

APPENDICES

Appendix A

Appendix A.1

Estimates of CAPM, F&F and C-F&F

MODEL	OLS	GARCH	TGARCH	EGARCH
CAPM				
INTERCEPT	0.0002 ^a	0.0001 ^a	0.0000	0.0000
%Significant	7.48%	27.10%	14.80%	27.10%
MKT	0.7624 ^a	0.7618 ^a	0.7595 ^a	0.7612 ^a
%Significant	98.91%	99.38%	99.38%	99.69%
Adjusted R ²	0.2693	0.2633	0.2623	0.2623
AIC	-5.3883	-5.5981	-5.6026	-5.6054
Best AIC	0.78%	0.93%	0.62%	0.31%
Best Adjusted R ²	0.16%	0.31%	0.16%	0.47%
F&F				
INTERCEPT	-0.0001 ^b	-0.0001 ^a	-0.0002 ^a	-0.0002 ^a
%Significant	4.83%	25.70%	21.03%	33.96%
MKT	0.9771 ^a	0.9588 ^a	0.9561 ^a	0.9593 ^a
%Significant	99.07%	99.53%	99.53%	99.84%
HML	0.3087 ^a	0.2818 ^a	0.2813 ^a	0.2774 ^a
%Significant	72.43%	79.44%	80.22%	81.46%
SMB	0.6870 ^a	0.6840 ^a	0.6805 ^a	0.6780 ^a
%Significant	91.12%	93.30%	92.99%	94.55%
Adjusted R ²	0.3295	0.3219	0.3215	0.3193
AIC	-5.4904	-5.7137	-5.7174	-5.7279
Best AIC	1.87%	1.87%	1.40%	1.56%
Best Adjusted R ²	0.31%	1.25%	2.02%	1.71%
C-F&F				
INTERCEPT	0.0000	-0.0001 ^a	-0.0002 ^a	-0.0002 ^a
%Significant	3.27%	24.30%	19.16%	30.37%
MKT	0.9787 ^a	0.9597 ^a	0.9581 ^a	0.9616 ^a
%Significant	99.07%	99.38%	99.22%	99.53%
HML	0.3027 ^a	0.2826 ^a	0.2838 ^a	0.2694 ^a
%Significant	73.21%	79.44%	79.60%	80.37%
SMB	0.6979 ^a	0.6889 ^a	0.6827 ^a	0.6789 ^a
%Significant	91.12%	92.83%	92.06%	92.99%
MOM	-0.0459 ^a	-0.0196 ^a	-0.0178 ^b	-0.0223 ^a
%Significant	31.15%	53.12%	52.65%	57.63%
Adjusted R ²	0.3318	0.3232	0.3220	0.3186
AIC	-5.4929	-5.7161	-5.7200	-5.7300
Best AIC	1.40%	1.40%	1.25%	1.87%
Best Adjusted R ²	0.78%	1.87%	1.56%	1.40%

Appendix A.2

Estimates of PSPR1, PSPR2 and PSPR3

MODEL	OLS	GARCH	TGARCH	EGARCH
PSPR1				
INTERCEPT	0.0001 ^a	0.0001 ^a	0.0000	0.0000
%Significant	9.19%	27.57%	18.07%	31.15%
MKT	0.9048 ^a	0.8910 ^a	0.8868 ^a	0.8915 ^a
%Significant	99.22%	99.69%	99.53%	100.00%
PSPR	0.6279 ^a	0.5910 ^a	0.5837 ^a	0.5844 ^a
%Significant	84.58%	88.94%	88.32%	88.32%
Adjusted R ²	0.3042	0.2985	0.2977	0.2969
AIC	-5.4407	-5.6544	-5.6578	-5.6646
Best AIC	1.25%	0.47%	1.09%	0.78%
Best Adjusted R ²	0.31%	2.18%	2.18%	2.34%
PSPR2				
INTERCEPT	-0.0001 ^b	-0.0001 ^a	-0.0002 ^a	-0.0002 ^a
%Significant	4.98%	24.61%	20.40%	35.05%
MKT	0.9809 ^a	0.9632 ^a	0.9584 ^a	0.9644 ^a
%Significant	99.22%	99.53%	99.53%	99.84%
HML	0.2960 ^a	0.2726 ^a	0.2748 ^a	0.2709 ^a
%Significant	72.43%	78.82%	79.75%	81.62%
SMB	0.6367 ^a	0.6487 ^a	0.6579 ^a	0.6317 ^a
%Significant	86.92%	92.06%	92.21%	91.90%
PSPR	0.0861 ^a	0.0576 ^a	0.0409 ^b	0.0716 ^a
%Significant	59.50%	73.52%	73.99%	76.01%
Adjusted R ²	0.3348	0.3268	0.3264	0.3251
AIC	-5.4976	-5.7191	-5.7224	-5.7307
Best AIC	10.59%	10.59%	9.35%	8.72%
Best Adjusted R ²	7.63%	9.35%	10.12%	9.50%
PSPR3				
INTERCEPT	0.0000	-0.0001 ^a	-0.0002 ^a	-0.0002 ^a
%Significant	3.43%	22.90%	19.00%	32.24%
MKT	0.9815 ^a	0.9625 ^a	0.9598 ^a	0.9677 ^a
%Significant	99.22%	99.53%	99.53%	100.00%
HML	0.2939 ^a	0.2777 ^a	0.2811 ^a	0.2635 ^a
%Significant	72.90%	78.97%	78.97%	81.62%
SMB	0.6632 ^a	0.6625 ^a	0.6604 ^a	0.6415 ^a
%Significant	89.25%	92.99%	93.61%	92.52%
MOM	-0.0439 ^a	-0.0205 ^b	-0.0212 ^b	-0.0217 ^b
%Significant	32.24%	55.92%	55.45%	61.84%
PSPR	0.0558 ^b	0.0419 ^b	0.0353 ^c	0.0634 ^a
%Significant	59.03%	74.30%	73.21%	75.86%
Adjusted R ²	0.3372	0.3281	0.3272	0.3264
AIC	-5.5005	-5.7228	-5.7273	-5.7340
Best AIC	15.42%	16.98%	17.76%	17.60%
Best Adjusted R ²	19.63%	14.95%	14.17%	14.02%

Appendix A.3

Estimates of TO1, TO2 and TO3

MODEL	OLS	GARCH	TGARCH	EGARCH
TO1				
INTERCEPT	0.0002 ^a	0.0002 ^a	0.0001 ^a	0.0001 ^b
%Significant	17.29%	35.51%	23.68%	35.67%
MKT	0.8178 ^a	0.8197 ^a	0.8181 ^a	0.8161 ^a
%Significant	99.07%	99.53%	99.38%	99.69%
TO	0.3307 ^a	0.3580 ^a	0.3538 ^a	0.3448 ^a
%Significant	77.10%	84.42%	83.96%	83.96%
Adjusted R ²	0.2862	0.2800	0.2796	0.2782
AIC	-5.4136	-5.6222	-5.6249	-5.6322
Best AIC	0.47%	1.40%	0.93%	0.93%
Best Adjusted R ²	0.47%	1.56%	1.40%	1.56%
TO2				
INTERCEPT	-0.0001 ^a	-0.0001 ^a	-0.0002 ^a	-0.0002 ^a
%Significant	4.98%	24.30%	17.29%	33.64%
MKT	0.9667 ^a	0.9548 ^a	0.9499 ^a	0.9583 ^a
%Significant	99.22%	99.38%	99.38%	99.84%
HML	0.3175 ^a	0.2765 ^a	0.2791 ^a	0.2756 ^a
%Significant	73.83%	80.22%	80.84%	82.71%
SMB	0.7058 ^a	0.6871 ^a	0.6925 ^a	0.6791 ^a
%Significant	91.74%	93.46%	93.93%	93.93%
TO	-0.0732 ^b	-0.0234	-0.0425 ^c	-0.0070
%Significant	59.03%	67.91%	69.31%	70.72%
Adjusted R ²	0.3357	0.3274	0.3267	0.3255
AIC	-5.4988	-5.7201	-5.7244	-5.7348
Best AIC	13.71%	12.31%	13.40%	13.55%
Best Adjusted R ²	9.81%	18.54%	17.91%	17.91%
TO3				
INTERCEPT	-0.0001 ^b	-0.0001 ^a	-0.0002 ^a	-0.0002 ^a
%Significant	3.89%	22.43%	16.36%	31.00%
MKT	0.9699 ^a	0.9562 ^a	0.9522 ^a	0.9611 ^a
%Significant	99.38%	99.53%	99.38%	100.00%
HML	0.3112 ^a	0.2845 ^a	0.2845 ^a	0.2775 ^a
%Significant	73.68%	79.91%	80.53%	82.09%
SMB	0.7172 ^a	0.6968 ^a	0.6981 ^a	0.6891 ^a
%Significant	92.37%	94.55%	94.55%	93.93%
MOM	-0.0492 ^a	-0.0260 ^a	-0.0258 ^a	-0.0310 ^a
%Significant	30.53%	53.58%	53.43%	57.48%
TO	-0.0725 ^b	-0.0267	-0.0446 ^c	-0.0198
%Significant	58.26%	67.29%	66.20%	69.00%
Adjusted R ²	0.3380	0.3291	0.3277	0.3264
AIC	-5.5012	-5.7208	-5.7279	-5.7386
Best AIC	19.78%	18.22%	19.63%	18.38%
Best Adjusted R ²	24.92%	16.20%	17.76%	17.76%

Appendix A.4

Estimates of AM1, AM2 and AM3

MODEL	OLS	GARCH	TGARCH	EGARCH
AM1				
INTERCEPT	0.0001 ^a	0.0001 ^b	0.0000 ^c	0.0000
%Significant	6.07%	26.01%	16.04%	28.66%
MKT	0.8965 ^a	0.8865 ^a	0.8821 ^a	0.8864 ^a
%Significant	99.22%	99.53%	99.22%	99.84%
AM	0.5274 ^a	0.5170 ^a	0.5104 ^a	0.5130 ^a
%Significant	83.80%	88.79%	88.16%	89.72%
Adjusted R ²	0.3037	0.2981	0.2974	0.2966
AIC	-5.4425	-5.6562	-5.6596	-5.6666
Best AIC	1.40%	1.09%	0.16%	1.09%
Best Adjusted R ²	0.62%	1.40%	1.25%	0.93%
AM2				
INTERCEPT	-0.0001 ^b	-0.0001 ^a	-0.0002 ^a	-0.0002 ^a
%Significant	4.83%	25.86%	19.63%	33.80%
MKT	0.9761 ^a	0.9582 ^a	0.9554 ^a	0.9631 ^a
%Significant	99.22%	99.22%	99.69%	99.84%
HML	0.3014 ^a	0.2730 ^a	0.2717 ^a	0.2665 ^a
%Significant	72.74%	79.60%	80.06%	81.62%
SMB	0.6719 ^a	0.6713 ^a	0.6736 ^a	0.6524 ^a
%Significant	89.41%	91.28%	92.83%	92.68%
AM	0.0194	0.0185	0.0096	0.0400 ^b
%Significant	53.58%	67.45%	67.91%	69.16%
Adjusted R ²	0.3351	0.3262	0.3256	0.3252
AIC	-5.4978	-5.7198	-5.7243	-5.7297
Best AIC	5.76%	6.70%	6.39%	6.39%
Best Adjusted R ²	4.21%	6.23%	5.45%	6.54%
AM3				
INTERCEPT	0.0000 ^c	-0.0001 ^a	-0.0002 ^a	-0.0002 ^a
%Significant	3.12%	24.61%	19.31%	32.09%
MKT	0.9775 ^a	0.9597 ^a	0.9583 ^a	0.9646 ^a
%Significant	99.22%	99.53%	99.53%	100.00%
HML	0.2985 ^a	0.2686 ^a	0.2722 ^a	0.2626 ^a
%Significant	73.36%	80.37%	80.69%	81.78%
SMB	0.6942 ^a	0.6730 ^a	0.6738 ^a	0.6586 ^a
%Significant	90.50%	92.99%	93.77%	92.99%
MOM	-0.0498 ^a	-0.0243 ^a	-0.0228 ^b	-0.0274 ^a
%Significant	30.22%	53.74%	53.27%	57.94%
AM	0.0000	0.0144	0.0088	0.0346 ^c
%Significant	53.43%	65.73%	66.82%	67.29%
Adjusted R ²	0.3374	0.3281	0.3272	0.3257
AIC	-5.5004	-5.7219	-5.7281	-5.7352
Best AIC	9.66%	9.50%	10.12%	9.03%
Best Adjusted R ²	12.15%	8.57%	8.41%	8.10%

Appendix A.5

Daily mean returns of liquidity beta sorted portfolios

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
PSPR											
Average	0.0002	0.0003 ^c	0.0003 ^b	0.0003 ^c	0.0003 ^b	0.0004 ^a	0.0004 ^a	0.0003 ^b	0.0005 ^a	0.0006 ^a	0.0004 ^b
TO											
Average	0.0003	0.0002	0.0003 ^b	0.0003 ^b	0.0003 ^b	0.0004 ^a	0.0004 ^a	0.0004 ^a	0.0004 ^a	0.0004 ^a	0.0001
AM											
Average	0.0001	0.0003 ^b	0.0002 ^c	0.0003 ^b	0.0005 ^a	0.0004 ^a	0.0004 ^a	0.0003 ^b	0.0004 ^a	0.0006 ^a	0.0005 ^a

Appendix A.6

Asset pricing models of proportional spread beta sorted portfolios

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
CAPM											
INTERCEPT	-0.0001	0.0001	0.0001	0.0001	0.0002 ^c	0.0003 ^a	0.0003 ^a	0.0002	0.0004 ^a	0.0004 ^a	0.0005 ^a
MKT	0.9884 ^a	0.9024 ^a	0.8613 ^a	0.8111 ^a	0.7501 ^a	0.6984 ^a	0.6623 ^a	0.6729 ^a	0.6776 ^a	0.7209 ^a	-0.2675 ^a
Adjusted R ²	0.8378	0.8900	0.8678	0.8096	0.7624	0.7011	0.6630	0.6636	0.6349	0.5905	0.1466
AIC	-7.5123	-8.1425	-8.0271	-7.7130	-7.5876	-7.4174	-7.3475	-7.3189	-7.1783	-6.8675	-6.7240
GRS	3.9884										
F&F											
INTERCEPT	-0.0002 ^b	-0.0001 ^c	-0.0001	-0.0002 ^b	-0.0001 ^c	0.0000	0.0000	-0.0001 ^b	0.0000	0.0000	0.0002 ^c
MKT	1.0998 ^a	1.0280 ^a	1.0067 ^a	0.9937 ^a	0.9567 ^a	0.9346 ^a	0.9093 ^a	0.9187 ^a	0.9420 ^a	0.9984 ^a	-0.1013 ^a
HML	0.3524 ^a	0.2871 ^a	0.2910 ^a	0.4089 ^a	0.3728 ^a	0.3817 ^a	0.4291 ^a	0.4194 ^a	0.4188 ^a	0.3433 ^a	-0.0091
SMB	0.3377 ^a	0.3955 ^a	0.4636 ^a	0.5762 ^a	0.6642 ^a	0.7653 ^a	0.7962 ^a	0.7934 ^a	0.8578 ^a	0.9132 ^a	0.5755 ^a
Adjusted R ²	0.8676	0.9327	0.9281	0.9110	0.9026	0.8956	0.8864	0.8782	0.8694	0.8062	0.3160
AIC	-7.7142	-8.6332	-8.6350	-8.4724	-8.4790	-8.4688	-8.4347	-8.3345	-8.2060	-7.6153	-6.9447
GRS	2.6826										
C-F&F											
INTERCEPT	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	-0.0001	0.0001	0.0001	0.0002
MKT	1.1039 ^a	1.0293 ^a	1.0078 ^a	0.9961 ^a	0.9582 ^a	0.9351 ^a	0.9100 ^a	0.9212 ^a	0.9438 ^a	1.0013 ^a	-0.1026 ^a
HML	0.3288 ^a	0.2793 ^a	0.2844 ^a	0.3952 ^a	0.3643 ^a	0.3792 ^a	0.4252 ^a	0.4047 ^a	0.4087 ^a	0.3270 ^a	-0.0017
SMB	0.3713 ^a	0.4065 ^a	0.4730 ^a	0.5957 ^a	0.6763 ^a	0.7689 ^a	0.8019 ^a	0.8144 ^a	0.8721 ^a	0.9363 ^a	0.5650 ^a
MOM	-0.1337 ^a	-0.0440 ^a	-0.0373 ^a	-0.0775 ^a	-0.0481 ^a	-0.0144	-0.0223	-0.0837 ^a	-0.0572 ^a	-0.0919 ^a	0.0419 ^c
Adjusted R ²	0.8752	0.9337	0.9289	0.9146	0.9041	0.8957	0.8868	0.8833	0.8716	0.8110	0.3176
AIC	-7.7731	-8.6485	-8.6459	-8.5141	-8.4947	-8.4697	-8.4375	-8.3769	-8.2229	-7.6398	-6.9468
GRS	2.3959										
PSPR1											
INTERCEPT	-0.0001	0.0000	0.0001	0.0000	0.0001	0.0002 ^b	0.0002 ^b	0.0000	0.0002 ^a	0.0002 ^b	0.0003 ^b
MKT	1.0042 ^a	0.9464 ^a	0.9329 ^a	0.9158 ^a	0.8799 ^a	0.8548 ^a	0.8282 ^a	0.8521 ^a	0.8817 ^a	0.9688 ^a	-0.0354 ^b
PSPR	0.0758 ^a	0.2112 ^a	0.3437 ^a	0.5028 ^a	0.6235 ^a	0.7511 ^a	0.7965 ^a	0.8609 ^a	0.9803 ^a	1.1908 ^a	1.1150 ^a
Adjusted R ²	0.8385	0.8969	0.8874	0.8537	0.8371	0.8162	0.7990	0.8178	0.8234	0.8192	0.5086
AIC	-7.5162	-8.2069	-8.1872	-7.9764	-7.9649	-7.9033	-7.8643	-7.9319	-7.9046	-7.6848	-7.2756
GRS	4.0471										
PSPR2											
INTERCEPT	-0.0002 ^b	-0.0001 ^b	-0.0001	-0.0002 ^b	-0.0001 ^c	0.0000	0.0000	-0.0001 ^c	0.0001	0.0001	0.0003 ^a
MKT	1.0824 ^a	1.0168 ^a	1.0012 ^a	0.9932 ^a	0.9592 ^a	0.9398 ^a	0.9161 ^a	0.9308 ^a	0.9590 ^a	1.0278 ^a	-0.0546 ^a
HML	0.4134 ^a	0.3263 ^a	0.3105 ^a	0.4106 ^a	0.3643 ^a	0.3635 ^a	0.4053 ^a	0.3767 ^a	0.3591 ^a	0.2399 ^a	-0.1736 ^a
SMB	0.5900 ^a	0.5575 ^a	0.5440 ^a	0.5832 ^a	0.6290 ^a	0.6901 ^a	0.6977 ^a	0.6165 ^a	0.6112 ^a	0.4861 ^a	-0.1039 ^a
PSPR	-0.4454 ^a	-0.2860 ^a	-0.1420 ^a	-0.0123	0.0623 ^c	0.1328 ^a	0.1740 ^a	0.3122 ^a	0.4353 ^a	0.7541 ^a	1.1996 ^a
Adjusted R ²	0.8791	0.9388	0.9297	0.9109	0.9029	0.8973	0.8895	0.8880	0.8873	0.8503	0.5175
AIC	-7.8056	-8.7278	-8.6572	-8.4720	-8.4822	-8.4850	-8.4621	-8.4176	-8.3528	-7.8733	-7.2934
GRS	4.0596										
PSPR3											
INTERCEPT	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	-0.0001	0.0001	0.0001	0.0002 ^b
MKT	1.0828 ^a	1.0170 ^a	1.0013 ^a	0.9934 ^a	0.9592 ^a	0.9398 ^a	0.9161 ^a	0.9309 ^a	0.9590 ^a	1.0279 ^a	-0.0549 ^a
HML	0.3990 ^a	0.3204 ^a	0.3063 ^a	0.4042 ^a	0.3609 ^a	0.3635 ^a	0.4049 ^a	0.3725 ^a	0.3581 ^a	0.2387 ^a	-0.1603 ^a
SMB	0.7204 ^a	0.6107 ^a	0.5818 ^a	0.6405 ^a	0.6594 ^a	0.6907 ^a	0.7010 ^a	0.6543 ^a	0.6205 ^a	0.4969 ^a	-0.2235 ^a
MOM	-0.1939 ^a	-0.0792 ^a	-0.0561 ^a	-0.0852 ^a	-0.0452 ^a	-0.0009	-0.0050	-0.0561 ^a	-0.0138	-0.0161	0.1778 ^a
PSPR	-0.5897 ^a	-0.3449 ^a	-0.1838 ^a	-0.0757 ^a	0.0286	0.1322 ^a	0.1704 ^a	0.2705 ^a	0.4250 ^a	0.7421 ^a	1.3318 ^a
Adjusted R ²	0.8940	0.9419	0.9313	0.9150	0.9042	0.8973	0.8895	0.8901	0.8874	0.8504	0.5472
AIC	-7.9361	-8.7801	-8.6810	-8.5188	-8.4949	-8.4845	-8.4617	-8.4362	-8.3534	-7.8737	-7.3567
GRS	2.6461										

