	.071378	-.0171495	-.0388357	.0171321	.4192244
2008	1.745917	-1.041036	.3032116	-1.908337	.217238	.0745229	.9491797
2009	1.338166	.1451724	1.329081	.2762668	.3136236	-.0018645	.8251625
2010	.7997191	.0040118	-.1912514	-.0948813	-.0467725	.0152059	.9599898
2011	1.494296	-.0451358	-.0891635	-.4078728	-.0352463	-.0027266	.9204407
2012	1.325449	-.4231136	-.1969118	-.458824	.2291046	.0105939	.6888437
2013	.6943452	-.3112262	-.284338	.250989	-.0357639	.0018796	.8540749
2014	1.339698	-.3262851	.6118673	.4588137	-.0997253	-.0023134	.9519383
2015	.8580409	.0461546	-.1112311	-.0654049	.1142458	-.0031837	.9356702
2016	.9272426	-.1942242	-.0404978	-.0285233	-.1316164	.0037446	.7282723
2017	1.121546	-.3138175	.103321	-.0745333	-.1012892	-.0037498	.6345834
2018	1.005598	-.6577322	.0739795	-.217052	.1928748	-.0246155	.9695347
2019	.6737306	-.5643727	-2.664291	1.058862	.4626841	.0105447	.7876356
Mean	1.062257	-.2931194	-.1118912	-.1242872	.0747038	.0090874	.7929687
N	14	14	14	14	14	14	14

Fama-MacBeth (1973) Two-Step procedure

Number of obs	168
Num. time periods	14
F(5, 13)	28.14
Prob > F	0.0000
avg. R-squared	0.8679

exr_ht	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	.959353	.0881775	10.88	0.000	.7688572	1.149849
smb	-.0714355	.0407082	-1.75	0.103	-.1593803	.0165093
hml	.0883559	.0842436	1.05	0.313	-.0936412	.2703531
mom	-.0185634	.0565906	-0.33	0.748	-.14082	.1036933
liq	.0112638	.0196117	0.57	0.576	-.0311047	.0536324
_cons	-.0001352	.0044754	-0.03	0.976	-.0098036	.0095332

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	mom	liq	constant	R2
2006	-.0208988	-.1622135	-.3074931	-.1536632	-.0387357	-.0106013	.1350617
2007	.734407	.0505869	.4003499	.208789	.0266282	.0233995	.9003302
2008	1.151952	-.0661497	.3420909	-.0860419	.0798018	.0293751	.9862235
2009	1.148065	.2051293	.8231742	.3260442	.1258304	.0080333	.8839478
2010	.9741387	-.0919364	-.1535623	-.0990712	-.1213734	.0077792	.9712396
2011	.9169027	-.1657707	-.0645843	-.1618403	.0065186	.0027667	.9732051
2012	.8960835	-.350807	-.0828943	-.5520673	.1005102	.0058247	.9281518
2013	.8739122	.1159879	-.077863	.1827241	-.0216744	.0023663	.9197601
2014	1.237662	-.1069692	.1393496	.1041295	.0068532	-.0042939	.9325569
2015	.886774	.0326022	-.1576519	-.0041207	.0597141	-.0048625	.9817317
2016	1.052025	-.2326054	-.0693972	-.0232476	-.0381744	.0051781	.8495318
2017	1.339235	-.1907744	.0461827	-.1171129	.0480231	-.0061792	.7487758
2018	.9976295	-.1224445	-.100234	.0777427	.0384961	-.0292483	.9645363
2019	1.243055	.0852677	.4995161	.0378485	-.1147242	-.0314308	.9750064
Mean	.959353	-.0714355	.0883559	-.0185634	.0112638	-.0001352	.8678613
N	14	14	14	14	14	14	14

1 . xtfmb exr_vw_ht marketrf smb hml mom liq, verbose

Fama-MacBeth (1973) Two-Step procedure

Number of obs	168
Num. time periods	14
F(5, 13)	32.89
Prob > F	0.0000
avg. R-squared	0.8252

exr_vw_ht	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	.8131787	.077394	10.51	0.000	.6459792	.9803783
smb	-.064	.0586666	-1.09	0.295	-.1907415	.0627415
hml	-.0525726	.0694755	-0.76	0.463	-.2026653	.0975201
mom	-.0564246	.0662668	-0.85	0.410	-.1995852	.0867361
liq	.0534781	.0276802	1.93	0.075	-.0063213	.1132775
_cons	.0018026	.0049382	0.37	0.721	-.0088657	.0124709

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	mom	liq	constant	R2
2006	-.0513855	-.2241535	-.3980528	-.2079703	.0611484	-.0126862	.2518774
2007	.8209314	.3276518	.1645513	.1049717	-.0330024	.0275716	.8670715
2008	.9890518	.184786	.182682	-.2064514	.155456	.0366699	.9459232
2009	.7035421	.0233272	.2960958	.0040638	.1304191	.0141645	.8959517
2010	.7710398	.0897362	-.2708485	-.1117572	-.0261102	.0085978	.9734796
2011	.7032772	-.0504183	.1680654	.2348536	.0630984	.0123146	.949959
2012	.7636084	-.0391408	-.2512937	-.5957602	.2884988	.0015419	.7122356
2013	.8994822	-.3341442	-.1521946	.1234947	-.1181436	-.0038872	.775722
2014	1.034169	-.0731767	-.1121829	-.2122187	.0450763	-.0069597	.9177116
2015	1.087976	-.0638637	.0747215	.0896252	.0743337	.0050133	.9478326
2016	.8014867	.0520653	.0416923	.0238445	-.0643427	.0036323	.732224
2017	1.201572	-.1425422	-.061406	-.1607695	-.0141067	-.0027921	.7922271
2018	.8324131	-.5745338	-.6037142	-.270997	.1275818	-.0283133	.8507521
2019	.8273379	-.0715935	.1858679	.3951269	.0587866	-.0296309	.94003
Mean	.8131787	-.064	-.0525726	-.0564246	.0534781	.0018026	.8252141
N	14	14	14	14	14	14	14

Fama-MacBeth (1973) Two-Step procedure

Number of obs	168
Num. time periods	14
F(3, 13)	226.21
Prob > F	0.0000
avg. R-squared	0.8941

exr_lim	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	.9478866	.0399093	23.75	0.000	.8616678	1.034105
smb	-.0227001	.0498856	-0.46	0.657	-.1304714	.0850712
hml	.024001	.0375105	0.64	0.533	-.0570356	.1050376
_cons	.0037662	.0013984	2.69	0.018	.0007452	.0067872

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	constant	R2
2006	1.150017	.3163762	.0390521	.0094648	.8394861
2007	.699835	.0285836	.1106568	-.0063358	.8812973
2008	1.014795	-.1979778	.1068987	.0130593	.9658094
2009	1.011989	.1483039	.2663561	.0081549	.8644044
2010	.9254629	-.0350199	.0646074	.0084744	.9390517
2011	.8929485	-.1501084	-.1904348	.0003497	.9663296
2012	.9719671	-.384057	.2434707	.0027933	.8948143
2013	.9531709	.0452134	.0784648	.0058762	.8826976
2014	1.054434	.1204183	-.001068	.001311	.8794453
2015	.8504743	.0863664	-.1054106	-.001868	.9584717
2016	1.016432	-.1669131	.0114399	.004696	.8904267
2017	.6002614	-.2313572	.0247334	.0067499	.6090715
2018	1.038947	-.0386632	-.1825155	-.0005492	.9813444
2019	1.089677	.1410337	-.1302374	.0005506	.9643562
Mean	.9478866	-.0227001	.024001	.0037662	.8940719
N	14	14	14	14	14

```
1 .  xtfmb exr_vw_lim marketrf smb hml rmw cma mom liq, verbose

Fama-MacBeth (1973) Two-Step procedure           Number of obs     =       168
                                                 Num. time periods =        14
                                                 F(  7,    13)     =     84.02
                                                 Prob > F          =    0.0000
                                                 avg. R-squared    =    0.9234
------------------------------------------------------------------------------
             |                Fama-MacBeth
  exr_vw_lim |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    marketrf |    1.020395   .0545119    18.72   0.000      .902629    1.138161
         smb |    .0410962   .1082633     0.38   0.710    -.1927924    .2749848
         hml |    .0811784   .1287746     0.63   0.539    -.1970223    .3593791
         rmw |    .0217474   .1363591     0.16   0.876    -.2728385    .3163333
         cma |   -.0346664   .1613839    -0.21   0.833    -.3833151    .3139823
         mom |    .0514691   .1170708     0.44   0.667     -.201447    .3043852
         liq |    .0194845   .0379546     0.51   0.616    -.0625115    .1014805
       _cons |    .0065566   .0027865     2.35   0.035     .0005367    .0125765
------------------------------------------------------------------------------

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

+-------------------------------------------------------------------------------------------------------------------+
| year_1 | marketrf |      smb |      hml |      rmw |      cma |      mom |      liq | constant |       R2 |
|--------+----------+----------+----------+----------+----------+----------+----------+----------+----------|
|   2006 | 1.451718 | .2829987 | .6214047 | -.7629386 | -.8486489 | .2682884 | -.1067794 | .0252039 | .8410755 |
|   2007 | .8615029 | .3321801 | -.7303385 | .6240906 | .4354382 | -.3378258 | -.1078404 | -.0022977 | .9678695 |
|   2008 | 1.131373 | -.1712685 | .9215448 | .1365142 | -.6990823 | -.9570009 | .1076159 | .0271131 | .9298246 |
|   2009 | .9337105 | .4760138 | .108865 | .2370007 | .2862829 | .2284712 | .1404324 | .0041197 | .9671179 |
|   2010 | 1.096561 | .1835688 | -.0233192 | -.2921384 | .2122777 | -.1255525 | -.200021 | .0011976 | .9958143 |
|   2011 | .9722884 | .148282 | .1038334 | .3334738 | .2036701 | .4918231 | -.1161786 | .0022184 | .9724403 |
|   2012 | 1.280755 | -1.076134 | .7126622 | -.3281255 | -.9147618 | .615062 | .2612134 | .0008183 | .8710189 |
|   2013 | .8797357 | -.0031646 | -.057174 | -.8089175 | -.3606577 | .0578007 | .0760805 | .0084403 | .9507725 |
|   2014 | 1.291182 | .3151025 | -.1635877 | .6507406 | .995319 | -.2900771 | .1386438 | -.0104131 | .9725752 |
|   2015 | 1.048011 | -.0869465 | -.1869655 | -.6065084 | .6700076 | .1399237 | -.0118404 | -.0033324 | .964238 |
|   2016 | .8056371 | .2033077 | .1424384 | .2444359 | -.2423604 | .157143 | -.1935572 | .0114376 | .8452243 |
|   2017 | .8674978 | -.2080207 | -.0723051 | -.0781104 | .2487783 | -.0163959 | .0729328 | .0046684 | .6756966 |
|   2018 | .8366426 | .4699697 | .4675392 | .2869064 | -.7610008 | -.2504446 | .0836733 | .0084633 | .9777648 |
|   2019 | .8289124 | -.2905418 | -.7080998 | .6680409 | .289409 | .7393526 | .1284079 | .0141554 | .9963809 |
|--------+----------+----------+----------+----------+----------+----------+----------+----------+----------|
|   Mean | 1.020395 | .0410962 | .0811784 | .0217474 | -.0346664 | .0514691 | .0194845 | .0065566 | .9234152 |
|      N |       14 |       14 |       14 |       14 |       14 |       14 |       14 |       14 |       14 |
+-------------------------------------------------------------------------------------------------------------------+

2 . xtfmb exr_vw_lim marketrf smb hml mom liq, verbose

Fama-MacBeth (1973) Two-Step procedure           Number of obs     =       168
                                                 Num. time periods =        14
                                                 F(  5,    13)     =    119.21
                                                 Prob > F          =    0.0000
                                                 avg. R-squared    =    0.8979
------------------------------------------------------------------------------
             |                Fama-MacBeth
  exr_vw_lim |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    marketrf |    .9966489   .0438366    22.74   0.000     .9019456    1.091352
         smb |   -.0052955    .089499    -0.06   0.954    -.1986463    .1880553
         hml |    .0208788   .0957678     0.22   0.831     -.186015    .2277725
         mom |   -.0115429   .1004153    -0.11   0.910     -.228477    .2053912
         liq |    .0170785    .031402     0.54   0.596    -.0507613    .0849183
       _cons |    .0072821   .0024127     3.02   0.010     .0020698    .0124945
------------------------------------------------------------------------------

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

+-------------------------------------------------------------------------------------------------+
| year_1 | marketrf |      smb |      hml |      mom |      liq | constant |       R2 |
|--------+----------+----------+----------+----------+----------+----------+----------|
|   2006 | 1.337238 | .2864101 | -.063162 | -.0045325 | -.0183813 | .0157431 | .7362627 |
|   2007 | .8781969 | .090702 | -.7130247 | -.5668522 | -.094511 | -.0001645 | .9476387 |
|   2008 | 1.089721 | -.3306129 | .8108602 | -.650237 | .1023932 | .0295832 | .9246402 |
|   2009 | .8710779 | .4372798 | .1042675 | .2337297 | .1096369 | .0075876 | .9548029 |
|   2010 | 1.095684 | .2557657 | .0335304 | -.1299402 | -.1699699 | .0006974 | .9933993 |
|   2011 | 1.059197 | -.0060674 | .0775427 | .0634942 | -.0550708 | .0018153 | .9698979 |
|   2012 | 1.21114 | -.5937701 | .2959799 | .3911735 | .14813 | .0019017 | .846903 |
|   2013 | .7782857 | -.11787 | .047238 | -.3036346 | .0812249 | .0098929 | .9200373 |
|   2014 | .9755891 | -.0106996 | -.0612616 | -.1328037 | .1522245 | -.003438 | .9279593 |
|   2015 | 1.045 | -.0204806 | .0733761 | .1052009 | -.0871746 | -.0016367 | .9366407 |
|   2016 | .7886066 | .1635018 | .0355605 | .1336388 | -.1892953 | .0107602 | .8178238 |
|   2017 | 1.081217 | -.2125005 | -.0267346 | -.0231344 | .0837535 | .0024761 | .659792 |
|   2018 | .9105129 | .522664 | .2481264 | -.1205944 | .0550407 | .0100269 | .9417213 |
|   2019 | .8316189 | -.5384595 | -.569996 | .8428914 | .1210979 | .0167049 | .9932801 |
|--------+----------+----------+----------+----------+----------+----------+----------|
|   Mean | .9966489 | -.0052955 | .0208788 | -.0115429 | .0170785 | .0072821 | .8979142 |
|      N |       14 |       14 |       14 |       14 |       14 |       14 |       14 |
+-------------------------------------------------------------------------------------------------+

3 . xtfmb exr_vw_lim marketrf smb hml rmw cma , verbose

Fama-MacBeth (1973) Two-Step procedure           Number of obs     =       168
                                                 Num. time periods =        14
                                                 F(  5,    13)     =     96.65
                                                 Prob > F          =    0.0000
                                                 avg. R-squared    =    0.8850
------------------------------------------------------------------------------
             |                Fama-MacBeth
  exr_vw_lim |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    marketrf |    .9606006   .0480202    20.00   0.000     .8568593    1.064342
         smb |    .0852009   .0585119     1.46   0.169    -.0412064    .2116082
         hml |   -.0148262   .0896472    -0.17   0.871    -.2084972    .1788448
         rmw |    .1109616   .1490796     0.74   0.470    -.2111053    .4330286
         cma |    .0561867   .1145293     0.49   0.632    -.1912389    .3036123
       _cons |    .0051217   .0015718     3.26   0.006     .001726    .0085173
------------------------------------------------------------------------------

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

+-------------------------------------------------------------------------------------------+
| year_1 | marketrf |      smb |      hml |      rmw |      cma | constant |       R2 |
|--------+----------+----------+----------+----------+----------+----------+----------|
|   2006 | 1.284448 | .0659392 | .2478449 | -.6161132 | -.5677728 | .0162269 | .8096962 |
|   2007 | .9174754 | .3408789 | -.4513414 | .5574269 | .515753 | .004323 | .9201354 |
|   2008 | 1.030682 | .0390586 | .5281609 | .1462581 | -.215326 | .0103058 | .9086786 |
|   2009 | .861359 | .2238477 | -.1412725 | .0824151 | .2838393 | .0034093 | .9383613 |
|   2010 | 1.071333 | .1795693 | .1239524 | -.1133805 | .0396235 | .001781 | .9795254 |
|   2011 | 1.067909 | .0075639 | .0322749 | .0577238 | -.1085973 | .0024341 | .96874 |
|   2012 | 1.016487 | -.101486 | .3496785 | .8355742 | -.2710525 | .0069939 | .840547 |
|   2013 | .8968152 | -.1550436 | -.0784842 | -.7732236 | -.2186682 | .0065067 | .9396943 |
```

2014	1.196849	.1156175	-.2342416	.1367312	.6581597	-.0073194	.91161
2015	1.062104	-.039065	-.1536157	-.4304901	.7676098	-.0031338	.9610929
2016	.7933376	.0454143	-.1051467	.16744	.112357	.0045277	.6363713
2017	.5937271	-.2723183	-.1038589	-.2869526	.422682	.0114592	.6578026
2018	.8687387	.6152374	.4513841	.5276136	-.6059525	.0064514	.9609712
2019	.7871445	.1275987	-.6729018	1.26244	-.0260408	.0077374	.956763
Mean	.9606006	.0852009	-.0148262	.1109616	.0561867	.0051217	.8849992
N	14	14	14	14	14	14	14

```
4 . xtfmb exr_vw_lim marketrf smb hml¨, verbose
variable hml¨ not found
r(111);

5 . xtfmb exr_vw_lim marketrf smb hmlq, verbose
variable hmlq not found
r(111);

6 . xtfmb exr_vw_lim marketrf smb hml, verbose

Fama-MacBeth (1973) Two-Step procedure           Number of obs     =       168
                                                 Num. time periods =        14
                                                 F(  3,    13)     =    230.25
                                                 Prob > F          =    0.0000
                                                 avg. R-squared    =    0.8497
```

exr_vw_lim	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	.9944541	.0386688	25.72	0.000	.9109152	1.077993
smb	.0761541	.0684538	1.11	0.286	-.0717314	.2240395
hml	.0697353	.0459262	1.52	0.153	-.0294822	.1689528
_cons	.0055693	.0013109	4.25	0.001	.0027373	.0084013

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_l	marketrf	smb	hml	constant	R2
2006	1.333557	.2974436	-.0631471	.0159926	.7355824
2007	.9249997	.1520128	-.1382385	.0066574	.861857
2008	1.033279	-.0802977	.5023261	.0127916	.9071918
2009	.8267536	.2249607	-.095715	.0058973	.9313055
2010	1.069282	.2095469	.1372679	.0016834	.9791186
2011	1.066605	-.0013094	.0175008	.0026026	.9685767
2012	1.166013	-.4346355	.0233106	.0050838	.8135813
2013	.8471639	.3538836	.1813919	.0065277	.787598
2014	1.019711	.0194015	.0586547	-.0032218	.88232
2015	1.044239	.0234262	.1288252	.000346	.9297105
2016	.7846211	.0419188	-.1138842	.0043799	.6260236
2017	.9641482	-.2252273	.0079496	.0045655	.6214438
2018	.9518574	.5862484	.2817254	.0098207	.9347246
2019	.8901284	-.1012157	.0483272	.0048436	.917143
Mean	.9944541	.0761541	.0697353	.0055693	.8497269
N	14	14	14	14	14

1 . xtfmb exr_vw_him marketrf smb hml rmw cma mom liq, verbose

Fama-MacBeth (1973) Two-Step procedure — Number of obs = 168; Num. time periods = 14; F(7, 13) = 35.06; Prob > F = 0.0000; avg. R-squared = 0.9465

exr_vw_him	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	1.018274	.0716761	14.21	0.000	.8634267	1.17312
smb	-.0634538	.0866598	-0.73	0.477	-.250671	.1237633
hml	-.0406225	.0834761	-0.49	0.635	-.2209616	.1397167
rmw	-.2093263	.1601499	-1.31	0.214	-.555309	.1366565
cma	.0461556	.1499319	0.31	0.763	-.2777526	.3700638
mom	.0712575	.0622408	1.14	0.273	-.0632055	.2057205
liq	-.0496545	.0400554	-1.24	0.237	-.1361891	.03688
_cons	.0062922	.0022983	2.74	0.017	.001327	.0112575