Appendix A.7

Asset pricing models of turnover rate beta sorted portfolios

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
CAPM											
INTERCEPT	0.0001	0.0000	0.0001	0.0001	0.0002 ^c	0.0003 ^a	0.0002 ^b	0.0003 ^a	0.0003 ^a	0.0003 ^a	0.0002
MKT	0.9674 ^a	0.8688 ^a	0.8255 ^a	0.8032 ^a	0.7912 ^a	0.7377 ^a	0.7126 ^a	0.6694 ^a	0.6670 ^a	0.7023 ^a	-0.2651 ^a
Adjusted R ²	0.8110	0.8110	0.8121	0.8056	0.8081	0.7567	0.7274	0.6794	0.6815	0.6664	0.1447
AIC	-7.1058	-7.5845	-7.6941	-7.7071	-7.7532	-7.5901	-7.5061	-7.4006	-7.4178	-7.2456	-6.7269
GRS	4.7084										
F&F											
INTERCEPT	-0.0001	-0.0002 ^b	-0.0001 ^c	-0.0001 ^a	-0.0001 ^c	0.0000	-0.0001 ^c	0.0000	0.0000	0.0000	0.0001
MKT	1.1215 ^a	1.0300 ^a	1.0081 ^a	1.0027 ^a	0.9884 ^a	0.9585 ^a	0.9437 ^a	0.9130 ^a	0.8977 ^a	0.9240 ^a	-0.1974 ^a
HML	0.2277 ^a	0.3211 ^a	0.3554 ^a	0.3772 ^a	0.3923 ^a	0.3971 ^a	0.4172 ^a	0.4291 ^a	0.4460 ^a	0.3426 ^a	0.1148 ^a
SMB	0.5021 ^a	0.5145 ^a	0.5836 ^a	0.6390 ^a	0.6293 ^a	0.7099 ^a	0.7431 ^a	0.7845 ^a	0.7378 ^a	0.7206 ^a	0.2185 ^a
Adjusted R ²	0.8145	0.8790	0.9087	0.9263	0.9305	0.9210	0.9130	0.8975	0.8799	0.8277	0.1672
AIC	-7.3325	-8.0303	-8.4159	-8.6762	-8.7683	-8.7146	-8.6475	-8.5399	-8.3923	-7.9060	-6.7530
GRS	1.9647										
C-F&F											
INTERCEPT	0.0000	-0.0001	-0.0001	-0.0001 ^b	-0.0001	0.0000	-0.0001	0.0000	0.0000	0.0000	0.0000
MKT	1.1271 ^a	1.0337 ^a	1.0102 ^a	1.0042 ^a	0.9894 ^a	0.9595 ^a	0.9446 ^a	0.9136 ^a	0.8988 ^a	0.9254 ^a	-0.2017 ^a
HML	0.1960 ^a	0.3001 ^a	0.3432 ^a	0.3681 ^a	0.3865 ^a	0.3916 ^a	0.4120 ^a	0.4259 ^a	0.4396 ^a	0.3348 ^a	0.1389 ^a
SMB	0.5473 ^a	0.5443 ^a	0.6009 ^a	0.6518 ^a	0.6375 ^a	0.7177 ^a	0.7505 ^a	0.7891 ^a	0.7470 ^a	0.7316 ^a	0.1843 ^a
MOM	-0.1800 ^a	-0.1187 ^a	-0.0691 ^a	-0.0511 ^a	-0.0327 ^a	-0.0313 ^a	-0.0298 ^b	-0.0180	-0.0363 ^b	-0.0437 ^a	0.1362 ^a
Adjusted R ²	0.8277	0.8865	0.9116	0.9279	0.9312	0.9217	0.9136	0.8977	0.8809	0.8290	0.1860
AIC	-7.4059	-8.0941	-8.4469	-8.6980	-8.7778	-8.7227	-8.6543	-8.5418	-8.4002	-7.9130	-6.7756
GRS	1.4251										
TO1											
INTERCEPT	0.0000	0.0001	0.0002 ^c	0.0002 ^b	0.0002 ^a	0.0004 ^a	0.0003 ^a	0.0004 ^a	0.0004 ^a	0.0005 ^a	0.0004 ^a
MKT	0.9203 ^a	0.8813 ^a	0.8594 ^a	0.8511 ^a	0.8527 ^a	0.8164 ^a	0.8044 ^a	0.7721 ^a	0.7703 ^a	0.8290 ^a	-0.0914 ^a
TO	-0.3200 ^a	0.0853 ^b	0.2309 ^a	0.3260 ^a	0.4184 ^a	0.5348 ^a	0.6246 ^a	0.6981 ^a	0.7026 ^a	0.8619 ^a	1.1819 ^a
Adjusted R ²	0.7754	0.8117	0.8183	0.8186	0.8302	0.7956	0.7821	0.7517	0.7555	0.7646	0.4266
AIC	-7.1413	-7.5880	-7.7273	-7.7758	-7.8753	-7.7640	-7.7298	-7.6558	-7.6820	-7.5941	-7.1266
GRS	8.3826										
TO2											
INTERCEPT	-0.0004 ^a	-0.0003 ^a	-0.0002 ^b	-0.0002 ^a	-0.0001 ^c	0.0000	0.0000	0.0000	0.0001	0.0002 ^b	0.0005 ^a
MKT	1.0725 ^a	1.0105 ^a	0.9964 ^a	0.9957 ^a	0.9887 ^a	0.9643 ^a	0.9548 ^a	0.9279 ^a	0.9146 ^a	0.9554 ^a	-0.1171 ^a
HML	0.3818 ^a	0.3825 ^a	0.3921 ^a	0.3992 ^a	0.3913 ^a	0.3787 ^a	0.3824 ^a	0.3824 ^a	0.3928 ^a	0.2440 ^a	-0.1377 ^a
SMB	0.7054 ^a	0.5956 ^a	0.6321 ^a	0.6680 ^a	0.6279 ^a	0.6857 ^a	0.6971 ^a	0.7230 ^a	0.6676 ^a	0.5905 ^a	-0.1149 ^a
TO	-0.7740 ^a	-0.3086 ^a	-0.1846 ^a	-0.1105 ^a	0.0053	0.0922 ^a	0.1751 ^a	0.2343 ^a	0.2674 ^a	0.4950 ^a	1.2690 ^a
Adjusted R ²	0.8540	0.8872	0.9120	0.9275	0.9305	0.9220	0.9165	0.9041	0.8887	0.8543	0.4342
AIC	-7.5715	-8.1002	-8.4518	-8.6925	-8.7679	-8.7262	-8.6885	-8.6069	-8.4680	-8.0734	-7.1393
GRS	9.4755										
TO3											
INTERCEPT	-0.0002 ^b	-0.0002 ^b	-0.0001 ^c	-0.0001 ^a	-0.0001	0.0000	0.0000	0.0001	0.0001 ^c	0.0002 ^b	0.0004 ^a
MKT	1.0779 ^a	1.0141 ^a	0.9985 ^a	0.9972 ^a	0.9897 ^a	0.9653 ^a	0.9557 ^a	0.9284 ^a	0.9157 ^a	0.9566 ^a	-0.1213 ^a
HML	0.3503 ^a	0.3618 ^a	0.3801 ^a	0.3903 ^a	0.3856 ^a	0.3734 ^a	0.3774 ^a	0.3795 ^a	0.3867 ^a	0.2368 ^a	-0.1135 ^a
SMB	0.7522 ^a	0.6262 ^a	0.6499 ^a	0.6812 ^a	0.6363 ^a	0.6936 ^a	0.7045 ^a	0.7274 ^a	0.6767 ^a	0.6013 ^a	-0.1509 ^a
MOM	-0.1825 ^a	-0.1197 ^a	-0.0697 ^a	-0.0514 ^a	-0.0327 ^a	-0.0310 ^a	-0.0292 ^b	-0.0173	-0.0354 ^b	-0.0422 ^a	0.1403 ^a
TO	-0.7776 ^a	-0.3109 ^a	-0.1860 ^a	-0.1115 ^a	0.0046	0.0916 ^a	0.1745 ^a	0.2340 ^a	0.2667 ^a	0.4942 ^a	1.2718 ^a
Adjusted R ²	0.8675	0.8949	0.9148	0.9291	0.9312	0.9226	0.9171	0.9043	0.8896	0.8555	0.4542
AIC	-7.6687	-8.1701	-8.4846	-8.7149	-8.7773	-8.7342	-8.6953	-8.6088	-8.4761	-8.0811	-7.1751
GRS	4.7862										

Appendix A.8

Asset pricing models of illiquidity ratio beta sorted portfolios

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
CAPM											
INTERCEPT	-0.0001	0.0001	0.0001	0.0001	0.0003 ^a	0.0002 ^a	0.0003 ^a	0.0002 ^c	0.0003 ^b	0.0004 ^a	0.0006 ^a
MKT	0.9423 ^a	0.8407 ^a	0.7808 ^a	0.7786 ^a	0.7720 ^a	0.7374 ^a	0.7011 ^a	0.7095 ^a	0.7154 ^a	0.7670 ^a	-0.1753 ^a
Adjusted R ²	0.7926	0.8232	0.7945	0.7898	0.7943	0.7472	0.6982	0.7013	0.6804	0.6599	0.0655
AIC	-7.3067	-7.7318	-7.6942	-7.6710	-7.7156	-7.5402	-7.3960	-7.3868	-7.2725	-7.0405	-6.6750
GRS	3.8994										
F&F											
INTERCEPT	-0.0002 ^c	-0.0001	-0.0002 ^b	-0.0001 ^b	0.0000	-0.0001	0.0000	-0.0001 ^b	-0.0001	0.0001	0.0003 ^b
MKT	1.0368 ^a	0.9826 ^a	0.9608 ^a	0.9790 ^a	0.9810 ^a	0.9682 ^a	0.9522 ^a	0.9494 ^a	0.9613 ^a	1.0158 ^a	-0.0210
HML	0.2980 ^a	0.3042 ^a	0.3584 ^a	0.3784 ^a	0.3964 ^a	0.4070 ^a	0.4436 ^a	0.3883 ^a	0.3843 ^a	0.3486 ^a	0.0506
SMB	0.2870 ^a	0.4500 ^a	0.5744 ^a	0.6420 ^a	0.6694 ^a	0.7433 ^a	0.8085 ^a	0.7773 ^a	0.7985 ^a	0.8134 ^a	0.5265 ^a
Adjusted R ²	0.8149	0.8808	0.8975	0.9168	0.9358	0.9247	0.9153	0.8958	0.8756	0.8296	0.2064
AIC	-7.4195	-8.1254	-8.3889	-8.5975	-8.8790	-8.7507	-8.6665	-8.4393	-8.2157	-7.7308	-6.8380
GRS	2.7846										
C-F&F											
INTERCEPT	-0.0001	0.0000	-0.0001	-0.0001 ^c	0.0000	-0.0001	0.0000	-0.0001 ^c	0.0000	0.0001 ^c	0.0002 ^c
MKT	1.0426 ^a	0.9851 ^a	0.9639 ^a	0.9801 ^a	0.9819 ^a	0.9685 ^a	0.9529 ^a	0.9507 ^a	0.9629 ^a	1.0176 ^a	-0.0250
HML	0.2648 ^a	0.2904 ^a	0.3411 ^a	0.3720 ^a	0.3914 ^a	0.4054 ^a	0.4394 ^a	0.3808 ^a	0.3756 ^a	0.3384 ^a	0.0736 ^c
SMB	0.3342 ^a	0.4696 ^a	0.5990 ^a	0.6511 ^a	0.6765 ^a	0.7456 ^a	0.8145 ^a	0.7879 ^a	0.8110 ^a	0.8280 ^a	0.4938 ^a
MOM	-0.1882 ^a	-0.0781 ^a	-0.0977 ^a	-0.0363 ^a	-0.0279 ^a	-0.0091	-0.0238 ^b	-0.0422 ^a	-0.0495 ^a	-0.0580 ^a	0.1302 ^a
Adjusted R ²	0.8306	0.8843	0.9036	0.9177	0.9363	0.9247	0.9157	0.8970	0.8772	0.8314	0.2243
AIC	-7.5079	-8.1549	-8.4507	-8.6074	-8.8866	-8.7509	-8.6708	-8.4508	-8.2283	-7.7413	-6.8605
GRS	1.6661										
AM1											
INTERCEPT	-0.0001	0.0001	-0.0001	0.0000	0.0001 ^c	0.0001	0.0001	0.0000	0.0000	0.0002 ^b	0.0003 ^b
MKT	0.9491 ^a	0.8999 ^a	0.8811 ^a	0.9034 ^a	0.9046 ^a	0.8886 ^a	0.8722 ^a	0.8855 ^a	0.8918 ^a	0.9769 ^a	0.0278
AM	0.0299	0.2577 ^a	0.4367 ^a	0.5431 ^a	0.5774 ^a	0.6585 ^a	0.7450 ^a	0.7662 ^a	0.7680 ^a	0.9141 ^a	0.8842 ^a
Adjusted R ²	0.7927	0.8361	0.8363	0.8545	0.8691	0.8476	0.8309	0.8390	0.8124	0.8177	0.3469
AIC	-7.3069	-7.8078	-7.9215	-8.0384	-8.1673	-8.0456	-7.9750	-8.0043	-7.8050	-7.6640	-7.0331
GRS	2.3928										
AM2											
INTERCEPT	-0.0002 ^c	-0.0001	-0.0002 ^b	-0.0001 ^b	0.0000	-0.0001	0.0000	-0.0001 ^b	-0.0001	0.0001	0.0003 ^b
MKT	1.0186 ^a	0.9721 ^a	0.9564 ^a	0.9786 ^a	0.9815 ^a	0.9703 ^a	0.9568 ^a	0.9581 ^a	0.9688 ^a	1.0344 ^a	0.0158
HML	0.4193 ^a	0.3746 ^a	0.3882 ^a	0.3809 ^a	0.3930 ^a	0.3930 ^a	0.4125 ^a	0.3300 ^a	0.3347 ^a	0.2245 ^a	-0.1948 ^a
SMB	0.5780 ^a	0.6191 ^a	0.6461 ^a	0.6481 ^a	0.6612 ^a	0.7094 ^a	0.7339 ^a	0.6373 ^a	0.6794 ^a	0.5154 ^a	-0.0626
AM	-0.4662 ^a	-0.2708 ^a	-0.1148 ^a	-0.0097	0.0131	0.0542 ^b	0.1196 ^a	0.2242 ^a	0.1908 ^a	0.4774 ^a	0.9436 ^a
Adjusted R ²	0.8302	0.8875	0.8988	0.9168	0.9358	0.9250	0.9169	0.9013	0.8795	0.8498	0.3575
AIC	-7.5059	-8.1834	-8.4018	-8.5971	-8.8788	-8.7545	-8.6853	-8.4936	-8.2466	-7.8571	-7.0489
GRS	2.7994										
AM3											
INTERCEPT	0.0000	0.0000	-0.0001	-0.0001 ^c	0.0000	-0.0001	0.0000	-0.0001 ^b	-0.0001	0.0001	0.0002
MKT	1.0207 ^a	0.9730 ^a	0.9573 ^a	0.9790 ^a	0.9817 ^a	0.9703 ^a	0.9569 ^a	0.9583 ^a	0.9691 ^a	1.0346 ^a	0.0139
HML	0.4127 ^a	0.3717 ^a	0.3852 ^a	0.3799 ^a	0.3922 ^a	0.3928 ^a	0.4122 ^a	0.3294 ^a	0.3338 ^a	0.2241 ^a	-0.1886 ^a
SMB	0.7269 ^a	0.6854 ^a	0.7159 ^a	0.6720 ^a	0.6785 ^a	0.7121 ^a	0.7421 ^a	0.6513 ^a	0.7000 ^a	0.5245 ^a	-0.2023 ^a
MOM	-0.2439 ^a	-0.1087 ^a	-0.1143 ^a	-0.0393 ^a	-0.0282 ^a	-0.0044	-0.0135	-0.0229 ^b	-0.0338 ^b	-0.0150	0.2289 ^a
AM	-0.6066 ^a	-0.3333 ^a	-0.1806 ^a	-0.0323	-0.0031	0.0517 ^b	0.1118 ^a	0.2110 ^a	0.1714 ^a	0.4688 ^a	1.0753 ^a
Adjusted R ²	0.8552	0.8940	0.9068	0.9177	0.9363	0.9250	0.9170	0.9016	0.8801	0.8499	0.4103
AIC	-7.6650	-8.2423	-8.4839	-8.6081	-8.8861	-8.7541	-8.6862	-8.4966	-8.2520	-7.8574	-7.1343
GRS	1.8950										