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	rmw	cma	mom	liq	constant	R2
2006	1.611866	.1156298	.0885106	.0855247	-.0814691	.0740214	-.2671216	.0267507	.8220673
2007	.8764715	.2940763	.0491539	.1915423	-.408794	-.1169872	-.1292302	.0017947	.9460744
2008	.9722921	.1769854	-.1243855	-.5822721	-.5322825	-.1916376	-.0447517	.0032408	.9813423
2009	.7791018	.2148081	-.2127057	.3302118	.4094051	.1550773	-.0626802	.0056008	.9943302
2010	1.105662	-.0975522	.1888951	.0298884	-.5878355	-.085222	-.2042392	-.000306	.9786293
2011	.6995088	.1134281	.0814182	-.0624622	.8125879	.2830156	-.1003512	.0101772	.9875979
2012	1.220536	-.6429805	-.7810884	-1.38241	-.1629098	-.2574683	.3475887	.000819	.933181
2013	1.080591	-.270748	-.452085	-.6604566	.8802245	-.0564708	-.0531648	-.0053769	.9573719
2014	.9816149	-.360258	.1025503	-.2828858	-.9040599	.1840409	-.0579639	.0104422	.946237
2015	.9614974	.0895231	-.2474181	.0106807	.2588316	.1271235	-.0418521	-.0045449	.9784068
2016	.8446145	-.2575286	.093249	-.1056696	-.0111671	.0003526	-.0771697	.0071754	.8803756
2017	.5882251	-.5599696	.0249754	-.2677422	-.0025064	-.0977054	-.1384761	.0156023	.8715642
2018	1.321141	-.1478425	.5224574	-1.177152	.0828917	.4824495	-.0273691	.0137154	.9793345
2019	1.212708	.444075	.0977586	.9426351	.8932617	.4970158	.1616174	.0030006	.9950787
Mean	1.018274	-.0634538	-.0406225	-.2093263	.0461556	.0712575	-.0496545	.0062922	.9465422
N	14	14	14	14	14	14	14	14	14

2 . xtfmb exr_vw_him marketrf smb hml mom liq, verbose

Fama-MacBeth (1973) Two-Step procedure — Number of obs = 168; Num. time periods = 14; F(5, 13) = 53.10; Prob > F = 0.0000; avg. R-squared = 0.9309

exr_vw_him	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	1.005808	.0661992	15.19	0.000	.8627934	1.148823
smb	.0293506	.057963	0.51	0.621	-.0958709	.1545721
hml	-.0334199	.0624238	-0.54	0.601	-.1682783	.1014385
mom	.0649999	.0611567	1.06	0.307	-.0671212	.197121
liq	-.0688849	.0274142	-2.51	0.026	-.1281096	-.0096603
_cons	.0063734	.0019468	3.27	0.006	.0021674	.0105793

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	mom	liq	constant	R2
2006	1.62027	.0881911	.0606073	.0515739	-.2618341	.0271758	.8204066
2007	.9532911	.2648348	-.1302753	-.0145205	-.1258854	.0022096	.9358181
2008	.9173563	.281613	-.1621684	.1259935	-.0340384	.0024114	.9673072
2009	.6910383	.1610959	-.2169475	.1630232	-.1061148	.0104943	.9616017
2010	1.073638	-.0916384	-.0635243	-.086383	-.2104797	.0028696	.9765958
2011	.7823731	.0371765	.1552844	-.0825616	-.0698907	.0085213	.9771398
2012	.9158356	.2620505	-.5586722	-.4031787	.0938136	.0058083	.8930206
2013	1.142736	.1812955	.2386189	.0341663	-.0366957	-.0022669	.937602
2014	1.221347	-.1679558	-.2404427	.1143973	-.0697958	.0048873	.9118381
2015	.9573472	.111326	-.1772271	.1505205	-.0438951	-.0034457	.9753923
2016	.8496537	-.2545003	.1107443	.0007026	-.0801085	.0071546	.876171
2017	.6659349	-.4578201	.0375328	-.1115524	-.1108762	.0092394	.8416947
2018	1.118772	-.0862054	.329322	.4864722	-.0474795	.0052483	.9690239
2019	1.17172	.0814447	.1492691	.4813454	.1388912	.0089196	.9885571
Mean	1.005808	.0293506	-.0334199	.0649999	-.0688849	.0063734	.9308692
N	14	14	14	14	14	14	14

3 . xtfmb exr_vw_him marketrf smb hml rmw cma, verbose

Fama-MacBeth (1973) Two-Step procedure — Number of obs = 168; Num. time periods = 14; F(5, 13) = 84.77; Prob > F = 0.0000; avg. R-squared = 0.9159

exr_vw_him	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	1.018486	.0503695	20.22	0.000	.909669	1.127303
smb	-.0062026	.0747164	-0.08	0.935	-.1676176	.1552123
hml	.014048	.069976	0.20	0.844	-.1371259	.1652219
rmw	-.1133498	.1371317	-0.83	0.423	-.4096049	.1829053
cma	.0192245	.134147	0.14	0.888	-.2705824	.3090314
_cons	.0062695	.0020315	3.09	0.009	.0018807	.0106584

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	rmw	cma	constant	R2
2006	1.472628	.1365694	-.0751267	.1901798	-.0146497	.0246437	.7290266
2007	.9122713	.1581603	.3714062	-.1794962	-.7637129	.0101142	.8894587
2008	.9207099	.1555409	-.0673823	-.4093679	-.0598462	.0081977	.9727159
2009	.774646	.1859343	-.251651	.3406318	.4720558	.0055337	.9842486
2010	1.083679	-.0897431	.2694841	.2237518	-.7622899	.0006102	.9620941
2011	.7534801	.0195206	.031312	-.2520877	.6386737	.0107818	.9823681
2012	.9624435	.1284729	-.3920844	-.3789741	.0947252	.0037923	.8712163
2013	1.072922	-.1533803	-.4362695	-.7111739	.7624959	-.0040689	.9533395

2014	1.035136	-.2201937	.1479133	.0272682	-.6963918	.0087525	.933603
2015	.9715409	.1387283	-.2152656	.0666475	.3325883	-.003688	.973393
2016	.8552872	-.2417296	.0717024	-.1207297	-.0110042	.0075494	.8649775
2017	1.05195	-.4751558	.1894275	-.0864209	-.1483786	.003083	.7715461
2018	1.221822	-.4143818	.3124612	-1.247661	-.0901425	.0137181	.9596063
2019	1.170285	.5848205	.2407452	.9505346	.5150204	-.0012463	.9746898
Mean	1.018486	-.0062026	.014048	-.1133498	.0192245	.0062695	.9158774
N	14	14	14	14	14	14	14

4 . xtfmb exr_vw_him marketrf smb hml, verbose

Fama-MacBeth (1973) Two-Step procedure

Number of obs	168
Num. time periods	14
F(3, 13)	120.10
Prob > F	0.0000
avg. R-squared	0.8994

exr_vw_him	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	1.004176	.0535406	18.76	0.000	.8885088	1.119844
smb	.0294331	.0653407	0.45	0.660	-.111727	.1705932
hml	-.0026138	.0576393	-0.05	0.965	-.127136	.1219084
_cons	.0063374	.0018502	3.43	0.005	.0023404	.0103345

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	constant	R2
2006	1.494524	.1017195	-.0391271	.026195	.7263887
2007	.9797989	.2411743	-.1296894	.0083917	.8384117
2008	.9207358	.2401916	-.0654977	.0069182	.964407
2009	.6851132	.1654867	-.2145004	.0113889	.9418553
2010	1.048426	-.1336712	-.0540161	.0046072	.9575927
2011	.7643182	.0319381	.1526042	.0096626	.9724127
2012	.8952516	.286171	-.2548727	.0046109	.8611521
2013	1.121331	.1603297	.2091189	-.0012293	.9350854
2014	1.181071	-.1575848	-.3206588	.0050667	.9006242
2015	.972087	.1875171	-.121921	-.0021063	.9682252
2016	.8614463	-.2379983	.0908943	.0075171	.8594671
2017	.9546907	-.4229045	.1728087	.0013784	.7500905
2018	.9975747	-.350984	.044933	.0047821	.9462399
2019	1.182099	.3006782	.4933305	.0015409	.9696922
Mean	1.004176	.0294331	-.0026138	.0063374	.8994032
N	14	14	14	14	14

Fama-MacBeth (1973) Two-Step procedure

Number of obs	168
Num. time periods	14
F(7, 13)	78.74
Prob > F	0.0000
avg. R-squared	0.9255

exr_vw_lm	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	1.011966	.0777165	13.02	0.000	.8440695	1.179862
smb	-.1133826	.0818136	-1.39	0.189	-.2901301	.0633648
hml	-.0493713	.1086794	-0.45	0.657	-.2841589	.1854163
rmw	-.3709332	.2063584	-1.80	0.096	-.8167433	.074877
cma	-.0619138	.1402584	-0.44	0.666	-.3649236	.2410961
mom	.0861577	.0700946	1.23	0.241	-.0652725	.2375879
liq	-.003207	.0351962	-0.09	0.929	-.0792438	.0728298
_cons	.0046126	.0020664	2.23	0.044	.0001484	.0090768