Appendix A.9

Daily mean returns of liquidity sorted portfolios

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
PSPR											
Average	0.0003 ^c	0.0003 ^c	0.0003 ^b	0.0003 ^b	0.0003 ^b	0.0004 ^a	0.0004 ^a	0.0004 ^a	0.0004 ^a	0.0005 ^a	0.0003 ^c
TO											
Average	0.0007 ^a	0.0003 ^c	0.0003 ^b	0.0003 ^c	0.0002	0.0004 ^b	0.0003 ^b	0.0003 ^c	0.0002	0.0004 ^a	-0.0003 ^b
AM											
Average	0.0003 ^c	0.0003	0.0002	0.0003 ^b	0.0003 ^c	0.0003 ^b	0.0003 ^c	0.0004 ^a	0.0006 ^a	0.0004 ^b	0.0001
SIZE											
Average	0.0002 ^c	0.0002	0.0002	0.0002	0.0003 ^b	0.0003 ^b	0.0003 ^c	0.0005 ^a	0.0006 ^a	0.0007 ^a	0.0005 ^a

Appendix A.10

Asset pricing models of proportional spread sorted portfolios

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
CAPM											
INTERCEPT	0.0000	0.0001	0.0002 ^b	0.0001	0.0001	0.0002 ^b	0.0003 ^a	0.0002 ^b	0.0003 ^b	0.0004 ^b	0.0004 ^b
MKT	0.9761 ^a	0.8969 ^a	0.8201 ^a	0.7827 ^a	0.7490 ^a	0.7235 ^a	0.7112 ^a	0.6924 ^a	0.7102 ^a	0.6823 ^a	-0.2938 ^a
Adjusted R ²	0.9616	0.8933	0.8263	0.7791	0.7478	0.7239	0.7066	0.6705	0.6338	0.5614	0.1870
AIC	-9.1170	-8.1893	-7.8035	-7.5974	-7.5118	-7.4581	-7.4074	-7.2925	-7.0801	-6.8585	-6.8282
GRS	3.9188										
F&F											
INTERCEPT	0.0000	-0.0001	-0.0001	-0.0001 ^b	-0.0002 ^a	-0.0001	0.0000	-0.0001 ^c	-0.0001	0.0000	0.0000
MKT	0.9915 ^a	1.0114 ^a	1.0024 ^a	1.0001 ^a	0.9803 ^a	0.9654 ^a	0.9641 ^a	0.9584 ^a	0.9911 ^a	0.9687 ^a	-0.0228 ^c
HML	0.0885 ^a	0.2767 ^a	0.3564 ^a	0.4265 ^a	0.4360 ^a	0.4141 ^a	0.4179 ^a	0.4114 ^a	0.3504 ^a	0.3133 ^a	0.2248 ^a
SMB	0.0412 ^b	0.3590 ^a	0.5825 ^a	0.6943 ^a	0.7410 ^a	0.7807 ^a	0.8181 ^a	0.8644 ^a	0.9239 ^a	0.9477 ^a	0.9064 ^a
Adjusted R ²	0.9629	0.9299	0.9257	0.9254	0.9209	0.9200	0.9232	0.9109	0.8782	0.8081	0.5958
AIC	-9.1499	-8.6084	-8.6523	-8.6824	-8.6712	-8.6968	-8.7471	-8.6000	-8.1799	-7.6843	-7.5264
GRS	2.4685										
C-F&F											
INTERCEPT	0.0000	0.0000	-0.0001	-0.0001 ^b	-0.0001 ^b	0.0000	0.0000	-0.0001	0.0000	0.0001	0.0001
MKT	0.9932 ^a	1.0134 ^a	1.0023 ^a	1.0013 ^a	0.9812 ^a	0.9670 ^a	0.9654 ^a	0.9609 ^a	0.9945 ^a	0.9735 ^a	-0.0197
HML	0.0786 ^a	0.2656 ^a	0.3571 ^a	0.4194 ^a	0.4304 ^a	0.4046 ^a	0.4101 ^a	0.3971 ^a	0.3313 ^a	0.2856 ^a	0.2070 ^a
SMB	0.0552 ^a	0.3748 ^a	0.5815 ^a	0.7043 ^a	0.7490 ^a	0.7942 ^a	0.8292 ^a	0.8848 ^a	0.9510 ^a	0.9869 ^a	0.9317 ^a
MOM	-0.0559 ^a	-0.0630 ^a	0.0039	-0.0397 ^a	-0.0317 ^b	-0.0537 ^a	-0.0443 ^a	-0.0814 ^a	-0.1079 ^a	-0.1565 ^a	-0.1006 ^a
Adjusted R ²	0.9645	0.9320	0.9257	0.9264	0.9216	0.9220	0.9245	0.9155	0.8854	0.8227	0.6066
AIC	-9.1926	-8.6396	-8.6519	-8.6953	-8.6792	-8.7214	-8.7645	-8.6527	-8.2410	-7.7634	-7.5533
GRS	1.5795										
PSPR1											
INTERCEPT	0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0002 ^b	0.0001	0.0001	0.0002 ^b	0.0002 ^b
MKT	0.9653 ^a	0.9269 ^a	0.8936 ^a	0.9002 ^a	0.8882 ^a	0.8789 ^a	0.8776 ^a	0.8900 ^a	0.9423 ^a	0.9539 ^a	-0.0114
PSPR	-0.0521 ^a	0.1442 ^a	0.3530 ^a	0.5643 ^a	0.6686 ^a	0.7468 ^a	0.7992 ^a	0.9490 ^a	1.1148 ^a	1.3044 ^a	1.3564 ^a
Adjusted R ²	0.9620	0.8965	0.8480	0.8366	0.8323	0.8333	0.8332	0.8493	0.8555	0.8527	0.7535
AIC	-9.1266	-8.2200	-7.9367	-7.8984	-7.9198	-7.9627	-7.9719	-8.0744	-8.0096	-7.9492	-8.0211
GRS	2.5317										
PSPR2											
INTERCEPT	0.0000	-0.0001 ^c	-0.0001 ^b	-0.0001 ^a	-0.0002 ^a	-0.0001	0.0000	-0.0001 ^c	0.0000	0.0001	0.0001
MKT	0.9846 ^a	0.9976 ^a	0.9890 ^a	0.9958 ^a	0.9809 ^a	0.9692 ^a	0.9694 ^a	0.9723 ^a	1.0136 ^a	1.0045 ^a	0.0198 ^b
HML	0.1125 ^a	0.3255 ^a	0.4035 ^a	0.4417 ^a	0.4337 ^a	0.4005 ^a	0.3993 ^a	0.3626 ^a	0.2714 ^a	0.1873 ^a	0.0748 ^a
SMB	0.1404 ^a	0.5606 ^a	0.7773 ^a	0.7573 ^a	0.7317 ^a	0.7248 ^a	0.7414 ^a	0.6626 ^a	0.5976 ^a	0.4272 ^a	0.2868 ^a
PSPR	-0.1751 ^a	-0.3559 ^a	-0.3439 ^a	-0.1112 ^a	0.0164	0.0987 ^a	0.1355 ^a	0.3563 ^a	0.5762 ^a	0.9188 ^a	1.0939 ^a
Adjusted R ²	0.9650	0.9395	0.9356	0.9265	0.9209	0.9209	0.9249	0.9230	0.9066	0.8776	0.7730
AIC	-9.2081	-8.7552	-8.7952	-8.6963	-8.6710	-8.7079	-8.7697	-8.7458	-8.4458	-8.1337	-8.1032
GRS	3.6961										
PSPR3											
INTERCEPT	0.0000	0.0000	-0.0001 ^c	-0.0001 ^b	-0.0001 ^b	0.0000	0.0000	-0.0001	0.0000	0.0001	0.0001
MKT	0.9848 ^a	0.9978 ^a	0.9890 ^a	0.9959 ^a	0.9810 ^a	0.9693 ^a	0.9694 ^a	0.9724 ^a	1.0137 ^a	1.0046 ^a	0.0198 ^b
HML	0.1066 ^a	0.3175 ^a	0.4010 ^a	0.4376 ^a	0.4313 ^a	0.3970 ^a	0.3969 ^a	0.3590 ^a	0.2674 ^a	0.1823 ^a	0.0757 ^a
SMB	0.1941 ^a	0.6328 ^a	0.8000 ^a	0.7944 ^a	0.7536 ^a	0.7565 ^a	0.7635 ^a	0.6953 ^a	0.6333 ^a	0.4728 ^a	0.2788 ^a
MOM	-0.0798 ^a	-0.1075 ^a	-0.0338 ^a	-0.0553 ^a	-0.0325 ^a	-0.0472 ^a	-0.0329 ^a	-0.0487 ^a	-0.0531 ^a	-0.0678 ^a	0.0120
PSPR	-0.2345 ^a	-0.4359 ^a	-0.3691 ^a	-0.1523 ^a	-0.0078	0.0636 ^b	0.1110 ^a	0.3201 ^a	0.5367 ^a	0.8684 ^a	1.1028 ^a
Adjusted R ²	0.9680	0.9453	0.9363	0.9282	0.9216	0.9223	0.9256	0.9245	0.9082	0.8801	0.7731
AIC	-9.2959	-8.8573	-8.8048	-8.7204	-8.6787	-8.7254	-8.7785	-8.7654	-8.4629	-8.1543	-8.1034
GRS	3.7236										

Appendix A.11

Asset pricing models of turnover rate sorted portfolios

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
CAPM											
INTERCEPT	0.0005 ^a	0.0001	0.0001	0.0001	0.0001	0.0002 ^b	0.0002	0.0001	0.0001	0.0003 ^b	-0.0002 ^c
MKT	0.8973 ^a	0.8575 ^a	0.8641 ^a	0.8191 ^a	0.7953 ^a	0.7735 ^a	0.7695 ^a	0.7589 ^a	0.7407 ^a	0.6713 ^a	-0.2260 ^a
Adjusted R ²	0.8228	0.8226	0.8455	0.8002	0.7896	0.7690	0.7618	0.7501	0.7352	0.5838	0.1480
AIC	-7.5987	-7.6882	-7.8384	-7.6334	-7.6273	-7.5634	-7.5336	-7.4978	-7.4680	-6.9824	-7.0722
GRS	5.7434										
F&F											
INTERCEPT	0.0003 ^a	-0.0001	-0.0001	-0.0001 ^c	-0.0002 ^a	-0.0001 ^c	-0.0001 ^b	-0.0002 ^a	-0.0002 ^a	-0.0001	-0.0004 ^a
MKT	1.0551 ^a	1.0065 ^a	1.0141 ^a	1.0000 ^a	0.9828 ^a	0.9853 ^a	0.9894 ^a	0.9887 ^a	0.9819 ^a	0.9448 ^a	-0.1103 ^a
HML	0.1542 ^a	0.2538 ^a	0.2860 ^a	0.3518 ^a	0.3630 ^a	0.3274 ^a	0.3846 ^a	0.4161 ^a	0.3654 ^a	0.4640 ^a	0.3098 ^a
SMB	0.5244 ^a	0.4808 ^a	0.4801 ^a	0.5781 ^a	0.5995 ^a	0.6884 ^a	0.7088 ^a	0.7385 ^a	0.7845 ^a	0.8832 ^a	0.3588 ^a
Adjusted R ²	0.8869	0.8827	0.9073	0.8951	0.8963	0.9091	0.9127	0.9168	0.9245	0.8186	0.2484
AIC	-8.0470	-8.1013	-8.3491	-8.2771	-8.3343	-8.4956	-8.5367	-8.5975	-8.7231	-7.8126	-7.1970
GRS	6.1464										
C-F&F											
INTERCEPT	0.0003 ^a	0.0000	0.0000	-0.0001	-0.0001 ^b	-0.0001	-0.0001	-0.0002 ^a	-0.0002 ^a	0.0000	-0.0003 ^b
MKT	1.0560 ^a	1.0099 ^a	1.0158 ^a	1.0020 ^a	0.9849 ^a	0.9870 ^a	0.9919 ^a	0.9908 ^a	0.9829 ^a	0.9476 ^a	-0.1085 ^a
HML	0.1486 ^a	0.2344 ^a	0.2762 ^a	0.3406 ^a	0.3511 ^a	0.3178 ^a	0.3708 ^a	0.4038 ^a	0.3597 ^a	0.4483 ^a	0.2997 ^a
SMB	0.5323 ^a	0.5085 ^a	0.4940 ^a	0.5941 ^a	0.6164 ^a	0.7020 ^a	0.7284 ^a	0.7559 ^a	0.7926 ^a	0.9055 ^a	0.3732 ^a
MOM	-0.0315 ^c	-0.1102 ^a	-0.0557 ^a	-0.0637 ^a	-0.0673 ^a	-0.0544 ^a	-0.0780 ^a	-0.0694 ^a	-0.0322 ^a	-0.0888 ^a	-0.0573 ^b
Adjusted R ²	0.8873	0.8894	0.9090	0.8975	0.8991	0.9110	0.9166	0.9199	0.9252	0.8237	0.2529
AIC	-8.0510	-8.1601	-8.3676	-8.2998	-8.3612	-8.5162	-8.5819	-8.6352	-8.7318	-7.8406	-7.2028
GRS	5.7845										
TO1											
INTERCEPT	0.0005 ^a	0.0001	0.0001	0.0002 ^c	0.0001	0.0003 ^a	0.0003 ^a	0.0002 ^b	0.0002 ^b	0.0005 ^a	0.0000
MKT	0.8677 ^a	0.8380 ^a	0.8694 ^a	0.8642 ^a	0.8519 ^a	0.8418 ^a	0.8465 ^a	0.8474 ^a	0.8396 ^a	0.8316 ^a	-0.0360 ^a
TO	-0.2020 ^a	-0.1329 ^a	0.0358	0.3066 ^a	0.3847 ^a	0.4650 ^a	0.5238 ^a	0.6018 ^a	0.6728 ^a	1.0907 ^a	1.2927 ^a
Adjusted R ²	0.8268	0.8245	0.8456	0.8111	0.8076	0.7962	0.7963	0.7962	0.7945	0.7347	0.6227
AIC	-7.6215	-7.6987	-7.8388	-7.6894	-7.7167	-7.6882	-7.6899	-7.7016	-7.7215	-7.4323	-7.8865
GRS	8.8057										
TO2											
INTERCEPT	0.0001	-0.0003 ^a	-0.0002 ^b	-0.0002 ^b	-0.0002 ^a	-0.0001	-0.0001 ^c	-0.0002 ^a	-0.0002 ^a	0.0001	0.0000
MKT	1.0152 ^a	0.9724 ^a	0.9927 ^a	0.9944 ^a	0.9822 ^a	0.9876 ^a	0.9946 ^a	0.9982 ^a	0.9956 ^a	0.9853 ^a	-0.0300 ^b
HML	0.2794 ^a	0.3608 ^a	0.3534 ^a	0.3693 ^a	0.3649 ^a	0.3201 ^a	0.3682 ^a	0.3861 ^a	0.3222 ^a	0.3369 ^a	0.0574 ^a
SMB	0.6898 ^a	0.6220 ^a	0.5690 ^a	0.6013 ^a	0.6021 ^a	0.6788 ^a	0.6872 ^a	0.6989 ^a	0.7274 ^a	0.7153 ^a	0.0255
TO	-0.6295 ^a	-0.5375 ^a	-0.3384 ^a	-0.0880 ^a	-0.0096	0.0364 ^c	0.0821 ^a	0.1506 ^a	0.2171 ^a	0.6391 ^a	1.2686 ^a
Adjusted R ²	0.9194	0.9087	0.9177	0.8958	0.8963	0.9092	0.9134	0.9192	0.9296	0.8612	0.6239
AIC	-8.3860	-8.3513	-8.4679	-8.2837	-8.3338	-8.4966	-8.5442	-8.6260	-8.7923	-8.0796	-7.8891
GRS	7.2966										
TO3											
INTERCEPT	0.0001 ^c	-0.0002 ^a	-0.0001 ^b	-0.0001 ^c	-0.0001 ^b	-0.0001	-0.0001	-0.0001 ^b	-0.0002 ^a	0.0002 ^b	0.0001
MKT	1.0162 ^a	0.9758 ^a	0.9943 ^a	0.9963 ^a	0.9842 ^a	0.9892 ^a	0.9969 ^a	1.0002 ^a	0.9966 ^a	0.9878 ^a	-0.0284 ^b
HML	0.2737 ^a	0.3414 ^a	0.3436 ^a	0.3583 ^a	0.3533 ^a	0.3108 ^a	0.3548 ^a	0.3742 ^a	0.3168 ^a	0.3219 ^a	0.0482 ^b
SMB	0.6984 ^a	0.6507 ^a	0.5835 ^a	0.6177 ^a	0.6193 ^a	0.6927 ^a	0.7072 ^a	0.7166 ^a	0.7355 ^a	0.7376 ^a	0.0392 ^c
MOM	-0.0335 ^a	-0.1119 ^a	-0.0568 ^a	-0.0640 ^a	-0.0673 ^a	-0.0542 ^a	-0.0778 ^a	-0.0689 ^a	-0.0315 ^a	-0.0868 ^a	-0.0532 ^a
TO	-0.6302 ^a	-0.5397 ^a	-0.3395 ^a	-0.0893 ^a	-0.0110	0.0353	0.0806 ^a	0.1493 ^a	0.2165 ^a	0.6374 ^a	1.2675 ^a
Adjusted R ²	0.9200	0.9156	0.9195	0.8982	0.8991	0.9111	0.9172	0.9222	0.9303	0.8660	0.6279
AIC	-8.3926	-8.4302	-8.4897	-8.3067	-8.3608	-8.5171	-8.5894	-8.6643	-8.8012	-8.1147	-7.8995
GRS	6.4552										