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	rmw	cma	mom	liq	constant	R2
2006	.9464158	-.0802833	.4191051	-.7119285	-.3718513	-.0003801	-.097159	.0059375	.9720675
2007	.9820639	-.1520789	-.5881007	-.174071	.1491137	-.3588948	-.0620246	.0030936	.9354133
2008	.9472579	.2665893	.2513759	-.799283	-.3374079	.0464887	.0851796	.0196162	.9744129
2009	.8538112	.1080861	-.2847238	-.0024676	.4423718	.1265624	-.0280924	.0084189	.9701768
2010	.974188	.1819943	.452106	-.2644276	-.4453572	.0430889	.035836	.0075013	.9830685
2011	.9491696	.1869203	-.0236044	.0301903	.7723934	.4234981	-.1238194	.0046523	.9823183
2012	1.908608	-.7042356	-.9641277	-2.462399	-.2701124	-.1536127	.3519959	-.0109054	.8046185
2013	.9098003	.0940622	.1669906	.1365796	-.3958268	.1793636	-.1482988	.003219	.6584253
2014	1.303222	-.2928757	-.3612151	.0652549	.0900395	-.0620233	.128681	-.0067111	.9471058
2015	1.009642	.0520282	.3715193	-.0879635	-.7127846	.2709913	-.0755213	-.0027756	.9612445
2016	.9516339	-.3318366	-.1626274	.377028	.7901486	.0456397	-.1336329	.0084395	.8920042
2017	.6648083	-.2154368	-.0885895	-.0860157	.2212537	-.1496356	-.0214212	.0098522	.9196433
2018	.9225643	-.0163858	-.0905346	.2446062	.1622854	.0842635	.03265	.0023801	.9790813
2019	.8443353	-.6839045	.211228	-1.458168	-.9610585	.7108576	.0107289	.0118576	.9770685
Mean	1.011966	-.1133826	-.0493713	-.3709332	-.0619138	.0861577	-.003207	.0046126	.9254749
N	14	14	14	14	14	14	14	14	14

1 . xtfmb exr_vw_lm marketrf smb hml mom liq, verbose

Fama-MacBeth (1973) Two-Step procedure

Number of obs	168
Num. time periods	14
F(5, 13)	188.17
Prob > F	0.0000
avg. R-squared	0.8996

exr_vw_lm	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	.9757403	.0427941	22.80	0.000	.8832894	1.068191
smb	.0459854	.0862285	0.53	0.603	-.1403	.2322708
hml	-.0733755	.0669383	-1.10	0.293	-.2179869	.071236
mom	.0286489	.0693222	0.41	0.686	-.1211127	.1784105
liq	-.0237173	.0228282	-1.04	0.318	-.0730346	.0256001
_cons	.0041811	.0018113	2.31	0.038	.0002681	.0080941

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	mom	liq	constant	R2
2006	.8501253	-.0127452	.0292065	-.1288244	-.0508178	-.0013793	.8686864
2007	.9416459	-.1071078	-.5007805	-.3811862	-.0653701	.0026182	.9313424
2008	.897877	.4745612	.2565719	.3005291	.1011797	.0173914	.9539196
2009	.8207138	.1193049	-.1931441	.1527004	-.0500779	.0109922	.9580194
2010	.937232	.2623202	.2258659	.0373046	.0594713	.0105669	.9786285
2011	1.044902	.0797477	.0351143	-.01037	-.0811481	.0030815	.9778224
2012	1.365802	.901709	-.557198	-.4088209	-.0988268	-.0020159	.7597532
2013	.8705626	-.0987384	-.0860402	.0904137	-.1539375	.0022257	.6538303
2014	1.2737	-.3244963	-.3571405	-.0462787	.12992	-.0060639	.9468763
2015	1.021785	-.0070882	.1854846	.1977616	-.0763625	-.0059089	.9440469
2016	.9486882	-.2508772	-.0392653	.1078822	-.1160514	.0105427	.7782016
2017	.8598029	-.213129	-.0472588	-.1564859	-.0100902	.007509	.904063
2018	.9586675	-.0456029	.0141727	.0517248	.0449548	.0042607	.9771516
2019	.8688611	-.1340623	.007155	.5947347	.0351149	.0047158	.9615391
Mean	.9757403	.0459854	-.0733755	.0286489	-.0237173	.0041811	.8995629
N	14	14	14	14	14	14	14

2 . xtfmb exr_vw_lm marketrf smb hml rmw cma, verbose

Fama-MacBeth (1973) Two-Step procedure

Number of obs	168
Num. time periods	14
F(5, 13)	101.02
Prob > F	0.0000
avg. R-squared	0.8991

exr_vw_lm	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	.9913721	.0619341	16.01	0.000	.8575716	1.125173
smb	-.0009492	.0536547	-0.02	0.986	-.1168631	.1149647
hml	-.0509963	.0904852	-0.56	0.583	-.2464776	.1444851
rmw	-.2195602	.1414936	-1.55	0.145	-.5252385	.0861181
cma	-.0443259	.151387	-0.29	0.774	-.3713778	.2827259
_cons	.0042087	.0014074	2.99	0.010	.0011682	.0072491

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	rmw	cma	constant	R2
2006	.908538	-.0468813	.3948334	-.6858721	-.3766201	.0061016	.9326261
2007	1.03214	-.0633964	-.4207259	-.0459279	.4532886	.006681	.9106284
2008	.9949915	.343044	.0853423	-1.032864	-.8730194	.0090842	.9573678
2009	.8436569	.0637527	-.3356058	-.0108002	.4841157	.0083036	.9666525
2010	.9805176	.1884098	.3922787	-.2910221	-.4135422	.0075504	.9818951
2011	1.030759	.0565699	-.0915603	-.2292223	.5076084	.0051792	.9783762
2012	1.637928	.1293172	-.657011	-1.391972	.0504199	-.0073722	.7861323
2013	.7990244	.1860631	.1917479	.535097	-.3364917	.007773	.6217251
2014	1.262156	-.2909612	-.3745514	-.0973433	-.0026649	-.005148	.9320473

2015	1.032267	.1544075	.439243	.0771259	-.5489861	-.0012468	.9450288
2016	.9588571	-.3613974	-.2557122	.3396462	.892532	.0068256	.8586456
2017	.6779906	-.2412281	.0460045	-.2826666	.3911373	.0083065	.7902175
2018	.8947312	-.0592186	-.1946554	.3422695	.1672086	.0012973	.976555
2019	.8256525	-.0717702	.0664244	-.300292	-1.015549	.0055858	.9491041
Mean	.9913721	-.0009492	-.0509963	-.2195602	-.0443259	.0042087	.8990716
N	14	14	14	14	14	14	14

3 . xtfmb exr_vw_lm marketrf smb hml , verbose

Fama-MacBeth (1973) Two-Step procedure

Number of obs	= 168
Num. time periods	= 14
F(3, 13)	= 222.54
Prob > F	= 0.0000
avg. R-squared	= 0.8624

exr_vw_lm	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	1.002773	.0437198	22.94	0.000	.9083218	1.097224
smb	.0644504	.0757758	0.85	0.410	-.0992532	.228154
hml	-.0069107	.0590728	-0.12	0.909	-.1345298	.1207084
_cons	.0034619	.0015861	2.18	0.048	.0000353	.0068885

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	constant	R2
2006	.9133673	.1615921	.1293285	.0038515	.8078743
2007	.973491	-.0662496	-.1144668	.007294	.8896778
2008	1.003006	.2848061	.0133481	.0120439	.9054797
2009	.8084137	.0822316	-.2291889	.0112701	.9516239
2010	.9456506	.2768273	.2025942	.0101654	.9767882
2011	1.038327	.0795749	-.0065232	.004332	.9751598
2012	1.397725	.7781277	-.2670574	-.0048686	.742664
2013	.7857601	-.0879807	-.1938128	.0063307	.6118574
2014	1.28623	-.2685073	-.2864235	-.0055304	.9313753
2015	1.037491	.0899241	.263705	-.0038029	.9331039
2016	.9399816	-.3569919	-.1510488	.0052082	.7025885
2017	1.023767	-.1913562	.1515401	.0015498	.7465043
2018	.9588396	-.0761284	-.0587063	.0038393	.9735972
2019	.9267691	.1964364	.4499621	-.0032166	.9254026
Mean	1.002773	.0644504	-.0069107	.0034619	.8624069
N	14	14	14	14	14

Fama-MacBeth (1973) Two-Step procedure — Number of obs = 168; Num. time periods = 14; F(7, 13) = 156.83; Prob > F = 0.0000; avg. R-squared = 0.9537

exr_vw_hm	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	.9973754	.0618436	16.13	0.000	.8637705	1.13098
smb	-.0012009	.1112688	-0.01	0.992	-.2415826	.2391808
hml	.0037865	.155813	0.02	0.981	-.332827	.3404
rmw	-.0085113	.275183	-0.03	0.976	-.6030079	.5859853
cma	-.0502212	.2085128	-0.24	0.813	-.5006856	.4002433
mom	-.1352946	.1249322	-1.08	0.299	-.4051942	.1346049
liq	-.0487075	.0338111	-1.44	0.173	-.1217519	.0243369
_cons	.0089758	.0031233	2.87	0.013	.0022283	.0157233

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	rmw	cma	mom	liq	constant	R2
2006	1.485767	.3819946	.4977293	-.2126251	-.7322376	.3095357	-.249858	.0280731	.9273121
2007	.813602	.9538302	.0838155	2.128787	.2150097	.1839465	-.1913185	.006191	.9058024
2008	1.226856	-.3093233	.411724	-1.310906	-1.602558	-1.439552	.102728	.030013	.9840707
2009	1.149008	.2988817	.3008374	.3618103	-.0237271	.2310055	.0564856	.0001811	.9872176
2010	1.120622	-.1201965	.1240533	-.0099835	-.2378938	-.0758507	-.2427331	.0039207	.9884913
2011	1.039556	-.0805281	.1690849	-.4822403	.8751907	-.167792	-.0679721	.0094861	.9953488
2012	1.151835	-.3346307	-1.212193	-.9390172	.368515	-.6394808	.0993766	.005114	.9528874
2013	1.116458	-.1643671	-.8986236	-1.280926	.5977387	.3347513	-.0096599	-.0015622	.9409016
2014	.838792	-.1742305	.9085865	.0921028	-.709909	-.0038561	.0403086	.0110223	.9380313
2015	.7338066	-.2192405	-.4721936	.3309951	1.508084	.0900726	-.0919918	-.0070912	.8951159
2016	.9474633	-.0084136	.1733813	.0723889	-.4121009	.0413671	-.1311275	.0046387	.9525258
2017	.5907271	-.6197048	-.0239148	-.7245787	.2362504	-.0474696	-.1338085	.0264973	.9687254
2018	.8884714	-.2093633	.4972951	-.1290588	-.6834394	-.4602674	.0560234	.0118223	.9787666
2019	.860292	.5884793	-.5065712	1.984093	-.1020185	-.2505349	.0816419	-.002645	.9364843
Mean	.9973754	-.0012009	.0037865	-.0085113	-.0502212	-.1352946	-.0487075	.0089758	.9536915
N	14	14	14	14	14	14	14	14	14