Appendix A.12

Asset pricing models of illiquidity ratio sorted portfolios

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
CAPM											
INTERCEPT	0.0000	0.0000	0.0000	0.0002	0.0001	0.0001	0.0001	0.0003 ^a	0.0005 ^a	0.0003 ^c	0.0003
MKT	1.0073 ^a	0.9496 ^a	0.8289 ^a	0.8011 ^a	0.7750 ^a	0.7644 ^a	0.7444 ^a	0.6897 ^a	0.7154 ^a	0.6806 ^a	-0.3267 ^a
Adjusted R ²	0.9567	0.8872	0.7709	0.7592	0.7419	0.7508	0.7012	0.6622	0.6532	0.5603	0.1951
AIC	-8.9272	-8.0127	-7.4355	-7.4390	-7.4128	-7.4874	-7.2906	-7.2630	-7.1499	-6.8590	-6.6680
GRS	6.6563										
F&F											
INTERCEPT	0.0000	-0.0001	-0.0002 ^a	-0.0001 ^c	-0.0002 ^a	-0.0002 ^a	-0.0002 ^a	-0.0001	0.0001	-0.0001	-0.0002
MKT	0.9796 ^a	1.0182 ^a	1.0129 ^a	1.0139 ^a	1.0056 ^a	0.9956 ^a	0.9999 ^a	0.9629 ^a	0.9972 ^a	0.9653 ^a	-0.0142
HML	0.0262	0.1923 ^a	0.3525 ^a	0.3735 ^a	0.4064 ^a	0.4250 ^a	0.3917 ^a	0.4259 ^a	0.3604 ^a	0.4023 ^a	0.3761 ^a
SMB	-0.0992 ^a	0.2115 ^a	0.5890 ^a	0.6856 ^a	0.7426 ^a	0.7424 ^a	0.8306 ^a	0.8874 ^a	0.9255 ^a	0.9303 ^a	1.0296 ^a
Adjusted R ²	0.9594	0.8994	0.8632	0.8891	0.9011	0.9176	0.9020	0.9146	0.9023	0.7997	0.6365
AIC	-8.9902	-8.1263	-7.9507	-8.2136	-8.3718	-8.5931	-8.4046	-8.6377	-8.4160	-7.6447	-7.4625
GRS	4.0848										
C-F&F											
INTERCEPT	0.0001	0.0000	-0.0002 ^b	-0.0001	-0.0001 ^b	-0.0001 ^b	-0.0002 ^b	0.0000	0.0001 ^b	0.0000	-0.0001
MKT	0.9813 ^a	1.0200 ^a	1.0146 ^a	1.0151 ^a	1.0078 ^a	0.9977 ^a	1.0028 ^a	0.9644 ^a	0.9991 ^a	0.9689 ^a	-0.0124
HML	0.0166	0.1823 ^a	0.3427 ^a	0.3666 ^a	0.3940 ^a	0.4130 ^a	0.3751 ^a	0.4177 ^a	0.3493 ^a	0.3823 ^a	0.3656 ^a
SMB	-0.0856 ^a	0.2257 ^a	0.6029 ^a	0.6955 ^a	0.7603 ^a	0.7595 ^a	0.8542 ^a	0.8992 ^a	0.9413 ^a	0.9588 ^a	1.0444 ^a
MOM	-0.0543 ^a	-0.0566 ^a	-0.0554 ^a	-0.0392 ^a	-0.0703 ^a	-0.0680 ^a	-0.0939 ^a	-0.0467 ^a	-0.0633 ^a	-0.1135 ^a	-0.0592 ^b
Adjusted R ²	0.9607	0.9009	0.8649	0.8900	0.9042	0.9205	0.9075	0.9161	0.9048	0.8074	0.6396
AIC	-9.0243	-8.1414	-7.9628	-8.2213	-8.4025	-8.6292	-8.4624	-8.6551	-8.4419	-7.6837	-7.4708
GRS	3.8502										
AM1											
INTERCEPT	0.0000	0.0000	-0.0001	0.0000	-0.0001	0.0000	-0.0001	0.0001	0.0002 ^a	-0.0001	-0.0001
MKT	0.9753 ^a	0.9305 ^a	0.8960 ^a	0.9159 ^a	0.9138 ^a	0.9130 ^a	0.9230 ^a	0.8930 ^a	0.9292 ^a	0.9437 ^a	-0.0316 ^a
AM	-0.1396 ^a	-0.0831 ^a	0.2921 ^a	0.5000 ^a	0.6045 ^a	0.6471 ^a	0.7780 ^a	0.8852 ^a	0.9307 ^a	1.1454 ^a	1.2850 ^a
Adjusted R ²	0.9598	0.8883	0.7869	0.8090	0.8179	0.8414	0.8302	0.8458	0.8393	0.8275	0.7037
AIC	-9.0008	-8.0224	-7.5079	-7.6702	-7.7612	-7.9388	-7.8552	-8.0469	-7.9189	-7.7945	-7.6669
GRS	4.3175										
AM2											
INTERCEPT	0.0000	-0.0001	-0.0002 ^a	-0.0001 ^c	-0.0002 ^a	-0.0002 ^a	-0.0002 ^a	-0.0001	0.0001	-0.0001 ^c	-0.0002 ^b
MKT	0.9748 ^a	0.9962 ^a	0.9955 ^a	1.0070 ^a	1.0033 ^a	0.9968 ^a	1.0059 ^a	0.9738 ^a	1.0094 ^a	0.9949 ^a	0.0201 ^c
HML	0.0583 ^a	0.3391 ^a	0.4687 ^a	0.4197 ^a	0.4218 ^a	0.4172 ^a	0.3515 ^a	0.3533 ^a	0.2787 ^a	0.2052 ^a	0.1469 ^a
SMB	-0.0223	0.5639 ^a	0.8679 ^a	0.7966 ^a	0.7796 ^a	0.7238 ^a	0.7340 ^a	0.7131 ^a	0.7293 ^a	0.4573 ^a	0.4796 ^a
AM	-0.1232 ^a	-0.5645 ^a	-0.4467 ^a	-0.1778 ^a	-0.0592 ^c	0.0299	0.1548 ^a	0.2793 ^a	0.3142 ^a	0.7577 ^a	0.8809 ^a
Adjusted R ²	0.9605	0.9242	0.8810	0.8920	0.9015	0.9176	0.9044	0.9232	0.9123	0.8548	0.7492
AIC	-9.0181	-8.4099	-8.0895	-8.2403	-8.3748	-8.5937	-8.4290	-8.7436	-8.5235	-7.9662	-7.8334
GRS	4.3755										
AM3											
INTERCEPT	0.0001 ^c	0.0000	-0.0001 ^c	-0.0001	-0.0001 ^b	-0.0001 ^b	-0.0002 ^b	-0.0001	0.0001	-0.0001	-0.0002 ^b
MKT	0.9754 ^a	0.9972 ^a	0.9964 ^a	1.0075 ^a	1.0040 ^a	0.9974 ^a	1.0066 ^a	0.9740 ^a	1.0097 ^a	0.9953 ^a	0.0199 ^c
HML	0.0564 ^a	0.3361 ^a	0.4659 ^a	0.4182 ^a	0.4196 ^a	0.4154 ^a	0.3492 ^a	0.3527 ^a	0.2777 ^a	0.2040 ^a	0.1476 ^a
SMB	0.0200	0.6337 ^a	0.9300 ^a	0.8324 ^a	0.8284 ^a	0.7658 ^a	0.7853 ^a	0.7267 ^a	0.7515 ^a	0.4856 ^a	0.4656 ^a
MOM	-0.0693 ^a	-0.1144 ^a	-0.1018 ^a	-0.0586 ^a	-0.0799 ^a	-0.0689 ^a	-0.0841 ^a	-0.0223 ^a	-0.0364 ^a	-0.0464 ^a	0.0229
AM	-0.1631 ^a	-0.6303 ^a	-0.5053 ^a	-0.2116 ^a	-0.1052 ^a	-0.0098	0.1064 ^a	0.2665 ^a	0.2933 ^a	0.7310 ^a	0.8941 ^a
Adjusted R ²	0.9626	0.9303	0.8864	0.8939	0.9052	0.9205	0.9086	0.9235	0.9130	0.8560	0.7496
AIC	-9.0731	-8.4930	-8.1361	-8.2577	-8.4128	-8.6288	-8.4736	-8.7474	-8.5321	-7.9742	-7.8347
GRS	3.6130										

Appendix A.13

Asset pricing models of market capitalisation sorted portfolios

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
CAPM											
INTERCEPT	0.0000	0.0000	0.0000	0.0000	0.0002 ^c	0.0002 ^c	0.0001	0.0003 ^a	0.0005 ^a	0.0006 ^a	0.0006 ^a
MKT	1.0197 ^a	0.9269 ^a	0.8127 ^a	0.7902 ^a	0.7477 ^a	0.7044 ^a	0.7007 ^a	0.6847 ^a	0.6908 ^a	0.6589 ^a	-0.3608 ^a
Adjusted R ²	0.9611	0.8784	0.7671	0.7451	0.7185	0.6984	0.6748	0.6662	0.6626	0.5714	0.2445
AIC	-9.0138	-7.9761	-7.4539	-7.3903	-7.3651	-7.3874	-7.2885	-7.2956	-7.2617	-6.9691	-6.7580
GRS	12.6657										
F&F											
INTERCEPT	0.0000	-0.0001 ^c	-0.0002 ^a	-0.0003 ^a	-0.0001 ^b	-0.0002 ^a	-0.0003 ^a	0.0000	0.0001 ^b	0.0002 ^a	0.0002 ^b
MKT	0.9923 ^a	1.0221 ^a	1.0123 ^a	1.0179 ^a	0.9874 ^a	0.9679 ^a	0.9726 ^a	0.9567 ^a	0.9608 ^a	0.9385 ^a	-0.0538 ^a
HML	0.0150	0.2684 ^a	0.3963 ^a	0.4062 ^a	0.4310 ^a	0.4128 ^a	0.4001 ^a	0.3814 ^a	0.4089 ^a	0.3666 ^a	0.3516 ^a
SMB	-0.0965 ^a	0.2930 ^a	0.6369 ^a	0.7325 ^a	0.7706 ^a	0.8555 ^a	0.8863 ^a	0.8890 ^a	0.8785 ^a	0.9175 ^a	1.0140 ^a
Adjusted R ²	0.9634	0.9028	0.8798	0.8950	0.8974	0.9357	0.9223	0.9230	0.9087	0.8240	0.6843
AIC	-9.0742	-8.1998	-8.1151	-8.2764	-8.3738	-8.9325	-8.7197	-8.7614	-8.5687	-7.8588	-7.6300
GRS	9.6138										
C-F&F											
INTERCEPT	0.0000	-0.0001	-0.0002 ^b	-0.0002 ^a	-0.0001	-0.0001 ^b	-0.0002 ^a	0.0000	0.0002 ^a	0.0003 ^a	0.0002 ^b
MKT	0.9936 ^a	1.0250 ^a	1.0136 ^a	1.0200 ^a	0.9894 ^a	0.9699 ^a	0.9751 ^a	0.9583 ^a	0.9625 ^a	0.9403 ^a	-0.0532 ^a
HML	0.0079	0.2520 ^a	0.3886 ^a	0.3943 ^a	0.4195 ^a	0.4014 ^a	0.3857 ^a	0.3723 ^a	0.3994 ^a	0.3563 ^a	0.3484 ^a
SMB	-0.0864 ^a	0.3165 ^a	0.6479 ^a	0.7494 ^a	0.7869 ^a	0.8717 ^a	0.9067 ^a	0.9019 ^a	0.8920 ^a	0.9321 ^a	1.0185 ^a
MOM	-0.0405 ^a	-0.0934 ^a	-0.0437 ^a	-0.0677 ^a	-0.0650 ^a	-0.0647 ^a	-0.0812 ^a	-0.0513 ^a	-0.0541 ^a	-0.0584 ^a	-0.0180
Adjusted R ²	0.9641	0.9073	0.8809	0.8977	0.9000	0.9386	0.9268	0.9248	0.9107	0.8262	0.6845
AIC	-9.0945	-8.2461	-8.1238	-8.3021	-8.3999	-8.9786	-8.7791	-8.7854	-8.5906	-7.8711	-7.6304
GRS	9.2526										
PSPR1											
INTERCEPT	0.0000	0.0000	0.0000	-0.0001	0.0001	0.0001	0.0000	0.0002 ^b	0.0003 ^a	0.0004 ^a	0.0004 ^a
MKT	0.9839 ^a	0.9492 ^a	0.9141 ^a	0.9226 ^a	0.8974 ^a	0.8788 ^a	0.8921 ^a	0.8802 ^a	0.8893 ^a	0.9042 ^a	-0.0797 ^a
PSPR	-0.1717 ^a	0.1069 ^a	0.4871 ^a	0.6358 ^a	0.7190 ^a	0.8374 ^a	0.9195 ^a	0.9388 ^a	0.9538 ^a	1.1785 ^a	1.3502 ^a
Adjusted R ²	0.9649	0.8800	0.8062	0.8135	0.8127	0.8385	0.8398	0.8440	0.8419	0.8310	0.7307
AIC	-9.1179	-7.9893	-7.6373	-7.7025	-7.7726	-8.0115	-7.9961	-8.0559	-8.0195	-7.8992	-7.7895
GRS	8.4968										
PSPR2											
INTERCEPT	0.0000	-0.0002 ^b	-0.0002 ^a	-0.0003 ^a	-0.0001 ^b	-0.0002 ^a	-0.0002 ^a	0.0000	0.0002 ^a	0.0003 ^a	0.0003 ^a
MKT	0.9858 ^a	1.0101 ^a	1.0059 ^a	1.0163 ^a	0.9898 ^a	0.9734 ^a	0.9824 ^a	0.9677 ^a	0.9740 ^a	0.9667 ^a	-0.0191 ^b
HML	0.0380 ^b	0.3105 ^a	0.4189 ^a	0.4116 ^a	0.4223 ^a	0.3934 ^a	0.3657 ^a	0.3426 ^a	0.3625 ^a	0.2674 ^a	0.2294 ^a
SMB	-0.0017	0.4667 ^a	0.7303 ^a	0.7549 ^a	0.7348 ^a	0.7753 ^a	0.7443 ^a	0.7289 ^a	0.6867 ^a	0.5075 ^a	0.5093 ^a
PSPR	-0.1674 ^a	-0.3066 ^a	-0.1648 ^a	-0.0397	0.0631 ^c	0.1415 ^a	0.2507 ^a	0.2827 ^a	0.3385 ^a	0.7238 ^a	0.8911 ^a
Adjusted R ²	0.9651	0.9094	0.8820	0.8951	0.8977	0.9376	0.9282	0.9307	0.9196	0.8711	0.7861
AIC	-9.1232	-8.2693	-8.1327	-8.2771	-8.3767	-8.9624	-8.7983	-8.8671	-8.6950	-8.1698	-8.0193
GRS	11.9547										
PSPR3											
INTERCEPT	0.0000	-0.0001	-0.0002 ^b	-0.0002 ^a	-0.0001	-0.0001 ^b	-0.0002 ^a	0.0000	0.0002 ^a	0.0003 ^a	0.0002 ^a
MKT	0.9859 ^a	1.0104 ^a	1.0060 ^a	1.0165 ^a	0.9899 ^a	0.9736 ^a	0.9825 ^a	0.9678 ^a	0.9740 ^a	0.9667 ^a	-0.0192 ^b
HML	0.0333 ^b	0.3004 ^a	0.4140 ^a	0.4059 ^a	0.4176 ^a	0.3893 ^a	0.3612 ^a	0.3408 ^a	0.3610 ^a	0.2686 ^a	0.2355 ^a
SMB	0.0402 ^b	0.5574 ^a	0.7743 ^a	0.8071 ^a	0.7774 ^a	0.8119 ^a	0.7847 ^a	0.7452 ^a	0.7010 ^a	0.4963 ^a	0.4561 ^a
MOM	-0.0623 ^a	-0.1349 ^a	-0.0655 ^a	-0.0776 ^a	-0.0634 ^a	-0.0544 ^a	-0.0602 ^a	-0.0243 ^b	-0.0211 ^b	0.0167	0.0790 ^a
PSPR	-0.2137 ^a	-0.4070 ^a	-0.2136 ^a	-0.0974 ^a	0.0160	0.1011 ^a	0.2060 ^a	0.2647 ^a	0.3228 ^a	0.7362 ^a	0.9499 ^a
Adjusted R ²	0.9668	0.9179	0.8842	0.8983	0.9000	0.9395	0.9305	0.9311	0.9198	0.8712	0.7915
AIC	-9.1712	-8.3681	-8.1518	-8.3086	-8.3996	-8.9930	-8.8302	-8.8721	-8.6980	-8.1706	-8.0443
GRS	10.0378										

Appendix A.13 (Continued)