1 . xtfmb exr_vw_hm marketrf smb hml mom liq, verbose

Fama-MacBeth (1973) Two-Step procedure — Number of obs = 168; Num. time periods = 14; F(5, 13) = 212.86; Prob > F = 0.0000; avg. R-squared = 0.8995

exr_vw_hm	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	1.021401	.0429518	23.78	0.000	.928609	1.114193
smb	-.005558	.0522148	-0.11	0.917	-.1183611	.1072451
hml	.0276772	.0808679	0.34	0.738	-.1470273	.2023816
mom	-.0656494	.078091	-0.84	0.416	-.2343548	.103056
liq	-.0480332	.0282812	-1.70	0.113	-.109131	.0130647
_cons	.0088019	.0022597	3.90	0.002	.0039202	.0136836

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	mom	liq	constant	R2
2006	1.441428	.3069976	.0132116	.0846449	-.1825642	.0236527	.8523486
2007	1.038444	.2352235	-.2897589	-.1927018	-.1475993	.0129057	.7611333
2008	1.076422	-.1399089	.2680128	-.5374146	.1255176	.029262	.9289292
2009	1.08831	.2285596	.1991176	.2119336	.0325509	.0027755	.9808012
2010	1.106686	-.1119698	.0192085	-.0766978	-.2430771	.0052565	.9881474
2011	1.050194	-.0019148	.3018957	-.1613422	-.0987215	.0076885	.981768
2012	.9433829	.1337878	-.8043388	-.6349182	-.0440981	.0085582	.9148644
2013	1.100065	.1969765	-.130846	.146234	.010694	.0026524	.9136749
2014	.9791949	-.1288873	.3842967	.016103	.0315313	.0074565	.8822691
2015	.7063479	-.0964551	-.0965565	.2667797	-.0742088	-.0001992	.7738793
2016	.9356006	-.061825	.0574606	.0056077	-.1330838	.0035176	.9158998
2017	.987119	-.376653	.0508879	-.0875718	-.0564193	.0089504	.8528444
2018	.8892319	-.1393009	.226999	-.3375207	.0224696	.0104265	.9520187
2019	.957184	-.1224425	.1878899	.3777724	.0845443	.000323	.8946043
Mean	1.021401	-.005558	.0276772	-.0656494	-.0480332	.0088019	.899513
N	14	14	14	14	14	14	14

2 . xtfmb exr_vw_hm marketrf smb hml rmw cma, verbose

Fama-MacBeth (1973) Two-Step procedure — Number of obs = 168; Num. time periods = 14; F(5, 13) = 241.19; Prob > F = 0.0000; avg. R-squared = 0.9178

exr_vw_hm	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	.9910233	.0373274	26.55	0.000	.9103824	1.071664
smb	-.0545648	.0751323	-0.73	0.481	-.2168783	.1077488
hml	.0282159	.132038	0.21	0.834	-.2570348	.3134666
rmw	-.0466107	.1828158	-0.25	0.803	-.4415603	.3483388
cma	-.0288116	.1911627	-0.15	0.883	-.4417936	.3841704
_cons	.0072913	.0020068	3.63	0.003	.0029558	.0116268

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	rmw	cma	constant	R2
2006	1.243169	.1746407	.0344558	-.0090396	-.4138682	.017913	.8377755
2007	.8277982	.5710441	.5459013	1.218241	-.8702045	.0189858	.7926635
2008	1.047362	-.0496498	-.058882	-1.143732	-.5398135	.0121559	.9514906
2009	1.100019	.1209194	.1187307	.2679317	.0086044	-.0003125	.9775798
2010	1.096731	-.1038777	.1785321	.2271265	-.4441391	.0051992	.9679535
2011	1.003553	-.0740652	.1648159	-.4875811	1.000285	.0109562	.9918089
2012	1.127253	-.3904439	-.6423442	-.9388049	.1271701	.0032059	.8965061
2013	1.023523	-.3841072	-.9155759	-.7371246	.9734312	-.0003973	.9261547
2014	.8294221	-.1595723	.908335	.0648035	-.7223974	.0114136	.9359084

2015	.7353898	-.1729414	-.4456966	.1622566	1.530439	-.0051279	.8848872
2016	.9554054	-.033101	.0862739	.0365656	-.3193847	.0032267	.9064096
2017	1.059254	-.5241714	.0969036	-.470958	.0281383	.0142636	.9065083
2018	.9748434	.0478941	.643738	.0260982	-.4902747	.0109539	.9530859
2019	.8506032	.2135245	-.3201651	1.131667	-.2713474	-.000358	.919776
Mean	.9910233	-.0545648	.0282159	-.0466107	-.0288116	.0072913	.9177506
N	14	14	14	14	14	14	14

3 . xtfmb exr_vw_hm marketrf smb hml , verbose

Fama-MacBeth (1973) Two-Step procedure

Number of obs	= 168
Num. time periods	= 14
F(3, 13)	= 306.96
Prob > F	= 0.0000
avg. R-squared	= 0.8709

exr_vw_hm	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	1.03057	.0349203	29.51	0.000	.9551294	1.106011
smb	.003046	.0411652	0.07	0.942	-.085886	.0919781
hml	.0737596	.0656222	1.12	0.281	-.0680087	.2155278
_cons	.0074083	.0019169	3.86	0.002	.0032669	.0115496

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	constant	R2
2006	1.323016	.2562162	-.098226	.0210678	.8012099
2007	1.078025	.2324688	-.1075822	.0208432	.696779
2008	1.051537	.0465807	-.0932239	.0117745	.9011874
2009	1.057271	.0918777	.0697592	.0020022	.9735761
2010	1.079885	-.1558079	-.0066232	.0074232	.9654834
2011	1.017164	-.0124054	.3182638	.0093395	.9753442
2012	.9631858	.0253505	-.3436357	.005052	.8479853
2013	1.091575	-.0882854	-.1694171	.003082	.893182
2014	.9719951	-.1029498	.3885684	.0077282	.881081
2015	.7331755	.0391782	.0003997	.0021082	.7457287
2016	.9541199	-.0398131	.021034	.0038763	.8797454
2017	1.16304	-.3549712	.1589852	.0038463	.8140207
2018	.9705849	.0449028	.4332422	.0108279	.9380891
2019	.9734088	.0603022	.4610895	-.0052557	.8797176
Mean	1.03057	.003046	.0737596	.0074083	.8709378
N	14	14	14	14	14

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	rmw	cma	mom	liq	constant	R2
2006	1.112405	.1986328	.2117563	-.0877668	-.4150218	.0047371	-.0887575	.0067308	.9061359
2007	.684904	.1494969	.3000616	.2931328	.0736018	.2155326	.0084227	-.0059872	.904062
2008	.9905699	-.1711468	.2265264	.0422	.0171124	-.0019443	.046369	.0171374	.9721051
2009	1.018387	.3833703	.5512401	-.1066485	-.3933861	.3688038	.0504688	.0128148	.8972218
2010	.8915687	.1186502	.0184385	.5138825	.3429604	.0330089	-.1112145	.0094746	.9652783
2011	1.094791	-.3683211	-.1745466	-.2397284	-1.09717	-.9592941	.043871	-.0027258	.9821379
2012	.7704008	.5249097	-.301724	.6792109	1.037835	-.4956312	-.3740551	.0078245	.9857906
2013	.9584774	-.3353219	-.7576525	-1.102935	1.017885	.1358865	-.103925	-.0011679	.9567257
2014	1.260083	.2849643	.5684645	.7003064	.1347722	.0190827	-.000345	-.0021663	.9246586
2015	.8631618	.025536	-.2335781	.5188139	.6915584	-.1205275	-.0387232	-.0055639	.9825732
2016	1.019402	-.1790785	.0572948	.1713434	-.1238101	-.0136893	-.0148476	.0035489	.9058257
2017	.4565836	-.161069	-.0981842	.072816	.2792651	-.0601009	.0673576	.005328	.7846391
2018	1.192584	.0375562	.2550088	-.6597374	-.3277848	.1937747	.0512004	.0050612	.9965788
2019	.9813156	.1640693	-.8261617	.8078293	-.2716039	.1296058	.0121908	.0065385	.9862862
Mean	.9496167	.0480177	-.014504	.1144799	.0690153	-.0393397	-.0322848	.0040605	.9392871
N	14	14	14	14	14	14	14	14	14

1 . xtfmb exr_lim marketrf smb hml mom liq, verbose

Fama-MacBeth (1973) Two-Step procedure

Number of obs	168
Num. time periods	14
F(5, 13)	167.65
Prob > F	0.0000
avg. R-squared	0.9150

exr_lim	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	.9572087	.0378978	25.26	0.000	.8753355	1.039082
smb	-.0063345	.0495491	-0.13	0.900	-.1133789	.1007099
hml	.0464986	.0635269	0.73	0.477	-.0907429	.1837401
mom	.0725012	.052414	1.38	0.190	-.0407324	.1857348
liq	-.0205097	.0211291	-0.97	0.349	-.0661563	.0251369
_cons	.0040192	.0014747	2.73	0.017	.0008334	.0072049

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	mom	liq	constant	R2
2006	1.091275	.1503987	-.0550621	-.1219558	-.0512761	.0045004	.8737628
2007	.7100496	.0469058	.2636045	.1496565	.0145033	-.0050431	.8953193
2008	.9931306	-.182242	.2261503	-.0150322	.0455219	.0172568	.9720452
2009	1.06662	.3943754	.4989346	.3508777	.0775775	.0097042	.8878582
2010	.9337471	-.0251769	.2304893	.0427641	-.1600692	.0064009	.9522176
2011	.9215155	-.139836	-.2326938	-.1531578	-.0468915	-.0005012	.9688144
2012	.9171478	-.2122519	.1022528	-.2170838	-.191593	.0054833	.9419505
2013	1.006466	.2095729	.162799	.1388042	-.0811437	.0032852	.9142097
2014	1.124138	.0350013	.0856191	.1858034	.0024944	.0003291	.8937238
2015	.8460947	.076038	-.106841	.0156544	.0099719	-.001738	.9587559
2016	1.008387	-.2013459	-.0062143	-.026266	-.0114244	.0031986	.894974
2017	.6487591	-.227125	-.0548092	-.0593482	.0629428	.0066834	.6887652
2018	1.091566	.1063107	.0121405	.2621232	.0229885	.0000632	.9885255
2019	1.042025	-.1193078	-.4753898	.462177	.0192615	.0066454	.9786581
Mean	.9572087	-.0063345	.0464986	.0725012	-.0205097	.0040192	.91497
N	14	14	14	14	14	14	14

2 . xtfmb exr_lim marketrf smb hml rmw cma, verbose

Fama-MacBeth (1973) Two-Step procedure

Number of obs	168
Num. time periods	14
F(5, 13)	41.40
Prob > F	0.0000
avg. R-squared	0.9240

exr_lim	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	.9223611	.0690773	13.35	0.000	.7731287	1.071593
smb	-.0427253	.0700824	-0.61	0.553	-.194129	.1086784
hml	-.0422744	.1012576	-0.42	0.683	-.2610281	.1764793
rmw	.0201055	.140689	0.14	0.889	-.2838346	.3240456
cma	.0306959	.123032	0.25	0.807	-.2350986	.2964904
_cons	.0038997	.0016344	2.39	0.033	.0003687	.0074307

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	rmw	cma	constant	R2
2006	1.075425	.2243448	.1830198	-.0617272	-.4139644	.0067075	.886978
2007	.6599814	.0526552	.2703311	.107019	-.2291375	-.0062509	.8919073
2008	1.012235	-.126476	.1312169	-.0767749	-.2433232	.0113102	.967063
2009	.9513981	.1350125	.2933883	-.2275362	-.3256051	.012131	.8754315
2010	.8865769	.144878	-.0666328	.6403931	.2513661	.0105657	.9595094
2011	.9025424	-.1644018	-.0836791	.1292946	-.4565789	-.0005252	.9695774
2012	1.11534	-.682677	-.0940798	-.7920859	.3304414	.0008583	.9353946
2013	.8781435	-.2779706	-.7408887	-.8073252	1.071196	.0020508	.9372605
2014	1.264437	.3020366	.5732694	.7294512	.1551256	-.0022899	.9245585
2015	.8466803	-.0067341	-.259389	.2036492	.5840166	-.0046707	.9788007
2016	1.024895	-.1586488	.0701888	.171899	-.1549724	.0043118	.9045252
2017	.1841719	-.233456	-.0908456	-.1951585	.5041932	.0117303	.729801
2018	1.135269	-.0633171	.0586021	-.5053203	-.3388877	.0032623	.9893925
2019	.9759595	.2565998	-.8363436	.9656992	-.3041274	.0054042	.9857535
Mean	.9223611	-.0427253	-.0422744	.0201055	.0306959	.0038997	.9239966
N	14	14	14	14	14	14	14

3 . xtfmb exr_lim marketrf smb hml, verbose

1 . xtfmb exr_him marketrf smb hml rmw cma mom liq, verbose

Fama-MacBeth (1973) Two-Step procedure

Number of obs	168
Num. time periods	14
F(7, 13)	598.31
Prob > F	0.0000
avg. R-squared	0.9534

exr_him	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	1.023996	.0479239	21.37	0.000	.920463	1.127529
smb	-.0226561	.0602525	-0.38	0.713	-.1528236	.1075115
hml	.1089871	.096708	1.13	0.280	-.0999378	.3179119
rmw	-.1275561	.0882564	-1.45	0.172	-.3182225	.0631102
cma	.0564152	.1192386	0.47	0.644	-.2011842	.3140147
mom	-.0423898	.0559012	-0.76	0.462	-.1631569	.0783773
liq	-.0246003	.0233892	-1.05	0.312	-.0751296	.025929
_cons	.0026485	.0016447	1.61	0.131	-.0009046	.0062017

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	rmw	cma	mom	liq	constant	R2
2006	1.216427	.1563391	.2532823	-.1875147	-.2611686	.0548893	-.1842762	.0103863	.9089234
2007	.6923181	.0122592	.5343716	-.1480595	-.6013767	-.1431346	-.024384	-.0036977	.9876409
2008	.903779	-.3829874	.268972	-.3342796	.3417219	.1516429	.0389385	.0161841	.9808889
2009	1.05367	.0724176	.6905248	-.0402059	-.2706349	.3123618	.0277065	.0088493	.9396809
2010	.9887527	-.0917113	-.0500637	-.1891034	-.2265807	-.042885	-.1129806	.0032796	.9687549
2011	1.12756	-.0354461	.1644301	-.1236399	.0098156	-.357757	-.1435788	.0035358	.9816337
2012	1.012103	-.0855322	-.5622706	-.2445737	.3956064	-.4721995	-.0203342	.0060529	.9342471
2013	.9463208	-.4096849	-.4051143	-.7366914	.7426246	.1084042	-.0073805	-.0019654	.9786402
2014	1.400166	.253864	.4955624	.5771269	.6147469	.0645816	.0453593	-.0034372	.8980058
2015	.9888914	.3608842	-.3109678	-.4124579	.3987916	-.0639067	.0501925	-.0053796	.9865546
2016	1.118743	-.2186073	.0214588	.247532	.0251664	-.0458465	-.0924262	.0007262	.944697
2017	.8412198	-.1762575	.0114156	-.295768	.5397366	.0255816	.0976208	.0029507	.9172103
2018	.8611938	.0536259	.3317884	-.2356637	-.4913535	.0763989	.0757915	-.0029332	.9350718
2019	1.184803	.1736517	.0824299	.3375129	-.4272822	-.2615887	-.0946528	.0025276	.986299
Mean	1.023996	-.0226561	.1089871	-.1275561	.0564152	-.0423898	-.0246003	.0026485	.9534463
N	14	14	14	14	14	14	14	14	14

2 . xtfmb exr_him marketrf smb hml mom liq, verbose

Fama-MacBeth (1973) Two-Step procedure

Number of obs	168
Num. time periods	14
F(5, 13)	122.59
Prob > F	0.0000
avg. R-squared	0.9380

exr_him	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	1.04611	.043091	24.28	0.000	.9530173	1.139202
smb	.0162007	.0429564	0.38	0.712	-.0766009	.1090023
hml	.1537831	.0690988	2.23	0.044	.0045043	.3030619
mom	.0019053	.0480304	0.04	0.969	-.101858	.1056687
liq	-.0225951	.0231371	-0.98	0.347	-.0725798	.0273896
_cons	.0021295	.0015164	1.40	0.184	-.0011464	.0054054

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	mom	liq	constant	R2
2006	1.186971	.1491208	.0538696	-.0279558	-.1580245	.0078718	.8945459
2007	.75419	.1107493	.3606302	.0698289	-.0282315	-.0044239	.9648433
2008	.9150851	-.2170004	.3412035	.0344667	.0472189	.01392	.97353
2009	1.081124	.0735956	.6456637	.298409	.0440534	.0069599	.9353377
2010	.9675377	-.0364262	-.1718199	-.0467603	-.0955639	.0049647	.9665534
2011	1.105281	.0112332	.1810926	-.2436627	-.1620321	.0035116	.9812858
2012	.956884	-.0550308	-.295482	-.4062695	-.0396291	.0069844	.9203894
2013	.9861178	-.0165833	.2420273	.1309557	.0084912	.0011118	.9578224
2014	1.178568	-.0062757	.4166109	.2033391	.0540336	.0013148	.8832933
2015	.9877269	.4012587	-.1496292	-.0923064	-.0003309	-.0044636	.971707
2016	1.106919	-.2258226	-.0197698	-.0467503	-.0855512	.0007721	.9311805
2017	1.342457	-.1379513	.1164052	.0044173	.1341298	-.0048087	.8517314
2018	.8375111	.1123977	.1103999	.1669118	.0487719	-.0049712	.9181319
2019	1.239165	.0635447	.3217607	-.017949	-.0836663	.0010698	.9817982
Mean	1.04611	.0162007	.1537831	.0019053	-.0225951	.0021295	.9380107
N	14	14	14	14	14	14	14

3 . xtfmb exr_him marketrf smb hml rmw cma , verbose

Fama-MacBeth (1973) Two-Step procedure

Number of obs	168
Num. time periods	14
F(5, 13)	126.85
Prob > F	0.0000
avg. R-squared	0.9364

exr_him	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	.9894357	.058731	16.85	0.000	.862555	1.116316
smb	-.0579906	.0669235	-0.87	0.402	-.2025699	.0865888
hml	.0924307	.0802309	1.15	0.270	-.0808977	.265759
rmw	-.1227292	.0963471	-1.27	0.225	-.3308745	.0854161
cma	.0712863	.1176207	0.61	0.555	-.1828179	.3253905
_cons	.0031549	.0016287	1.94	0.075	-.0003636	.0066734

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	rmw	cma	constant	R2
2006	1.118584	.1671722	.1354578	-.113635	-.2109999	.0088024	.8323522
2007	.7122265	.0481609	.6002581	-.0956178	-.4785964	-.00229	.9815229
2008	.9462671	-.3626376	.2166436	-.4801914	-.0520928	.011819	.9751328
2009	1.001183	-.1243884	.4845881	-.1316141	-.2071062	.0083097	.9233428
2010	.9769665	-.0862132	-.0123977	-.0807394	-.3229026	.0038182	.9627853
2011	1.050837	-.021146	.1556872	-.1337823	.2763022	.0066508	.9678389
2012	1.069573	-.3686439	-.1901074	-.5501248	.1092902	.0035039	.9082211
2013	.9144135	-.4746128	-.4095986	-.5574061	.8600692	-.0014714	.9765264

2014	1.405085	.3325793	.5126554	.651006	.6739445	-.003432	.8957968
2015	.98643	.3308004	-.3288689	-.3431358	.3756984	-.0064446	.9835517
2016	1.143094	-.1411982	.0529608	.2411084	-.0795507	.003498	.9242253
2017	.4954638	-.2485723	-.0693847	-.4959154	.7045133	.0119022	.8755056
2018	.8230183	.0193817	.1541605	-.0114029	-.4435211	-.0052517	.9227918
2019	1.208958	.1174498	-.0080249	.3832422	-.20704	.0047542	.9798372
Mean	.9894357	-.0579906	.0924307	-.1227292	.0712863	.0031549	.9363879
N	14	14	14	14	14	14	14