TO1											
INTERCEPT	0.0000	-0.0001	0.0001	0.0001	0.0003 ^b	0.0003 ^a	0.0002 ^b	0.0005 ^a	0.0006 ^a	0.0008 ^a	0.0008 ^a
MKT	1.0051 ^a	0.9057 ^a	0.8345 ^a	0.8337 ^a	0.8133 ^a	0.7888 ^a	0.7942 ^a	0.7794 ^a	0.7908 ^a	0.7847 ^a	-0.2204 ^a
TO	-0.0992 ^a	-0.1446 ^a	0.1482 ^a	0.2956 ^a	0.4459 ^a	0.5743 ^a	0.6363 ^a	0.6444 ^a	0.6807 ^a	0.8558 ^a	0.9550 ^a
Adjusted R ²	0.9619	0.8805	0.7696	0.7552	0.7434	0.7438	0.7293	0.7239	0.7255	0.6658	0.4122
AIC	-9.0364	-7.9930	-7.4642	-7.4307	-7.4577	-7.5503	-7.4715	-7.4852	-7.4679	-7.2175	-7.0088
GRS	21.3969										
TO2											
INTERCEPT	0.0000	-0.0003 ^a	-0.0003 ^a	-0.0003 ^a	-0.0002 ^b	-0.0002 ^a	-0.0002 ^a	0.0000	0.0002 ^a	0.0003 ^a	0.0003 ^a
MKT	0.9886 ^a	0.9949 ^a	0.9914 ^a	1.0042 ^a	0.9833 ^a	0.9704 ^a	0.9787 ^a	0.9636 ^a	0.9706 ^a	0.9607 ^a	-0.0278 ^a
HML	0.0269	0.3538 ^a	0.4619 ^a	0.4492 ^a	0.4437 ^a	0.4049 ^a	0.3807 ^a	0.3596 ^a	0.3782 ^a	0.2968 ^a	0.2699 ^a
SMB	-0.0809 ^a	0.4058 ^a	0.7235 ^a	0.7893 ^a	0.7874 ^a	0.8451 ^a	0.8607 ^a	0.8603 ^a	0.8379 ^a	0.8253 ^a	0.9062 ^a
TO	-0.0595 ^a	-0.4292 ^a	-0.3297 ^a	-0.2162 ^a	-0.0639 ^b	0.0396	0.0973 ^a	0.1092 ^a	0.1546 ^a	0.3509 ^a	0.4104 ^a
Adjusted R ²	0.9636	0.9180	0.8900	0.8994	0.8978	0.9359	0.9233	0.9243	0.9114	0.8370	0.7096
AIC	-9.0809	-8.3688	-8.2029	-8.3195	-8.3774	-8.9347	-8.7328	-8.7788	-8.5979	-7.9353	-7.7136
GRS	13.6457										
TO3											
INTERCEPT	0.0000	-0.0002 ^a	-0.0003 ^a	-0.0003 ^a	-0.0001 ^c	-0.0001 ^b	-0.0002 ^a	0.0000	0.0002 ^a	0.0004 ^a	0.0003 ^a
MKT	0.9898 ^a	0.9977 ^a	0.9928 ^a	1.0062 ^a	0.9852 ^a	0.9724 ^a	0.9811 ^a	0.9651 ^a	0.9722 ^a	0.9624 ^a	-0.0273 ^a
HML	0.0198	0.3375 ^a	0.4542 ^a	0.4374 ^a	0.4324 ^a	0.3938 ^a	0.3667 ^a	0.3508 ^a	0.3689 ^a	0.2869 ^a	0.2670 ^a
SMB	-0.0705 ^a	0.4301 ^a	0.7350 ^a	0.8068 ^a	0.8041 ^a	0.8617 ^a	0.8815 ^a	0.8734 ^a	0.8516 ^a	0.8400 ^a	0.9105 ^a
MOM	-0.0407 ^a	-0.0948 ^a	-0.0448 ^a	-0.0684 ^a	-0.0652 ^a	-0.0646 ^a	-0.0809 ^a	-0.0509 ^a	-0.0536 ^a	-0.0573 ^a	-0.0166 ^a
TO	-0.0603 ^a	-0.4311 ^a	-0.3306 ^a	-0.2176 ^a	-0.0652 ^b	0.0383 ^c	0.0957 ^a	0.1082 ^a	0.1536 ^a	0.3497 ^a	0.4101 ^a
Adjusted R ²	0.9644	0.9225	0.8911	0.9022	0.9005	0.9388	0.9278	0.9261	0.9133	0.8391	0.7098
AIC	-9.1016	-8.4257	-8.2130	-8.3470	-8.4038	-8.9808	-8.7925	-8.8028	-8.6200	-7.9481	-7.7139
GRS	15.4756										
AM1											
INTERCEPT	0.0000	0.0000	-0.0001	-0.0001	0.0000	0.0000	-0.0001	0.0001	0.0003 ^a	0.0003 ^a	0.0003 ^a
MKT	0.9827 ^a	0.9307 ^a	0.9014 ^a	0.9201 ^a	0.8981 ^a	0.8792 ^a	0.8981 ^a	0.8862 ^a	0.8981 ^a	0.8967 ^a	-0.0860 ^a
AM	-0.1609 ^a	0.0162	0.3862 ^a	0.5654 ^a	0.6549 ^a	0.7611 ^a	0.8596 ^a	0.8772 ^a	0.9026 ^a	1.0355 ^a	1.1964 ^a
Adjusted R ²	0.9651	0.8784	0.7963	0.8092	0.8112	0.8356	0.8458	0.8503	0.8530	0.8090	0.6972
AIC	-9.1224	-7.9760	-7.5872	-7.6800	-7.7645	-7.9941	-8.0343	-8.0971	-8.0926	-7.7773	-7.6722
GRS	10.0017										
AM2											
INTERCEPT	0.0000	-0.0001 ^b	-0.0002 ^a	-0.0003 ^a	-0.0001 ^b	-0.0002 ^a	-0.0003 ^a	0.0000	0.0001 ^b	0.0002 ^a	0.0002 ^b
MKT	0.9856 ^a	1.0025 ^a	0.9992 ^a	1.0130 ^a	0.9872 ^a	0.9708 ^a	0.9815 ^a	0.9670 ^a	0.9738 ^a	0.9600 ^a	-0.0257 ^a
HML	0.0598 ^a	0.3994 ^a	0.4834 ^a	0.4385 ^a	0.4319 ^a	0.3937 ^a	0.3404 ^a	0.3129 ^a	0.3222 ^a	0.2235 ^a	0.1637 ^a
SMB	0.0110	0.6074 ^a	0.8461 ^a	0.8101 ^a	0.7728 ^a	0.8097 ^a	0.7432 ^a	0.7248 ^a	0.6703 ^a	0.5741 ^a	0.5631 ^a
AM	-0.1723 ^a	-0.5036 ^a	-0.3351 ^a	-0.1243 ^a	-0.0036	0.0734 ^a	0.2291 ^a	0.2631 ^a	0.3335 ^a	0.5500 ^a	0.7223 ^a
Adjusted R ²	0.9655	0.9234	0.8902	0.8964	0.8973	0.9363	0.9280	0.9308	0.9210	0.8556	0.7620
AIC	-9.1350	-8.4375	-8.2047	-8.2899	-8.3733	-8.9414	-8.7959	-8.8678	-8.7125	-8.0564	-7.9126
GRS	11.2496										
AM3											
INTERCEPT	0.0001	0.0000	-0.0001 ^b	-0.0002 ^a	-0.0001	-0.0001 ^b	-0.0002 ^a	0.0000	0.0001 ^a	0.0002 ^a	0.0002 ^b
MKT	0.9861 ^a	1.0037 ^a	0.9999 ^a	1.0137 ^a	0.9878 ^a	0.9713 ^a	0.9821 ^a	0.9672 ^a	0.9740 ^a	0.9600 ^a	-0.0261 ^a
HML	0.0582 ^a	0.3955 ^a	0.4813 ^a	0.4363 ^a	0.4301 ^a	0.3921 ^a	0.3387 ^a	0.3122 ^a	0.3215 ^a	0.2233 ^a	0.1651 ^a
SMB	0.0473 ^b	0.6974 ^a	0.8941 ^a	0.8610 ^a	0.8149 ^a	0.8470 ^a	0.7820 ^a	0.7423 ^a	0.6854 ^a	0.5792 ^a	0.5319 ^a
MOM	-0.0594 ^a	-0.1474 ^a	-0.0786 ^a	-0.0835 ^a	-0.0690 ^a	-0.0612 ^a	-0.0635 ^a	-0.0286 ^a	-0.0248 ^a	-0.0084	0.0510
AM	-0.2065 ^a	-0.5884 ^a	-0.3803 ^a	-0.1723 ^a	-0.0433	0.1926 ^a	0.0382	0.2466 ^a	0.3192 ^a	0.5452 ^a	0.7517 ^a
Adjusted R ²	0.9671	0.9339	0.8935	0.9003	0.9002	0.9388	0.9306	0.9313	0.9214	0.8556	0.7643
AIC	-9.1803	-8.5840	-8.2355	-8.3280	-8.4012	-8.9806	-8.8324	-8.8753	-8.7171	-8.0562	-7.9218
GRS	6.6783										

Appendix A.14

Sub-period daily mean returns of liquidity beta sorted portfolios

Panel A: Results from 1st July 1992 to 17th October 1997

	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
PSPR	0.0004 ^c	0.0005 ^a	0.0005 ^a	0.0005 ^b	0.0005 ^a	0.0006 ^a	0.0005 ^a	0.0005 ^a	0.0007 ^a	0.0006 ^c	0.0002
TO	0.0007 ^a	0.0005 ^b	0.0004 ^b	0.0004 ^b	0.0005 ^a	0.0006 ^a	0.0005 ^a	0.0005 ^a	0.0006 ^a	0.0005 ^b	-0.0002
AM	0.0004 ^b	0.0006 ^a	0.0004 ^a	0.0005 ^a	0.0007 ^a	0.0005 ^a	0.0005 ^a	0.0004 ^c	0.0003	0.0008 ^a	0.0004 ^c

Panel B: Results from 20th October 1997 to 3rd November 2003

	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
PSPR	-0.0001	-0.0001	0.0000	-0.0001	0.0000	0.0002	0.0002	-0.0002	0.0002	0.0003	0.0004
TO	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0002	0.0000	0.0001	0.0001	0.0002	0.0003
AM	-0.0003	-0.0001	-0.0001	0.0000	0.0001	0.0001	0.0002	0.0000	0.0003	0.0002	0.0005

Panel C: Results from 4th November 2003 to 29th June 2007

	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
PSPR	0.0004	0.0005 ^b	0.0005 ^b	0.0006 ^a	0.0006 ^b	0.0006 ^a	0.0008 ^a	0.0008 ^a	0.0007 ^a	0.0009 ^a	0.0005 ^a
TO	0.0004	0.0004	0.0006 ^a	0.0006 ^a	0.0006 ^a	0.0007 ^a	0.0007 ^a	0.0008 ^a	0.0008 ^a	0.0008 ^a	0.0003
AM	0.0003	0.0006 ^b	0.0005 ^b	0.0006 ^b	0.0006 ^a	0.0007 ^a	0.0007 ^a	0.0008 ^a	0.0008 ^a	0.0009 ^a	0.0006 ^a

Appendix A.15

Sub-period estimates of asset pricing models of proportional spread portfolios

Panel A: Results from 1st July 1992 to 17th October 1997

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
CAPM											
INTERCEPT	-0.0001	0.0000	0.0001	0.0000	0.0001	0.0001	0.0000	0.0001	0.0003	0.0002	0.0003
MKT	0.9730 ^a	0.9616 ^a	0.9414 ^a	0.9306 ^a	0.8981 ^a	0.8800 ^a	0.8909 ^a	0.8844 ^a	0.8722 ^a	0.9062 ^a	-0.0667 ^b
Adjusted R ²	0.9276	0.9558	0.9443	0.9272	0.9142	0.8904	0.8990	0.8687	0.8494	0.7346	0.0140
AIC	-8.2450	-8.7911	-8.5916	-8.3284	-8.2210	-7.9904	-8.0568	-7.7748	-7.6430	-6.8549	-6.8471
GRS	1.7349										
F&F											
INTERCEPT	-0.0002	0.0000	0.0000	-0.0001	0.0000	0.0000	-0.0001	0.0000	0.0001	0.0000	0.0002
MKT	1.0119 ^a	1.0017 ^a	0.9964 ^a	0.9978 ^a	0.9754 ^a	0.9685 ^a	0.9738 ^a	0.9833 ^a	0.9735 ^a	1.0248 ^a	0.0128
HML	0.2899 ^a	0.1842 ^a	0.1901 ^a	0.2818 ^a	0.1321 ^a	0.1704 ^a	0.2407 ^a	0.2823 ^a	0.2730 ^a	0.3338 ^a	0.0438
SMB	0.3140 ^a	0.3150 ^a	0.4274 ^a	0.5266 ^a	0.5924 ^a	0.6791 ^a	0.6419 ^a	0.7653 ^a	0.7830 ^a	0.9168 ^a	0.6028 ^a
Adjusted R ²	0.9426	0.9690	0.9684	0.9618	0.9650	0.9539	0.9557	0.9477	0.9322	0.8257	0.1575
AIC	-8.4749	-9.1461	-9.1553	-9.0579	-9.0274	-8.8539	-8.8799	-8.6933	-8.4396	-7.2737	-7.0029
GRS	1.2223										
C-F&F											
INTERCEPT	-0.0001	0.0000	0.0000	-0.0001	0.0000	0.0000	-0.0001	0.0000	0.0002	0.0002	0.0003
MKT	1.0121 ^a	1.0017 ^a	0.9963 ^a	0.9980 ^a	0.9755 ^a	0.9685 ^a	0.9739 ^a	0.9833 ^a	0.9736 ^a	1.0259 ^a	0.0138
HML	0.2870 ^a	0.1824 ^a	0.1907 ^a	0.2779 ^a	0.1317 ^a	0.1696 ^a	0.2397 ^a	0.2814 ^a	0.2701 ^a	0.3107 ^a	0.0237
SMB	0.3166 ^a	0.3165 ^a	0.4270 ^a	0.5299 ^a	0.5927 ^a	0.6797 ^a	0.6427 ^a	0.7661 ^a	0.7855 ^a	0.9362 ^a	0.6197 ^a
MOM	-0.0394	-0.0237 ^c	0.0071	-0.0519 ^a	-0.0049	-0.0100	-0.0128	-0.0119	-0.0387 ^c	-0.3047 ^a	-0.2654 ^a
Adjusted R ²	0.9429	0.9691	0.9684	0.9656	0.9617	0.9538	0.9557	0.9477	0.9325	0.8436	0.2075
AIC	-8.4792	-9.1488	-9.1542	-9.0746	-9.0261	-8.8530	-8.8793	-8.6925	-8.4435	-7.3818	-7.0634
GRS	1.7892										
PSPR1											
INTERCEPT	-0.0001	0.0000	0.0000	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0002	0.0000	0.0001
MKT	0.9872 ^a	0.9806 ^a	0.9748 ^a	0.9765 ^a	0.9509 ^a	0.9419 ^a	0.9488 ^a	0.9561 ^a	0.9546 ^a	1.0366 ^a	0.0494 ^b
PSPR	0.1498 ^a	0.2004 ^a	0.3524 ^a	0.4851 ^a	0.5577 ^a	0.6537 ^a	0.6112 ^a	0.7563 ^a	0.8700 ^a	1.3758 ^a	1.2260 ^a
Adjusted R ²	0.9296	0.9597	0.9568	0.9509	0.9474	0.9367	0.9388	0.9285	0.9290	0.8942	0.4809
AIC	-8.2727	-8.8823	-8.8438	-8.7219	-8.7096	-8.5382	-8.5576	-8.3822	-8.3945	-7.7734	-7.4879
GRS	1.1632										
PSPR2											
INTERCEPT	-0.0002	0.0000	0.0000	-0.0001	0.0000	0.0000	-0.0001	0.0000	0.0001	0.0000	0.0001
MKT	1.0100 ^a	1.0005 ^a	0.9962 ^a	0.9984 ^a	0.9763 ^a	0.9697 ^a	0.9749 ^a	0.9850 ^a	0.9768 ^a	1.0346 ^a	0.0246
HML	0.3302 ^a	0.2074 ^a	0.1943 ^a	0.2698 ^a	0.1141 ^a	0.1449 ^a	0.2191 ^a	0.2472 ^a	0.2045 ^a	0.1328 ^b	-0.1975 ^a
SMB	0.5005 ^a	0.4226 ^a	0.4466 ^a	0.4711 ^a	0.5090 ^a	0.5612 ^a	0.5419 ^a	0.6028 ^a	0.4659 ^a	-0.0133	-0.5138 ^a
PSPR	-0.2779 ^a	-0.1603 ^a	-0.0286	0.0828 ^b	0.1242 ^a	0.1756 ^a	0.1490 ^a	0.2422 ^a	0.4726 ^a	1.3862 ^a	1.6641 ^a
Adjusted R ²	0.9456	0.9701	0.9684	0.9652	0.9624	0.9553	0.9567	0.9503	0.9422	0.8951	0.5267
AIC	-8.5282	-9.1800	-9.1550	-9.0650	-9.0446	-8.8840	-8.9017	-8.7436	-8.5992	-7.7814	-7.5788
GRS	1.2388										
PSPR3											
INTERCEPT	-0.0001	0.0000	0.0000	-0.0001	0.0000	0.0000	-0.0001	-0.0001	0.0001	0.0001	0.0002
MKT	1.0099 ^a	1.0005 ^a	0.9962 ^a	0.9984 ^a	0.9763 ^a	0.9697 ^a	0.9749 ^a	0.9850 ^a	0.9769 ^a	1.0344 ^a	0.0245
HML	0.3321 ^a	0.2085 ^a	0.1942 ^a	0.2708 ^a	0.1138 ^a	0.1446 ^a	0.2189 ^a	0.2468 ^a	0.2039 ^a	0.1360 ^a	-0.1961 ^a
SMB	0.5429 ^a	0.4476 ^a	0.4446 ^a	0.4947 ^a	0.5029 ^a	0.5543 ^a	0.5385 ^a	0.5922 ^a	0.4539 ^a	0.0604	-0.4825 ^a
MOM	-0.0815 ^a	-0.0481 ^a	0.0039	-0.0453 ^b	0.0119	0.0133	0.0066	0.0205	0.0230	-0.1418 ^a	-0.0603
PSPR	-0.3334 ^a	-0.1930 ^a	-0.0259	0.0519	0.1323 ^a	0.1847 ^a	0.1535 ^a	0.2561 ^a	0.4882 ^a	1.2898 ^a	1.6231 ^a
Adjusted R ²	0.9468	0.9705	0.9684	0.9657	0.9624	0.9553	0.9567	0.9503	0.9423	0.8987	0.5287
AIC	-8.5509	-9.1946	-9.1536	-9.0762	-9.0440	-8.8835	-8.9005	-8.7440	-8.5998	-7.8147	-7.5824
GRS	1.2054										

Appendix A.15 (Continued)

Panel B: Results from 20th October 1997 to 3rd November 2003

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
CAPM											
INTERCEPT	0.0000	0.0001	0.0002	0.0001	0.0002	0.0005 ^b	0.0004 ^b	0.0001	0.0005 ^b	0.0005 ^b	0.0005 ^b
MKT	0.9711 ^a	0.8282 ^a	0.7628 ^a	0.6774 ^a	0.5906 ^a	0.5089 ^a	0.4335 ^a	0.4715 ^a	0.4874 ^a	0.5415 ^a	-0.4295 ^a
Adjusted R ²	0.7735	0.8402	0.8066	0.6989	0.6167	0.5172	0.4332	0.4739	0.4394	0.4528	0.2947
AIC	-6.9834	-7.7331	-7.6659	-7.3179	-7.2257	-7.1168	-7.1002	-7.0961	-6.8909	-6.7343	-6.5154
GRS	3.6245										
F&F											
INTERCEPT	-0.0003	-0.0002	-0.0001	-0.0003 ^c	-0.0001	0.0000	0.0000	-0.0003 ^b	0.0000	0.0000	0.0003
MKT	1.2161 ^a	1.0483 ^a	0.9968 ^a	0.9740 ^a	0.9296 ^a	0.8844 ^a	0.8165 ^a	0.8385 ^a	0.9041 ^a	0.9596 ^a	-0.2565 ^a
HML	0.4653 ^a	0.3361 ^a	0.3102 ^a	0.4534 ^a	0.4392 ^a	0.4193 ^a	0.4481 ^a	0.4426 ^a	0.4733 ^a	0.3324 ^a	-0.1330 ^a
SMB	0.4486 ^a	0.4237 ^a	0.4620 ^a	0.5708 ^a	0.6722 ^a	0.7615 ^a	0.7716 ^a	0.7361 ^a	0.8429 ^a	0.8817 ^a	0.4332 ^a
Adjusted R ²	0.8286	0.9032	0.8871	0.8414	0.8332	0.8238	0.7986	0.7825	0.7879	0.7699	0.4108
AIC	-7.2611	-8.2334	-8.2034	-7.9575	-8.0563	-8.1233	-8.1334	-7.9783	-7.8617	-7.5996	-6.6939
GRS	2.8315										
C-F&F											
INTERCEPT	-0.0001	-0.0001	-0.0001	-0.0002	-0.0001	0.0000	0.0000	-0.0002 ^c	0.0001	0.0000	0.0001
MKT	1.2074 ^a	1.0454 ^a	0.9937 ^a	0.9692 ^a	0.9263 ^a	0.8835 ^a	0.8151 ^a	0.8336 ^a	0.9009 ^a	0.9572 ^a	-0.2502 ^a
HML	0.3952 ^a	0.3122 ^a	0.2857 ^a	0.4144 ^a	0.4128 ^a	0.4124 ^a	0.4368 ^a	0.4031 ^a	0.4479 ^a	0.3131 ^a	-0.0821 ^c
SMB	0.4951 ^a	0.4395 ^a	0.4783 ^a	0.5967 ^a	0.6897 ^a	0.7661 ^a	0.7791 ^a	0.7622 ^a	0.8597 ^a	0.8945 ^a	0.3994 ^a
MOM	-0.1866 ^a	-0.0635 ^a	-0.0653 ^a	-0.1036 ^a	-0.0704 ^a	-0.0184	-0.0300 ^b	-0.1051 ^a	-0.0675 ^a	-0.0513 ^a	0.1353 ^a
Adjusted R ²	0.8494	0.9068	0.8914	0.8532	0.8395	0.8241	0.7999	0.7996	0.7940	0.7728	0.4318
AIC	-7.3896	-8.2701	-8.2411	-8.0345	-8.0942	-8.1249	-8.1396	-8.0595	-7.8898	-7.6113	-6.7296
GRS	1.3747										
PSPR1											
INTERCEPT	0.0000	0.0001	0.0001	0.0000	0.0002	0.0004 ^b	0.0004 ^b	0.0000	0.0004 ^a	0.0004 ^a	0.0004
MKT	1.0168 ^a	0.8913 ^a	0.8638 ^a	0.8246 ^a	0.7857 ^a	0.7377 ^a	0.6749 ^a	0.7215 ^a	0.7826 ^a	0.8713 ^a	-0.1454 ^a
PSPR	0.1568 ^a	0.2165 ^a	0.3462 ^a	0.5052 ^a	0.6692 ^a	0.7850 ^a	0.8282 ^a	0.8577 ^a	1.0127 ^a	1.1314 ^a	0.9746 ^a
Adjusted R ²	0.7764	0.8487	0.8315	0.7573	0.7357	0.7022	0.6711	0.7097	0.7248	0.7501	0.5230
AIC	-6.9956	-7.7874	-7.8030	-7.5326	-7.5967	-7.5996	-7.6436	-7.6902	-7.6016	-7.5176	-6.9059
GRS	3.8215										
PSPR2											
INTERCEPT	-0.0003 ^c	-0.0002 ^c	-0.0001	-0.0002 ^c	-0.0001	0.0001	0.0000	-0.0003 ^b	0.0001	0.0001	0.0005 ^b
MKT	1.1942 ^a	1.0334 ^a	0.9914 ^a	0.9769 ^a	0.9394 ^a	0.8972 ^a	0.8334 ^a	0.8622 ^a	0.9339 ^a	0.9959 ^a	-0.1983 ^a
HML	0.5141 ^a	0.3694 ^a	0.3221 ^a	0.4469 ^a	0.4171 ^a	0.3907 ^a	0.4103 ^a	0.3897 ^a	0.4067 ^a	0.2512 ^a	-0.2629 ^a
SMB	0.6421 ^a	0.5560 ^a	0.5093 ^a	0.5453 ^a	0.5846 ^a	0.6479 ^a	0.6219 ^a	0.5265 ^a	0.5786 ^a	0.5597 ^a	-0.0824 ^c
PSPR	-0.3807 ^a	-0.2603 ^a	-0.0929 ^b	0.0503	0.1722 ^a	0.2235 ^a	0.2945 ^a	0.4123 ^a	0.5198 ^a	0.6334 ^a	1.0140 ^a
Adjusted R ²	0.8381	0.9098	0.8880	0.8416	0.8373	0.8317	0.8145	0.8115	0.8279	0.8195	0.5424
AIC	-7.3171	-8.3034	-8.2107	-7.9582	-8.0806	-8.1686	-8.2151	-8.1206	-8.0701	-7.8418	-6.9462
GRS	3.2370										
PSPR3											
INTERCEPT	-0.0001	-0.0001	-0.0001	-0.0002	-0.0001	0.0001	0.0000	-0.0002 ^c	0.0001	0.0001	0.0003
MKT	1.1726 ^a	1.0249 ^a	0.9842 ^a	0.9671 ^a	0.9340 ^a	0.8973 ^a	0.8330 ^a	0.8553 ^a	0.9317 ^a	0.9963 ^a	-0.1764 ^a
HML	0.4493 ^a	0.3440 ^a	0.3005 ^a	0.4176 ^a	0.4008 ^a	0.3909 ^a	0.4090 ^a	0.3692 ^a	0.4000 ^a	0.2522 ^a	-0.1971 ^a
SMB	0.7949 ^a	0.6159 ^a	0.5603 ^a	0.6144 ^a	0.6232 ^a	0.6472 ^a	0.6251 ^a	0.5749 ^a	0.5943 ^a	0.5574 ^a	-0.2375 ^a
MOM	-0.2355 ^a	-0.0923 ^a	-0.0787 ^a	-0.1065 ^a	-0.0595 ^a	0.0010	-0.0048	-0.0746 ^a	-0.0242 ^c	0.0036	0.2391 ^a
PSPR	-0.5658 ^a	-0.3328 ^a	-0.1548 ^a	-0.0334	0.1254 ^a	0.2243 ^a	0.2907 ^a	0.3536 ^a	0.5008 ^a	0.6362 ^a	1.2020 ^a
Adjusted R ²	0.8690	0.9169	0.8938	0.8533	0.8415	0.8315	0.8144	0.8195	0.8286	0.8194	0.6045
AIC	-7.5281	-8.3841	-8.2630	-8.0341	-8.1059	-8.1673	-8.2141	-8.1631	-8.0731	-7.8406	-7.0913
GRS	1.9002										

Appendix A.15 (Continued)

Panel C: Results from 4th November 2003 to 29th June 2007

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
CAPM											
INTERCEPT	-0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0003 ^b	0.0003 ^b	0.0003 ^c	0.0005 ^b	0.0005 ^a
MKT	1.1409 ^a	0.9948 ^a	0.9761 ^a	0.9208 ^a	0.8557 ^a	0.7984 ^a	0.7423 ^a	0.6966 ^a	0.7227 ^a	0.7571 ^a	-0.3838 ^a
Adjusted R ²	0.8331	0.8562	0.8493	0.8287	0.7923	0.7433	0.7133	0.6609	0.6263	0.6087	0.2261
AIC	-8.1037	-8.5543	-8.5367	-8.5009	-8.4099	-8.2732	-8.2671	-8.1500	-7.9258	-7.7584	-7.4479
GRS	2.6491										
F&F											
INTERCEPT	-0.0002	-0.0001	-0.0001 ^c	-0.0001	-0.0002 ^b	-0.0001	0.0000	0.0000	-0.0001	0.0001	0.0003 ^c
MKT	1.2042 ^a	1.1197 ^a	1.1115 ^a	1.0797 ^a	1.0178 ^a	0.9813 ^a	0.9382 ^a	0.9061 ^a	0.9607 ^a	1.0013 ^a	-0.2029 ^a
HML	0.2360 ^a	0.2889 ^a	0.3145 ^a	0.3205 ^a	0.2700 ^a	0.2898 ^a	0.2744 ^a	0.2545 ^a	0.2590 ^a	0.2847 ^a	0.0487
SMB	0.2812 ^a	0.5032 ^a	0.5459 ^a	0.6265 ^a	0.6228 ^a	0.6984 ^a	0.7376 ^a	0.7774 ^a	0.8745 ^a	0.9029 ^a	0.6217 ^a
Adjusted R ²	0.8468	0.9103	0.9149	0.9230	0.8958	0.8840	0.8892	0.8694	0.8614	0.8290	0.3988
AIC	-8.1874	-9.0241	-9.1063	-9.2980	-9.0975	-9.0657	-9.2159	-9.1018	-8.9157	-8.5839	-7.6983
GRS	1.3188										
C-F&F											
INTERCEPT	-0.0002	-0.0002	-0.0001 ^c	-0.0001	-0.0002 ^b	-0.0001	0.0000	0.0000	-0.0001	0.0001	0.0003 ^c
MKT	1.1923 ^a	1.1125 ^a	1.1050 ^a	1.0688 ^a	1.0150 ^a	0.9902 ^a	0.9477 ^a	0.9225 ^a	0.9605 ^a	0.9959 ^a	-0.1964 ^a
HML	0.2235 ^a	0.2814 ^a	0.3077 ^a	0.3091 ^a	0.2671 ^a	0.2992 ^a	0.2843 ^a	0.2716 ^a	0.2588 ^a	0.2790 ^a	0.0555
SMB	0.2654 ^a	0.4936 ^a	0.5373 ^a	0.6121 ^a	0.6192 ^a	0.7102 ^a	0.7501 ^a	0.7990 ^a	0.8743 ^a	0.8958 ^a	0.6304 ^a
MOM	0.0399	0.0241	0.0217	0.0364 ^c	0.0092	-0.0297	-0.0317	-0.0546 ^a	0.0007	0.0180	-0.0219
Adjusted R ²	0.8471	0.9104	0.9150	0.9235	0.8957	0.8844	0.8897	0.8710	0.8613	0.8289	0.3985
AIC	-8.1882	-9.0244	-9.1064	-9.3032	-9.0958	-9.0675	-9.2189	-9.1132	-8.9136	-8.5826	-7.6967
GRS	1.6362										
PSPR1											
INTERCEPT	0.0000	0.0000	0.0000	0.0001	0.0000	0.0001	0.0002	0.0002	0.0001	0.0003 ^b	0.0003 ^b
MKT	1.0697 ^a	1.0205 ^a	1.0280 ^a	1.0121 ^a	0.9498 ^a	0.9408 ^a	0.9008 ^a	0.8914 ^a	0.9621 ^a	1.0212 ^a	-0.0485 ^c
PSPR	-0.2267 ^a	0.0820 ^b	0.1654 ^a	0.2906 ^a	0.2999 ^a	0.4536 ^a	0.5051 ^a	0.6204 ^a	0.7627 ^a	0.8414 ^a	1.0680 ^a
Adjusted R ²	0.8399	0.8573	0.8543	0.8461	0.8128	0.7942	0.7834	0.7723	0.7746	0.7686	0.5998
AIC	-8.1445	-8.5609	-8.5696	-8.6071	-8.5129	-8.4931	-8.5464	-8.5471	-8.4303	-8.2827	-8.1063
GRS	1.5336										
PSPR2											
INTERCEPT	-0.0002 ^c	-0.0002 ^b	-0.0002 ^b	-0.0001 ^c	-0.0002 ^b	-0.0001	0.0000	0.0000	-0.0001	0.0001	0.0003 ^b
MKT	1.0899 ^a	1.0425 ^a	1.0488 ^a	1.0335 ^a	0.9725 ^a	0.9621 ^a	0.9235 ^a	0.9131 ^a	0.9850 ^a	1.0421 ^a	-0.0477 ^c
HML	0.3752 ^a	0.3829 ^a	0.3907 ^a	0.3768 ^a	0.3251 ^a	0.3132 ^a	0.2923 ^a	0.2460 ^a	0.2294 ^a	0.2350 ^a	-0.1402 ^a
SMB	0.8035 ^a	0.8556 ^a	0.8321 ^a	0.8376 ^a	0.8298 ^a	0.7862 ^a	0.8047 ^a	0.7456 ^a	0.7635 ^a	0.7167 ^a	-0.0868 ^c
PSPR	-0.8214 ^a	-0.5543 ^a	-0.4501 ^a	-0.3319 ^a	-0.3255 ^a	-0.1380 ^a	-0.1055 ^a	0.0501	0.1746 ^a	0.2929 ^a	1.1143 ^a
Adjusted R ²	0.8934	0.9390	0.9343	0.9345	0.9081	0.8863	0.8907	0.8696	0.8652	0.8386	0.6050
AIC	-8.5485	-9.4079	-9.3646	-9.4596	-9.2220	-9.0845	-9.2280	-9.1025	-8.9425	-8.6411	-8.1173
GRS	2.0984										
PSPR3											
INTERCEPT	-0.0002	-0.0002 ^b	-0.0001 ^b	-0.0001 ^c	-0.0002 ^b	-0.0001	0.0000	0.0000	-0.0001	0.0001	0.0003 ^b
MKT	1.1032 ^a	1.0522 ^a	1.0562 ^a	1.0338 ^a	0.9794 ^a	0.9734 ^a	0.9344 ^a	0.9253 ^a	0.9799 ^a	1.0293 ^a	-0.0739 ^a
HML	0.3972 ^a	0.3989 ^a	0.4029 ^a	0.3773 ^a	0.3366 ^a	0.3319 ^a	0.3103 ^a	0.2661 ^a	0.2210 ^a	0.2139 ^a	-0.1833 ^a
SMB	0.8421 ^a	0.8837 ^a	0.8534 ^a	0.8385 ^a	0.8499 ^a	0.8190 ^a	0.8362 ^a	0.7809 ^a	0.7487 ^a	0.6796 ^a	-0.1625 ^a
MOM	-0.0563 ^c	-0.0409 ^a	-0.0310 ^c	-0.0014	-0.0293	-0.0479 ^b	-0.0461 ^b	-0.0515 ^a	0.0216	0.0540 ^b	0.1103 ^a
PSPR	-0.8470 ^a	-0.5729 ^a	-0.4642 ^a	-0.3325 ^a	-0.3388 ^a	-0.1597 ^a	-0.1265 ^a	0.0267	0.1844 ^a	0.3175 ^a	1.1644 ^a
Adjusted R ²	0.8941	0.9395	0.9346	0.9345	0.9084	0.8873	0.8917	0.8709	0.8653	0.8397	0.6123
AIC	-8.5542	-9.4156	-9.3679	-9.4575	-9.2240	-9.0921	-9.2363	-9.1118	-8.9421	-8.6469	-8.1349
GRS	1.8264										