4 . xtfmb exr_him marketrf smb hml , verbose

Fama-MacBeth (1973) Two-Step procedure

Number of obs	= 168
Num. time periods	= 14
F(3, 13)	= 275.69
Prob > F	= 0.0000
avg. R-squared	= 0.9128

exr_him	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	1.017688	.035847	28.39	0.000	.9402454	1.095131
smb	-.0180186	.0483554	-0.37	0.715	-.1224841	.0864469
hml	.1300497	.0515029	2.53	0.025	.0187845	.2413149
_cons	.0027501	.0013048	2.11	0.055	-.0000687	.0055689

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	constant	R2
2006	1.148378	.2303592	.0445224	.0095869	.8191148
2007	.7565983	.095048	.285258	-.0033241	.9408219
2008	.9460981	-.256525	.2207792	.010163	.9646773
2009	1.037663	-.1173707	.4649062	.0058913	.918753
2010	.9553337	-.0570483	-.1554683	.0057014	.9615225
2011	1.054629	-.0045232	.198427	.006203	.9667526
2012	.9726619	-.1331276	-.0017425	.0046445	.8904123
2013	.977977	-.2707762	.2069187	.0015224	.935865
2014	1.100387	.1175682	.3410491	.0026952	.8693389
2015	.9733518	.3500277	-.1754448	-.0047802	.968926
2016	1.130976	-.150406	-.0040631	.0037637	.9099305
2017	1.115958	-.1636025	.1191064	.0000235	.7491598
2018	.812919	.0184633	-.0426588	-.0056149	.9083733
2019	1.264703	.0896529	.3191065	.002026	.9754402
Mean	1.017688	-.0180186	.1300497	.0027501	.912792
N	14	14	14	14	14

Fama-MacBeth (1973) Two-Step procedure — Number of obs = 168; Num. time periods = 14; F(7, 13) = 116.78; Prob > F = 0.0000; avg. R-squared = 0.9271

exr_lm	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	1.013314	.0657878	15.40	0.000	.8711885	1.15544
smb	-.0221204	.0519431	-0.43	0.677	-.1343367	.0900959
hml	.0008147	.1187541	0.01	0.995	-.2557379	.2573673
rmw	-.1518111	.1543408	-0.98	0.343	-.4852441	.181622
cma	-.0098728	.1300156	-0.08	0.941	-.2907543	.2710087
mom	-.0211614	.0556686	-0.38	0.710	-.1414262	.0991033
liq	-.0005611	.0278969	-0.02	0.984	-.0608286	.0597064
_cons	.0040654	.002257	1.80	0.095	-.0008105	.0089413

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	rmw	cma	mom	liq	constant	R2
2006	1.19078	.1323825	.3066561	-.2338825	-.3694947	-.0186981	-.1363184	.0106442	.916629
2007	.7577899	-.1475677	.2376324	.0176028	-.3455959	-.1249468	-.004512	-.0005296	.9601227
2008	1.015082	-.0793549	.4576831	.0585366	.040619	.0541738	.1055016	.0190722	.9847593
2009	1.170264	.4091625	.5982408	-.1264918	-.3459442	.4584649	.0347262	.0108388	.9021164
2010	.8246093	-.0423003	.0726463	-.0776523	.588063	.0304064	-.1410243	.0136119	.964845
2011	1.028032	-.0857798	-.2136563	-.0884899	-.3396477	-.373696	-.0505508	-.0004302	.9826218
2012	1.648454	.0862841	-1.131109	-1.640479	.530293	-.3154787	.2017581	-.009631	.7536007
2013	.8897831	.0904774	-.4595227	-.7407005	.543272	.2018078	.0069776	.001239	.9723753
2014	1.123941	.144388	.4448192	.5498421	.2045134	-.1008273	.1310801	.0004574	.8940564
2015	.9821266	.1220915	-.0962241	.7663269	.4707738	-.1569931	-.1325779	-.0073956	.9774083
2016	1.02387	-.211215	-.0014535	.3468879	.0382573	.0069626	-.0619464	.0069033	.9182631
2017	.5940893	-.1993116	-.0315261	-.2668791	.351577	-.020815	-.0038373	.0110518	.8140295
2018	.8719573	-.2725379	.1188615	-.4185106	-.4858229	-.075713	.0845829	-.0048721	.9571359
2019	1.065622	-.2564041	-.291642	-.2714651	-1.019082	.1390927	-.0417143	.0059552	.98075
Mean	1.013314	-.0221204	.0008147	-.1518111	-.0098728	-.0211614	-.0005611	.0040654	.927051
N	14	14	14	14	14	14	14	14	14

1 . xtfmb exr_lm marketrf smb hml mom liq, verbose

Fama-MacBeth (1973) Two-Step procedure — Number of obs = 168; Num. time periods = 14; F(5, 13) = 222.27; Prob > F = 0.0000; avg. R-squared = 0.9108

exr_lm	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	1.006305	.0392669	25.63	0.000	.9214742	1.091136
smb	.0711038	.0857948	0.83	0.422	-.1142445	.2564521
hml	.0498478	.0721681	0.69	0.502	-.1060619	.2057574
mom	.0340051	.0529233	0.64	0.532	-.0803287	.148339
liq	-.0064669	.0207883	-0.31	0.761	-.0513773	.0384436
_cons	.0033878	.0018514	1.83	0.090	-.0006119	.0073876

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	mom	liq	constant	R2
2006	1.152943	.1166772	.0320129	-.1351647	-.099811	.0073505	.8927705
2007	.8055629	-.1247743	.1162347	-.0174277	-.0046284	-.0006276	.9509887
2008	1.019751	-.0919828	.4596108	.0282075	.1043822	.0191912	.9846615
2009	1.21833	.4251449	.5609971	.4442985	.0608365	.0078562	.8959221
2010	.8545337	-.0356	.3193412	.0307519	-.1300634	.0105449	.9620026
2011	.9716864	-.0095177	-.2298244	-.1103731	-.0808347	.000258	.9814956
2012	1.284636	.9392835	-.4794071	-.3320344	-.0557417	-.003627	.7082549
2013	.9046945	.3912326	.0863081	.1576926	.0208114	.0039998	.9545717
2014	.9957352	-.0624789	.1282175	.0303395	.1345507	.0029448	.8766823
2015	.9654706	.1499379	-.061186	-.0022088	-.0537948	-.0040421	.9639406
2016	1.00736	-.2209608	-.0584904	.0059489	-.0522836	.0069756	.8877357
2017	.9426622	-.1461384	.0404604	-.0384471	.0276027	.0042327	.7814543
2018	.817084	-.2035206	-.1351688	.016722	.0541071	-.0082302	.9413288
2019	1.147823	-.1318493	-.0812371	.3977667	-.015669	.000603	.9696847
Mean	1.006305	.0711038	.0498478	.0340051	-.0064669	.0033878	.910821
N	14	14	14	14	14	14	14

2 . xtfmb exr_lm marketrf smb hml, verbose

Fama-MacBeth (1973) Two-Step procedure — Number of obs = 168; Num. time periods = 14; F(3, 13) = 451.69; Prob > F = 0.0000; avg. R-squared = 0.8929

exr_lm	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	1.010856	.0413895	24.42	0.000	.9214393	1.100272
smb	.0532566	.0744574	0.72	0.487	-.1075989	.214112
hml	.0486616	.0469711	1.04	0.319	-.0528134	.1501365
_cons	.0028696	.0017913	1.60	0.133	-.0010002	.0067394

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	constant	R2
2006	1.202752	.3133233	.1272344	.0130222	.8307463
2007	.807355	-.1232414	.133709	-.0003341	.9508219
2008	1.080122	-.1571154	.1902635	.0103139	.9537606
2009	1.154272	.1447872	.2955646	.0063192	.8706058
2010	.8474013	-.0444129	.1909325	.012202	.9520585
2011	.9482995	-.0166051	-.2262173	.0015909	.9779417
2012	1.303887	.8576315	-.2414975	-.0057367	.6982736
2013	.9001374	.0728023	.0495653	.004241	.9158908
2014	.9793893	.0308649	.1645436	.0039047	.8547342
2015	.9545941	.1398158	-.0458141	-.0030533	.9607028
2016	1.013731	-.2168707	-.0757113	.0069111	.8826256
2017	.9330808	-.1464161	.0911717	.0038168	.7596513

2018	.8274745	-.2152669	-.1924769	-.0086607	.9360936
2019	1.199486	.1062954	.2199945	-.0043626	.9561458
Mean	1.010856	.0532566	.0486616	.0028696	.8928609
N	14	14	14	14	14

3 . xtfmb exr_lm marketrf smb hml rmw cma, verbose

Fama-MacBeth (1973) Two-Step procedure

Number of obs = 168
Num. time periods = 14
F(5, 13) = 277.36
Prob > F = 0.0000
avg. R-squared = 0.9128

exr_lm	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	.9856909	.0575211	17.14	0.000	.8614242	1.109958
smb	.0082197	.0486088	0.17	0.868	-.0967933	.1132327
hml	-.0342049	.0905395	-0.38	0.712	-.2298036	.1613938
rmw	-.1139845	.1010115	-1.13	0.280	-.3322064	.1042375
cma	-.01417	.1297283	-0.11	0.915	-.294431	.266091
_cons	.0035224	.0019049	1.85	0.087	-.0005928	.0076376