Appendix A.16

Sub-period estimates of asset pricing models of turnover rate portfolios

Panel A: Results from 1st July 1992 to 17th October 1997

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
CAPM											
INTERCEPT	0.0002	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	-0.0002
MKT	0.9843 ^a	0.9469 ^a	0.9128 ^a	0.9121 ^a	0.9135 ^a	0.8987 ^a	0.8902 ^a	0.8794 ^a	0.8913 ^a	0.9090 ^a	-0.0753 ^a
Adjusted R ²	0.9045	0.9066	0.9158	0.9147	0.9229	0.9020	0.8929	0.8883	0.9008	0.8159	0.0244
AIC	-7.9191	-8.0220	-8.2087	-8.1962	-8.3026	-8.0732	-7.9927	-7.9706	-8.0761	-7.3197	-7.1511
GRS	.6853										
F&F											
INTERCEPT	0.0002	0.0000	-0.0001	-0.0001 ^c	0.0000	0.0000	-0.0001	0.0000	0.0000	-0.0001	-0.0002
MKT	1.0295 ^a	1.0092 ^a	0.9854 ^a	0.9882 ^a	0.9877 ^a	0.9847 ^a	0.9787 ^a	0.9736 ^a	0.9687 ^a	1.0012 ^a	-0.0283 ^b
HML	0.1286 ^a	0.2040 ^a	0.2402 ^a	0.2882 ^a	0.3120 ^a	0.2404 ^a	0.2543 ^a	0.2630 ^a	0.2186 ^a	0.2301 ^a	0.1015 ^c
SMB	0.3498 ^a	0.4842 ^a	0.5643 ^a	0.5938 ^a	0.5815 ^a	0.6648 ^a	0.6853 ^a	0.7291 ^a	0.5990 ^a	0.7113 ^a	0.3615 ^a
Adjusted R ²	0.9182	0.9357	0.9588	0.9632	0.9705	0.9619	0.9571	0.9624	0.9501	0.8760	0.0924
AIC	-8.0732	-8.3932	-8.9221	-9.0346	-9.2606	-9.0155	-8.9073	-9.0571	-8.7626	-7.7135	-7.2220
GRS	.9579										
C-F&F											
INTERCEPT	0.0002 ^c	0.0001	-0.0001	-0.0001	0.0000	0.0000	-0.0001	-0.0001	0.0000	0.0001	-0.0002
MKT	1.0299 ^a	1.0098 ^a	0.9856 ^a	0.9882 ^a	0.9877 ^a	0.9848 ^a	0.9788 ^a	0.9736 ^a	0.9688 ^a	1.0018 ^a	-0.0280 ^b
HML	0.1216 ^a	0.1930 ^a	0.2367 ^a	0.2867 ^a	0.3119 ^a	0.2394 ^a	0.2533 ^a	0.2647 ^a	0.2171 ^a	0.2180 ^a	0.0963 ^c
SMB	0.3556 ^a	0.4935 ^a	0.5673 ^a	0.5950 ^a	0.5816 ^a	0.6657 ^a	0.6862 ^a	0.7276 ^a	0.6003 ^a	0.7215 ^a	0.3659 ^a
MOM	-0.0920 ^a	-0.1456 ^a	-0.0466 ^a	-0.0193	-0.0015	-0.0137	-0.0139	0.0224	-0.0200	-0.1607 ^a	-0.0687
Adjusted R ²	0.9199	0.9403	0.9593	0.9632	0.9704	0.9619	0.9572	0.9625	0.9502	0.8815	0.0963
AIC	-8.0930	-8.4671	-8.9334	-9.0356	-9.2592	-9.0152	-8.9069	-9.0590	-8.7632	-7.7579	-7.2256
GRS	1.1498										
TO1											
INTERCEPT	0.0002	0.0001	0.0001	0.0000	0.0002 ^c	0.0002 ^b	0.0002	0.0002 ^c	0.0002 ^c	0.0003 ^c	0.0001
MKT	0.9834 ^a	0.9538 ^a	0.9230 ^a	0.9227 ^a	0.9260 ^a	0.9125 ^a	0.9073 ^a	0.8953 ^a	0.9023 ^a	0.9388 ^a	-0.0446 ^a
TO	-0.0290	0.2115 ^a	0.3099 ^a	0.3250 ^a	0.3811 ^a	0.4181 ^a	0.5207 ^a	0.4854 ^a	0.3361 ^a	0.9076 ^a	0.9366 ^a
Adjusted R ²	0.9044	0.9092	0.9218	0.9213	0.9320	0.9132	0.9103	0.9038	0.9081	0.8626	0.2466
AIC	-7.9182	-8.0487	-8.2819	-8.2762	-8.4285	-8.1932	-8.1701	-8.1191	-8.1517	-7.6111	-7.4089
GRS	1.7917										
TO2											
INTERCEPT	0.0001	-0.0001	-0.0001	-0.0001 ^c	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000
MKT	1.0301 ^a	1.0094 ^a	0.9855 ^a	0.9882 ^a	0.9877 ^a	0.9846 ^a	0.9785 ^a	0.9735 ^a	0.9687 ^a	1.0001 ^a	-0.0300 ^a
HML	0.1686 ^a	0.2167 ^a	0.2442 ^a	0.2932 ^a	0.3067 ^a	0.2352 ^a	0.2337 ^a	0.2527 ^a	0.2209 ^a	0.1452 ^a	-0.0234
SMB	0.4255 ^a	0.5082 ^a	0.5718 ^a	0.6033 ^a	0.5714 ^a	0.6549 ^a	0.6462 ^a	0.7095 ^a	0.6034 ^a	0.5502 ^a	0.1247 ^a
TO	-0.2787 ^a	-0.0884 ^b	-0.0276	-0.0348	0.0372	0.0363	0.1439 ^a	0.0720 ^a	-0.0161	0.5924 ^a	0.8711 ^a
Adjusted R ²	0.9217	0.9360	0.9588	0.9632	0.9705	0.9619	0.9582	0.9626	0.9501	0.8926	0.2534
AIC	-8.1153	-8.3977	-8.9217	-9.0349	-9.2617	-9.0159	-8.9324	-9.0633	-8.7615	-7.8566	-7.4165
GRS	.6977										
TO3											
INTERCEPT	0.0002	0.0000	-0.0001	-0.0001 ^c	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0000
MKT	1.0305 ^a	1.0100 ^a	0.9857 ^a	0.9883 ^a	0.9877 ^a	0.9847 ^a	0.9785 ^a	0.9734 ^a	0.9688 ^a	1.0006 ^a	-0.0299 ^a
HML	0.1636 ^a	0.2096 ^a	0.2419 ^a	0.2922 ^a	0.3067 ^a	0.2346 ^a	0.2333 ^a	0.2539 ^a	0.2199 ^a	0.1388 ^a	-0.0248
SMB	0.4380 ^a	0.5261 ^a	0.5775 ^a	0.6058 ^a	0.5714 ^a	0.6564 ^a	0.6470 ^a	0.7064 ^a	0.6058 ^a	0.5663 ^a	0.1283 ^a
MOM	-0.1053 ^a	-0.1509 ^a	-0.0483 ^a	-0.0210	0.0002	-0.0121	-0.0076	0.0258 ^c	-0.0209	-0.1356 ^a	-0.0303
TO	-0.2999 ^a	-0.1188 ^a	-0.0373	-0.0391	0.0372	0.0338	0.1423 ^a	0.0772 ^a	-0.0203	0.5652 ^a	0.8650 ^a
Adjusted R ²	0.9238	0.9409	0.9593	0.9633	0.9705	0.9619	0.9582	0.9628	0.9502	0.8965	0.2537
AIC	-8.1429	-8.4771	-8.9337	-9.0363	-9.2602	-9.0154	-8.9313	-9.0663	-8.7622	-7.8923	-7.4162
GRS	1.1503										

Appendix A.16 (Continued)

Panel B: Results from 20th October 1997 to 3rd November 2003

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
CAPM											
INTERCEPT	0.0000	0.0001	0.0002	0.0002	0.0002	0.0004 ^b	0.0003	0.0004 ^b	0.0004 ^b	0.0004 ^b	0.0004
MKT	0.9313 ^a	0.7658 ^a	0.7183 ^a	0.6761 ^a	0.6520 ^a	0.5691 ^a	0.5286 ^a	0.4645 ^a	0.4535 ^a	0.5127 ^a	-0.4186 ^a
Adjusted R ²	0.6661	0.7211	0.7160	0.7079	0.7101	0.6252	0.5671	0.4817	0.4779	0.5367	0.2515
AIC	-6.5296	-7.1802	-7.2830	-7.3648	-7.4479	-7.3360	-7.2421	-7.1574	-7.1903	-7.1799	-6.3491
GRS	2.2615										
F&F											
INTERCEPT	-0.0003	-0.0003	-0.0002	-0.0002 ^c	-0.0002	0.0000	-0.0002	0.0000	0.0000	0.0001	0.0004
MKT	1.2463 ^a	1.0421 ^a	1.0307 ^a	1.0059 ^a	0.9650 ^a	0.9135 ^a	0.8921 ^a	0.8320 ^a	0.8104 ^a	0.8293 ^a	-0.4169 ^a
HML	0.3220 ^a	0.3681 ^a	0.4207 ^a	0.4226 ^a	0.4071 ^a	0.4334 ^a	0.4500 ^a	0.4533 ^a	0.4880 ^a	0.3556 ^a	0.0336
SMB	0.6463 ^a	0.5453 ^a	0.6155 ^a	0.6552 ^a	0.6203 ^a	0.6862 ^a	0.7261 ^a	0.7345 ^a	0.7012 ^a	0.6416 ^a	-0.0046
Adjusted R ²	0.7502	0.8208	0.8598	0.8876	0.8844	0.8701	0.8544	0.8049	0.7922	0.7591	0.2509
AIC	-6.8187	-7.6210	-7.9880	-8.3189	-8.3664	-8.3942	-8.3307	-8.1332	-8.1104	-7.8328	-6.3471
GRS	2.4186										
C-F&F											
INTERCEPT	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	-0.0001	0.0000	0.0000	0.0001	0.0002
MKT	1.2349 ^a	1.0354 ^a	1.0264 ^a	1.0028 ^a	0.9623 ^a	0.9117 ^a	0.8903 ^a	0.8308 ^a	0.8085 ^a	0.8288 ^a	-0.4061 ^a
HML	0.2298 ^a	0.3138 ^a	0.3863 ^a	0.3972 ^a	0.3856 ^a	0.4183 ^a	0.4353 ^a	0.4435 ^a	0.4733 ^a	0.3512 ^a	0.1214 ^b
SMB	0.7074 ^a	0.5813 ^a	0.6383 ^a	0.6721 ^a	0.6346 ^a	0.6962 ^a	0.7359 ^a	0.7410 ^a	0.7109 ^a	0.6446 ^a	-0.0628
MOM	-0.2453 ^a	-0.1443 ^a	-0.0915 ^a	-0.0677 ^a	-0.0573 ^a	-0.0400 ^a	-0.0392 ^a	-0.0261	-0.0392 ^b	-0.0117	0.2336 ^a
Adjusted R ²	0.7838	0.8394	0.8682	0.8928	0.8884	0.8723	0.8566	0.8059	0.7947	0.7592	0.3077
AIC	-6.9626	-7.7299	-8.0492	-8.3649	-8.4004	-8.4104	-8.3452	-8.1376	-8.1218	-7.8324	-6.4254
GRS	.5551										
TO1											
INTERCEPT	-0.0001	0.0001	0.0002	0.0003	0.0003 ^c	0.0005 ^a	0.0004 ^b	0.0006 ^a	0.0006 ^a	0.0006 ^a	0.0007 ^a
MKT	0.8026 ^a	0.7622 ^a	0.7554 ^a	0.7323 ^a	0.7314 ^a	0.6742 ^a	0.6532 ^a	0.6045 ^a	0.6053 ^a	0.6750 ^a	-0.1276 ^a
TO	-0.5476 ^a	-0.0153	0.1578 ^a	0.2392 ^a	0.3379 ^a	0.4473 ^a	0.5302 ^a	0.5961 ^a	0.6462 ^a	0.6909 ^a	1.2385 ^a
Adjusted R ²	0.6905	0.7210	0.7195	0.7172	0.7302	0.6662	0.6277	0.5660	0.5812	0.6403	0.4862
AIC	-6.6047	-7.1791	-7.2948	-7.3964	-7.5194	-7.4512	-7.3922	-7.3344	-7.4100	-7.4326	-6.7247
GRS	5.4073										
TO2											
INTERCEPT	-0.0007 ^a	-0.0004 ^b	-0.0002 ^c	-0.0002 ^b	-0.0002	0.0000	-0.0001	0.0001	0.0001	0.0002 ^c	0.0009 ^a
MKT	1.1193 ^a	0.9984 ^a	1.0073 ^a	0.9926 ^a	0.9688 ^a	0.9293 ^a	0.9176 ^a	0.8668 ^a	0.8532 ^a	0.8866 ^a	-0.2327 ^a
HML	0.5130 ^a	0.4338 ^a	0.4558 ^a	0.4427 ^a	0.4014 ^a	0.4097 ^a	0.4117 ^a	0.4010 ^a	0.4236 ^a	0.2695 ^a	-0.2435 ^a
SMB	0.8237 ^a	0.6064 ^a	0.6482 ^a	0.6738 ^a	0.6150 ^a	0.6642 ^a	0.6905 ^a	0.6859 ^a	0.6413 ^a	0.5617 ^a	-0.2621 ^a
TO	-0.9563 ^a	-0.3292 ^a	-0.1758 ^a	-0.1005 ^a	0.0285	0.1187 ^a	0.1919 ^a	0.2618 ^a	0.3224 ^a	0.4309 ^a	1.3872 ^a
Adjusted R ²	0.8167	0.8333	0.8638	0.8891	0.8845	0.8726	0.8614	0.8193	0.8150	0.7949	0.5129
AIC	-7.1276	-7.6928	-8.0162	-8.3309	-8.3662	-8.4130	-8.3793	-8.2093	-8.2260	-7.9932	-6.7768
GRS	6.6228										
TO3											
INTERCEPT	-0.0005 ^a	-0.0002 ^c	-0.0002	-0.0002	-0.0001	0.0001	0.0000	0.0001	0.0001	0.0003 ^b	0.0007 ^a
MKT	1.1161 ^a	0.9964 ^a	1.0061 ^a	0.9916 ^a	0.9679 ^a	0.9287 ^a	0.9169 ^a	0.8663 ^a	0.8525 ^a	0.8862 ^a	-0.2299 ^a
HML	0.4210 ^a	0.3766 ^a	0.4190 ^a	0.4151 ^a	0.3765 ^a	0.3910 ^a	0.3924 ^a	0.3864 ^a	0.4026 ^a	0.2588 ^a	-0.1623 ^a
SMB	0.8681 ^a	0.6340 ^a	0.6659 ^a	0.6871 ^a	0.6270 ^a	0.6732 ^a	0.6998 ^a	0.6929 ^a	0.6515 ^a	0.5669 ^a	-0.3012 ^a
MOM	-0.2169 ^a	-0.1350 ^a	-0.0867 ^a	-0.0651 ^a	-0.0586 ^a	-0.0441 ^a	-0.0456 ^a	-0.0345 ^b	-0.0497 ^a	-0.0254 ^b	0.1916 ^a
TO	-0.9040 ^a	-0.2966 ^a	-0.1549 ^a	-0.0848 ^a	0.0427	0.1294 ^a	0.2029 ^a	0.2702 ^a	0.3344 ^a	0.4370 ^a	1.3410 ^a
Adjusted R ²	0.8428	0.8495	0.8713	0.8937	0.8886	0.8752	0.8644	0.8211	0.8191	0.7958	0.5508
AIC	-7.2807	-7.7942	-8.0720	-8.3734	-8.4017	-8.4333	-8.4004	-8.2188	-8.2475	-7.9966	-6.8573
GRS	4.3270										

Appendix A.16 (Continued)