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	rmw	cma	constant	R2
2006	1.14613	.1964021	.2960516	-.2053138	-.3955273	.0114935	.8703275
2007	.7721716	-.090867	.2539572	.126899	-.1685502	-.000401	.9566527
2008	1.073664	.0157216	.2514217	-.2297494	-.6188865	.0060159	.9612111
2009	1.094906	.1256521	.3008984	-.2563187	-.2502832	.0100624	.8778028
2010	.8172734	-.0122109	-.0166345	.079748	.4714275	.0149101	.9545995
2011	.9510149	-.032457	-.1962877	-.0072278	-.078437	.0013974	.9781037
2012	1.513082	.4529843	-.770745	-1.142146	.5874127	-.0087144	.7404839
2013	.8392107	-.0607544	-.4727693	-.4224479	.7824593	.0015898	.963708
2014	1.073664	.1123506	.4217428	.3270758	.0700679	.0022873	.8649973
2015	.953368	.0951255	-.1249482	.0812202	.2912913	-.0044452	.964742
2016	1.030767	-.206976	-.0270229	.3331221	.0535336	.006868	.9112018
2017	.599058	-.2021991	-.012276	-.2921006	.3734397	.0107575	.8108346
2018	.8650507	-.2227286	.0071512	-.1715424	-.3832822	-.0071962	.9461294
2019	1.070313	-.0549676	-.3894076	.1829993	-.9330456	.0046888	.9778737
Mean	.9856909	.0082197	-.0342049	-.1139845	-.01417	.0035224	.912762
N	14	14	14	14	14	14	14

Fama-MacBeth (1973) Two-Step procedure — Number of obs = 168; Num. time periods = 14; F(7, 13) = 51.50; Prob > F = 0.0000; avg. R-squared = 0.9447

exr_hm	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	.9282564	.0614301	15.11	0.000	.7955447	1.060968
smb	.021718	.0508957	0.43	0.677	-.0882355	.1316714
hml	.0140507	.1194255	0.12	0.908	-.2439524	.2720538
rmw	-.0010025	.1385982	-0.01	0.994	-.3004256	.2984206
cma	.0894619	.1398106	0.64	0.533	-.2125804	.3915043
mom	-.0676282	.0761388	-0.89	0.391	-.232116	.0968597
liq	-.024799	.0204571	-1.21	0.247	-.068994	.019396
_cons	.0050924	.0021444	2.37	0.034	.0004596	.0097252

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	rmw	cma	mom	liq	constant	R2
2006	.887586	.1235091	.2711366	-.3347563	-.427085	.0386617	-.0847687	.0007311	.9074478
2007	.6572046	.2988904	.5775484	.8308933	-.2101918	.1344763	-.0574702	-.0034177	.9575663
2008	1.044811	-.1110061	.1233303	-.3426019	.2638183	-.0884274	.092838	.0256281	.9893135
2009	.8243421	.1922731	.5148669	-.2453936	-.1744593	.4926834	.0522983	.0140266	.9500754
2010	1.049349	-.1669484	-.3301285	.0160773	.4737226	-.0870005	-.1707279	.0072187	.9886554
2011	1.082428	.0328918	.0519623	-.180211	.0625136	-.4624346	.0026384	.0076286	.9905728
2012	.9934578	-.1941359	-.7110536	-.2784161	.6180277	-.3783147	-.0539423	.0019763	.9379461
2013	1.045458	-.2364817	-.4144319	-.6128652	.4795944	.2254638	-.0744089	.0001289	.9783952
2014	1.263748	.1261394	.7242833	.4012457	-.0675055	.1137868	.0301611	.0023367	.9212309
2015	.7664838	.0702311	-.4377581	.3994116	1.045073	-.1450701	.0068619	-.0053355	.9796354
2016	.9618093	-.1805408	.1396616	.0518775	-.2350283	.0121377	-.0495714	.0024239	.9413634
2017	.326494	-.0833443	-.1417976	-.241682	.7164096	.0158691	.0068122	.009348	.7244408
2018	1.069508	.0619196	.3338796	-.6083383	-.6123124	-.2302421	.0778403	.0095845	.9913261
2019	1.02291	.3706546	-.5047894	1.130723	-.6801102	-.588384	-.1257471	-.0009846	.9675818
Mean	.9282564	.021718	.0140507	-.0010025	.0894619	-.0676282	-.024799	.0050924	.9446822
N	14	14	14	14	14	14	14	14	14

1 . xtfmb exr_hm marketrf smb hml mom liq, verbose

Fama-MacBeth (1973) Two-Step procedure — Number of obs = 168; Num. time periods = 14; F(5, 13) = 185.41; Prob > F = 0.0000; avg. R-squared = 0.9089

exr_hm	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	.9757816	.0359788	27.12	0.000	.898054	1.053509
smb	.0109588	.0376868	0.29	0.776	-.0704585	.0923762
hml	.0703893	.0609912	1.15	0.269	-.0613742	.2021528
mom	-.00726	.0557928	-0.13	0.898	-.1277931	.113273
liq	-.0168649	.0199996	-0.84	0.414	-.0600714	.0263415
_cons	.0040994	.001811	2.26	0.041	.0001869	.0080118

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	mom	liq	constant	R2
2006	.8359827	.1166223	-.0616565	-.0974764	-.0412733	-.0036169	.8470203
2007	.7838375	.0427386	.3315685	.0811364	-.0408106	-.0009268	.884947
2008	1.050679	.0449736	.1848219	-.1685358	.1010402	.0235463	.9838326
2009	.8799502	.2353406	.5446937	.4944116	.0780758	.0111505	.9401112
2010	1.076932	-.1823256	-.1218127	-.0853787	-.1696671	.0045674	.9871852
2011	1.055574	.0949701	.0801552	-.3213984	-.0218835	.0074952	.9897153
2012	.9300802	-.2106213	-.3174935	-.2670301	-.0657923	.003056	.9077948
2013	1.061509	.0263424	.0527013	.1988412	-.0626484	.0024625	.9685251
2014	1.217339	-.0015215	.3559843	.2089193	.029968	.002992	.907167
2015	.7453821	.1526305	-.1985364	.0029344	.0379668	-.0002511	.9109896
2016	.9545162	-.2114428	.071519	-.0083863	-.0504031	.0017836	.9280508
2017	.9469233	-.089877	-.0097562	-.0044035	.0397007	.0026367	.5549251
2018	.9866346	.1536609	-.0016062	-.1124587	.0377905	.0047666	.969214
2019	1.135602	-.0180675	.0748675	-.0228156	-.1081727	-.0022711	.9445555
Mean	.9757816	.0109588	.0703893	-.00726	-.0168649	.0040994	.9088595
N	14	14	14	14	14	14	14

2 . xtfmb exr_hm marketrf smb hml rmw cma, verbose

Fama-MacBeth (1973) Two-Step procedure — Number of obs = 168; Num. time periods = 14; F(5, 13) = 44.59; Prob > F = 0.0000; avg. R-squared = 0.9285

exr_hm	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	.9152531	.0647493	14.14	0.000	.7753708	1.055135
smb	-.032198	.0561311	-0.57	0.576	-.1534617	.0890658
hml	.000371	.1114814	0.00	0.997	-.2404699	.241212
rmw	-.0354629	.1151047	-0.31	0.763	-.2841316	.2132058
cma	.0761169	.131399	0.58	0.572	-.2077534	.3599872
_cons	.0047324	.0014992	3.16	0.008	.0014936	.0079711

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	rmw	cma	constant	R2
2006	.8363061	.1158258	.1996219	-.2948718	-.3897257	-.0004545	.8843672
2007	.6528617	.1436296	.7130289	.4772436	-.6603485	.0005319	.9242049
2008	1.074789	-.0121025	-.0827759	-.5554373	-.1610365	.0136698	.9721721
2009	.7391261	-.1258882	.1829268	-.3958467	-.0777557	.0131528	.8891345
2010	1.029588	-.1647822	-.2371686	.1739747	.3272173	.007867	.975788
2011	.9891717	.1240463	.0908319	-.0194217	.3745075	.008955	.9873362
2012	1.069884	-.5181435	-.4324189	-.6460379	.3452058	-.0005239	.9217761
2013	.9539329	-.2849741	-.4097946	-.1957684	.6652797	.0027779	.9634647
2014	1.282913	.242437	.7535099	.5578886	.047152	.0018929	.9182528

2015	.7513923	.0215817	-.472012	.1988205	.9412839	-.0054236	.9730073
2016	.965687	-.1854486	.1110675	.0392135	-.2079155	.002066	.9348394
2017	.3084967	-.0843167	-.1588642	-.2321234	.7077593	.0099317	.7228634
2018	1.098758	.1955602	.317376	-.3843548	-.4689107	.0077084	.9802833
2019	1.060638	.0818039	-.5701344	.7802405	-.3770764	.0041018	.9511425
Mean	.9152531	-.032198	.000371	-.0354629	.0761169	.0047324	.9284737
N	14	14	14	14	14	14	14

3 . xtfmb exr_hm marketrf smb hml, verbose

Fama-MacBeth (1973) Two-Step procedure

Number of obs	168
Num. time periods	14
F(3, 13)	266.64
Prob > F	0.0000
avg. R-squared	0.8877

exr_hm	Fama-MacBeth Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
marketrf	.964509	.0341801	28.22	0.000	.8906674	1.038351
smb	-.0169409	.0476571	-0.36	0.728	-.1198978	.086016
hml	.042955	.0404438	1.06	0.308	-.0444185	.1303286
_cons	.0040274	.0010697	3.77	0.002	.0017165	.0063383

Coefficient estimates and R-squared of the cross-sectional regressions in step 1

year_1	marketrf	smb	hml	constant	R2
2006	.8828313	.2493696	.0135055	.0003522	.8112743
2007	.7882771	.0228583	.2430743	.0007407	.8473368
2008	1.075703	.0726973	-.0887052	.012618	.9606654
2009	.8072467	-.0853054	.2412557	.0093222	.8720591
2010	1.055028	-.2194198	-.0890163	.0058589	.9735702
2011	1.000181	.0729009	.2125028	.0081102	.9844586
2012	.9512694	-.2922886	-.1280966	.0011823	.8894002
2013	1.011717	-.2715725	-.0400953	.0048924	.9217948
2014	1.137958	.1105996	.2687345	.004258	.8929554
2015	.7532716	.1605369	-.2089993	-.0009442	.9084711
2016	.9640665	-.1903186	.0658889	.0024958	.9221475
2017	.8852559	-.0967437	-.0016787	.0038623	.5446687
2018	1.021655	.213598	.04127	.004675	.9661888
2019	1.168665	.0159152	.0717299	-.0010398	.9331131
Mean	.964509	-.0169409	.042955	.0040274	.8877217
N	14	14	14	14	14