Panel C: Results from 4th November 2003 to 29th June 2007

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
CAPM											
INTERCEPT	0.0000	-0.0001	0.0002	0.0001	0.0001	0.0002	0.0002 ^b	0.0003 ^b	0.0003 ^b	0.0003 ^b	0.0003 ^c
MKT	1.0629 ^a	1.0133 ^a	0.9516 ^a	0.9285 ^a	0.9136 ^a	0.8292 ^a	0.8046 ^a	0.7179 ^a	0.6921 ^a	0.6917 ^a	-0.3712 ^a
Adjusted R ²	0.7608	0.8322	0.8268	0.8111	0.8011	0.7636	0.7688	0.6975	0.6827	0.6551	0.2192
AIC	-7.7948	-8.3345	-8.4217	-8.3653	-8.3335	-8.3069	-8.3958	-8.2580	-8.2619	-8.1382	-7.4748
GRS	2.2897										
F&F											
INTERCEPT	-0.0002	-0.0002 ^b	0.0000	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0002
MKT	1.1922 ^a	1.1319 ^a	1.0942 ^a	1.0998 ^a	1.0894 ^a	1.0209 ^a	0.9861 ^a	0.9248 ^a	0.8890 ^a	0.8923 ^a	-0.2999 ^a
HML	0.2974 ^a	0.2554 ^a	0.2491 ^a	0.2884 ^a	0.3659 ^a	0.2975 ^a	0.2946 ^a	0.2881 ^a	0.2964 ^a	0.1590 ^a	-0.1384 ^b
SMB	0.5205 ^a	0.4723 ^a	0.5513 ^a	0.6591 ^a	0.6965 ^a	0.7303 ^a	0.6949 ^a	0.7785 ^a	0.7472 ^a	0.7198 ^a	0.1993 ^a
Adjusted R ²	0.8056	0.8765	0.8950	0.9119	0.9156	0.9104	0.9105	0.9026	0.8803	0.8435	0.2570
AIC	-8.0000	-8.6391	-8.9200	-9.1259	-9.1890	-9.2753	-9.3424	-9.3889	-9.2350	-8.9263	-7.5224
GRS	1.2970										
C-F&F											
INTERCEPT	-0.0002	-0.0002 ^b	0.0000	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0002
MKT	1.1860 ^a	1.1153 ^a	1.0841 ^a	1.1086 ^a	1.0790 ^a	1.0257 ^a	0.9884 ^a	0.9332 ^a	0.9012 ^a	0.8894 ^a	-0.2966 ^a
HML	0.2909 ^a	0.2381 ^a	0.2385 ^a	0.2975 ^a	0.3550 ^a	0.3024 ^a	0.2970 ^a	0.2969 ^a	0.3092 ^a	0.1560 ^a	-0.1350 ^b
SMB	0.5123 ^a	0.4504 ^a	0.5379 ^a	0.6707 ^a	0.6828 ^a	0.7365 ^a	0.6979 ^a	0.7896 ^a	0.7634 ^a	0.7160 ^a	0.2037 ^a
MOM	0.0208	0.0552 ^b	0.0338 ^c	-0.0291	0.0347	-0.0158	-0.0077	-0.0280	-0.0408 ^c	0.0097	-0.0110
Adjusted R ²	0.8055	0.8775	0.8953	0.9122	0.9160	0.9105	0.9104	0.9029	0.8812	0.8434	0.2563
AIC	-7.9985	-8.6457	-8.9222	-9.1278	-9.1928	-9.2745	-9.3407	-9.3915	-9.2415	-8.9246	-7.5204
GRS	1.2942										
TO1											
INTERCEPT	-0.0001	-0.0001	0.0002	0.0001	0.0002	0.0002 ^c	0.0003 ^b	0.0003 ^a	0.0003 ^a	0.0003 ^b	0.0004 ^b
MKT	0.9766 ^a	0.9593 ^a	0.9401 ^a	0.9702 ^a	0.9825 ^a	0.9279 ^a	0.9142 ^a	0.8626 ^a	0.8438 ^a	0.8562 ^a	-0.1205 ^a
TO	-0.3702 ^a	-0.2317 ^a	-0.0493	0.1789 ^a	0.2956 ^a	0.4233 ^a	0.4702 ^a	0.6207 ^a	0.6505 ^a	0.7051 ^a	1.0753 ^a
Adjusted R ²	0.7730	0.8379	0.8269	0.8150	0.8122	0.7902	0.8039	0.7674	0.7635	0.7463	0.4668
AIC	-7.8460	-8.3678	-8.4213	-8.3849	-8.3898	-8.4250	-8.5593	-8.5195	-8.5549	-8.4444	-7.8552
GRS	2.7691										
TO2											
INTERCEPT	-0.0004 ^a	-0.0004 ^a	-0.0001 ^c	-0.0002 ^b	-0.0001 ^c	-0.0001	0.0000	0.0000	0.0001	0.0001	0.0005 ^a
MKT	1.0661 ^a	1.0360 ^a	1.0215 ^a	1.0559 ^a	1.0634 ^a	1.0126 ^a	0.9906 ^a	0.9461 ^a	0.9197 ^a	0.9338 ^a	-0.1323 ^a
HML	0.4056 ^a	0.3376 ^a	0.3114 ^a	0.3261 ^a	0.3882 ^a	0.3046 ^a	0.2907 ^a	0.2699 ^a	0.2700 ^a	0.1234 ^a	-0.2823 ^a
SMB	0.8311 ^a	0.7082 ^a	0.7302 ^a	0.7674 ^a	0.7606 ^a	0.7507 ^a	0.6837 ^a	0.7259 ^a	0.6715 ^a	0.6175 ^a	-0.2136 ^a
TO	-0.8974 ^a	-0.6818 ^a	-0.5170 ^a	-0.3128 ^a	-0.1853 ^a	-0.0591 ^c	0.0321	0.1517 ^a	0.2187 ^a	0.2955 ^a	1.1929 ^a
Adjusted R ²	0.8621	0.9158	0.9204	0.9215	0.9190	0.9108	0.9105	0.9057	0.8873	0.8558	0.4939
AIC	-8.3425	-9.0209	-9.1960	-9.2395	-9.2285	-9.2777	-9.3418	-9.4208	-9.2943	-9.0074	-7.9052
GRS	5.0286										
TO3											
INTERCEPT	-0.0004 ^a	-0.0004 ^a	-0.0001	-0.0002 ^c	-0.0002 ^c	-0.0001	0.0000	0.0000	0.0001	0.0001	0.0004 ^a
MKT	1.0821 ^a	1.0381 ^a	1.0251 ^a	1.0707 ^a	1.0589 ^a	1.0180 ^a	0.9918 ^a	0.9497 ^a	0.9249 ^a	0.9244 ^a	-0.1577 ^a
HML	0.4290 ^a	0.3406 ^a	0.3167 ^a	0.3478 ^a	0.3817 ^a	0.3125 ^a	0.2925 ^a	0.2751 ^a	0.2776 ^a	0.1095 ^a	-0.3195 ^a
SMB	0.8654 ^a	0.7127 ^a	0.7380 ^a	0.7993 ^a	0.7510 ^a	0.7624 ^a	0.6863 ^a	0.7336 ^a	0.6827 ^a	0.5971 ^a	-0.2683 ^a
MOM	-0.0648 ^c	-0.0084	-0.0147	-0.0603 ^a	0.0181	-0.0220	-0.0049	-0.0145	-0.0212	0.0385 ^c	0.1034 ^b
TO	-0.9223 ^a	-0.6850 ^a	-0.5227 ^a	-0.3360 ^a	-0.1783 ^a	-0.0676 ^b	0.0302	0.1462 ^a	0.2106 ^a	0.3103 ^a	1.2326 ^a
Adjusted R ²	0.8632	0.9157	0.9204	0.9228	0.9190	0.9109	0.9104	0.9058	0.8875	0.8565	0.5005
AIC	-8.3490	-9.0191	-9.1950	-9.2557	-9.2280	-9.2781	-9.3398	-9.4199	-9.2946	-9.0112	-7.9173
GRS	5.5136										

Appendix A.17

Sub-period estimates of asset pricing models of illiquidity ratio portfolios

Panel A: Results from 1st July 1992 to 17th October 1997

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
CAPM											
INTERCEPT	0.0000	0.0002	0.0000	0.0001	0.0002 ^b	0.0001	0.0001	-0.0001	-0.0002	0.0004	0.0004 ^c
MKT	0.9354 ^a	0.8985 ^a	0.8856 ^a	0.8859 ^a	0.9198 ^a	0.9186 ^a	0.9071 ^a	0.9239 ^a	0.9259 ^a	0.9375 ^a	0.0020
Adjusted R ²	0.9105	0.9020	0.9039	0.8965	0.9223	0.9183	0.9059	0.9045	0.8688	0.7996	-0.0007
AIC	-8.0930	-8.0739	-8.1243	-8.0409	-8.2807	-8.2286	-8.0987	-8.0465	-7.6842	-7.1530	-7.0546
GRS	3.9851										
F&F											
INTERCEPT	-0.0001	0.0001	-0.0001	0.0000	0.0002 ^b	0.0000	0.0000	-0.0002 ^b	-0.0003 ^b	0.0002	0.0003 ^c
MKT	0.9845 ^a	0.9738 ^a	0.9684 ^a	0.9730 ^a	0.9920 ^a	0.9958 ^a	0.9914 ^a	0.9964 ^a	1.0034 ^a	1.0283 ^a	0.0438
HML	0.0408	0.0659 ^a	0.2072 ^a	0.1861 ^a	0.2927 ^a	0.2612 ^a	0.3125 ^a	0.2650 ^a	0.3301 ^a	0.4183 ^a	0.3775 ^a
SMB	0.3731 ^a	0.5719 ^a	0.6385 ^a	0.6697 ^a	0.5647 ^a	0.5999 ^a	0.6570 ^a	0.5656 ^a	0.6074 ^a	0.7143 ^a	0.3412 ^a
Adjusted R ²	0.9278	0.9459	0.9606	0.9579	0.9662	0.9651	0.9467	0.9665	0.9164	0.8597	0.0824
AIC	-8.3064	-8.6657	-9.0130	-8.9395	-9.1122	-9.1203	-9.0897	-8.6273	-8.1336	-7.5078	-7.1399
GRS	4.2936										
C-F&F											
INTERCEPT	-0.0001	0.0001	-0.0001	0.0000	0.0002 ^b	0.0000	0.0000	-0.0002	-0.0002	0.0004 ^b	0.0005 ^b
MKT	0.9846 ^a	0.9738 ^a	0.9683 ^a	0.9730 ^a	0.9920 ^a	0.9958 ^a	0.9915 ^a	0.9966 ^a	1.0040 ^a	1.0292 ^a	0.0446
HML	0.0399	0.0641 ^b	0.2079 ^a	0.1860 ^a	0.2932 ^a	0.2602 ^a	0.3103 ^a	0.2608 ^a	0.3192 ^a	0.4010 ^a	0.3612 ^a
SMB	0.3738 ^a	0.5735 ^a	0.6379 ^a	0.6698 ^a	0.5642 ^a	0.6007 ^a	0.6589 ^a	0.5692 ^a	0.6166 ^a	0.7288 ^a	0.3550 ^a
MOM	-0.0118	-0.0244	0.0096	-0.0014	0.0069	-0.0127	-0.0293 ^b	-0.0561 ^a	-0.1438 ^a	-0.2273 ^a	-0.2155 ^a
Adjusted R ²	0.9278	0.9460	0.9605	0.9579	0.9662	0.9653	0.9473	0.9666	0.9209	0.8698	0.1234
AIC	-8.3054	-8.6669	-9.0122	-8.9380	-9.1111	-9.1200	-9.0942	-8.6396	-8.1883	-7.5821	-7.1849
GRS	4.6915										
AM1											
INTERCEPT	-0.0001	0.0001	0.0000	0.0000	0.0002 ^b	0.0000	0.0000	-0.0002 ^c	-0.0002 ^b	0.0002 ^c	0.0003 ^c
MKT	0.9684 ^a	0.9435 ^a	0.9363 ^a	0.9413 ^a	0.9673 ^a	0.9675 ^a	0.9618 ^a	0.9755 ^a	0.9802 ^a	1.0237 ^a	0.0553 ^c
AM	0.3436 ^a	0.4694 ^a	0.5278 ^a	0.5774 ^a	0.4944 ^a	0.5098 ^a	0.5694 ^a	0.5378 ^a	0.5649 ^a	0.8980 ^a	0.5544 ^a
Adjusted R ²	0.9249	0.9310	0.9417	0.9413	0.9536	0.9516	0.9479	0.9406	0.9069	0.8860	0.1478
AIC	-8.2679	-8.4236	-8.6232	-8.6077	-8.7966	-8.7509	-8.6892	-8.5203	-8.0258	-7.7161	-7.2146
GRS	3.3181										
AM2											
INTERCEPT	-0.0001	0.0001	-0.0001	0.0000	0.0002 ^b	0.0000	0.0000	-0.0002 ^b	-0.0003 ^b	0.0003 ^c	0.0004 ^c
MKT	0.9839 ^a	0.9735 ^a	0.9682 ^a	0.9724 ^a	0.9916 ^a	0.9954 ^a	0.9909 ^a	0.9955 ^a	1.0026 ^a	1.0246 ^a	0.0407
HML	0.0019	0.0495 ^c	0.1934 ^a	0.1521 ^a	0.2659 ^a	0.2415 ^a	0.2841 ^a	0.2047 ^a	0.2773 ^a	0.1829 ^a	0.1810 ^a
SMB	0.2664 ^a	0.5268 ^a	0.6006 ^a	0.5763 ^a	0.4911 ^a	0.5459 ^a	0.5790 ^a	0.4000 ^a	0.4625 ^a	0.0682	-0.1982 ^b
AM	0.1373 ^b	0.0580 ^c	0.0487 ^c	0.1202 ^a	0.0947 ^a	0.0695 ^a	0.1004 ^a	0.2132 ^a	0.1865 ^a	0.8317 ^a	0.6943 ^a
Adjusted R ²	0.9286	0.9460	0.9606	0.9586	0.9666	0.9668	0.9656	0.9488	0.9179	0.8877	0.1704
AIC	-8.3172	-8.6674	-9.0147	-8.9557	-9.1238	-9.1259	-9.1025	-8.6670	-8.1511	-7.7295	-7.2400
GRS	4.8780										
AM3											
INTERCEPT	-0.0001	0.0001	-0.0001	-0.0001	0.0001 ^b	0.0000	0.0000	-0.0002 ^c	-0.0002	0.0003 ^b	0.0005 ^b
MKT	0.9839 ^a	0.9736 ^a	0.9681 ^a	0.9723 ^a	0.9915 ^a	0.9955 ^a	0.9911 ^a	0.9957 ^a	1.0035 ^a	1.0255 ^a	0.0416
HML	0.0013	0.0514 ^c	0.1916 ^a	0.1505 ^a	0.2638 ^a	0.2419 ^a	0.2859 ^a	0.2079 ^a	0.2906 ^a	0.1962 ^a	0.1950 ^a
SMB	0.2629 ^a	0.5370 ^a	0.5911 ^a	0.5679 ^a	0.4797 ^a	0.5482 ^a	0.5888 ^a	0.4172 ^a	0.5343 ^a	0.1404 ^b	-0.1225
MOM	0.0063	-0.0184	0.0173	0.0153	0.0207	-0.0041	-0.0179	-0.0313	-0.1304 ^a	-0.1312 ^a	-0.1375 ^b
AM	0.1413 ^b	0.0465	0.0595 ^c	0.1298 ^a	0.1077 ^a	0.0669 ^b	0.0892 ^a	0.1936 ^a	0.1048 ^c	0.7495 ^a	0.6082 ^a
Adjusted R ²	0.9286	0.9460	0.9607	0.9586	0.9667	0.9666	0.9656	0.9489	0.9213	0.8907	0.1854
AIC	-8.3158	-8.6673	-9.0150	-8.9555	-9.1252	-9.1245	-9.1031	-8.6696	-8.1927	-7.7563	-7.2575
GRS	3.1238										

Appendix A.17 (Continued)

Panel B: Results from 20th October 1997 to 3rd November 2003

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	diff(10-1)
CAPM											
INTERCEPT	-0.0001	0.0001	0.0001	0.0002	0.0003 ^b	0.0003 ^c	0.0005 ^b	0.0003	0.0005 ^b	0.0004 ^b	0.0006 ^b
MKT	0.9132 ^a	0.7482 ^a	0.6530 ^a	0.6450 ^a	0.6096 ^a	0.5439 ^a	0.4937 ^a	0.5151 ^a	0.5324 ^a	0.6169 ^a	-0.2963 ^a
Adjusted R ²	0.7092	0.7481	0.6881	0.6906	0.6776	0.5935	0.5037	0.5237	0.5186	0.5379	0.1389
AIC	-6.7695	-7.3654	-7.3404	-7.3765	-7.4294	-7.2932	-7.1236	-7.1185	-7.0322	-6.8149	-6.3089
GRS	2.1187										
F&F											
INTERCEPT	-0.0003	-0.0002	-0.0002 ^c	-0.0002 ^c	-0.0001	-0.0001	0.0000	-0.0002 ^c	0.0000	0.0000	0.0003
MKT	1.0920 ^a	0.9771 ^a	0.9403 ^a	0.9754 ^a	0.9515 ^a	0.9080 ^a	0.8873 ^a	0.8941 ^a	0.9264 ^a	1.0144 ^a	-0.0776 ^b
HML	0.4210 ^a	0.3860 ^a	0.4105 ^a	0.4346 ^a	0.4222 ^a	0.4229 ^a	0.4593 ^a	0.4070 ^a	0.4012 ^a	0.3585 ^a	-0.0625
SMB	0.3068 ^a	0.4314 ^a	0.5601 ^a	0.6534 ^a	0.6833 ^a	0.7342 ^a	0.7933 ^a	0.7726 ^a	0.8087 ^a	0.8276 ^a	0.5208 ^a
Adjusted R ²	0.7443	0.8235	0.8293	0.8834	0.9060	0.8810	0.8498	0.8345	0.8336	0.7924	0.2823
AIC	-6.8971	-7.7199	-7.9418	-8.3510	-8.6611	-8.5205	-8.3173	-8.1746	-8.0930	-7.6137	-6.4898
GRS	1.2601										
C-F&F											
INTERCEPT	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	-0.0001	0.0000	-0.0001	0.0001	0.0000	0.0000
MKT	1.0794 ^a	0.9719 ^a	0.9339 ^a	0.9727 ^a	0.9491 ^a	0.9072 ^a	0.8858 ^a	0.8922 ^a	0.9252 ^a	1.0134 ^a	-0.0660 ^c
HML	0.3198 ^a	0.3447 ^a	0.3586 ^a	0.4135 ^a	0.4028 ^a	0.4166 ^a	0.4469 ^a	0.3917 ^a	0.3912 ^a	0.3506 ^a	0.0308
SMB	0.3739 ^a	0.4587 ^a	0.5945 ^a	0.6674 ^a	0.6961 ^a	0.7383 ^a	0.8015 ^a	0.7827 ^a	0.8154 ^a	0.8328 ^a	0.4589 ^a
MOM	-0.2693 ^a	-0.1097 ^a	-0.1380 ^a	-0.0562 ^a	-0.0517 ^a	-0.0166	-0.0330 ^a	-0.0406 ^a	-0.0266 ^b	-0.0209	0.2483 ^a
Adjusted R ²	0.7892	0.8352	0.8516	0.8871	0.9095	0.8813	0.8368	0.8513	0.8344	0.7927	0.3534
AIC	-7.0896	-7.7875	-8.0814	-8.3831	-8.6984	-8.5226	-8.3270	-8.1878	-8.0974	-7.6147	-6.5935
GRS	.6833										
AM1											
INTERCEPT	-0.0001	0.0000	-0.0001	0.0000	0.0001	0.0001	0.0002	0.0000	0.0002	0.0001	0.0002
MKT	0.8845 ^a	0.8111 ^a	0.7910 ^a	0.8381 ^a	0.8151 ^a	0.7737 ^a	0.7513 ^a	0.7745 ^a	0.7889 ^a	0.9142 ^a	0.0297
AM	-0.0876 ^c	0.1922 ^a	0.4214 ^a	0.5898 ^a	0.6277 ^a	0.7017 ^a	0.7865 ^a	0.7920 ^a	0.7831 ^a	0.9077 ^a	0.9953 ^a
Adjusted R ²	0.7101	0.7566	0.7381	0.7914	0.8031	0.7661	0.7272	0.7401	0.7147	0.7414	0.4137
AIC	-6.7722	-7.3990	-7.5143	-7.7701	-7.9218	-7.8451	-7.7212	-7.7235	-7.5546	-7.3948	-6.6925
GRS	1.1644										
AM2											
INTERCEPT	-0.0003	-0.0002	-0.0002 ^c	-0.0002 ^c	-0.0001	-0.0001	0.0000	-0.0002 ^c	0.0000	0.0000	0.0003
MKT	1.0549 ^a	0.9587 ^a	0.9348 ^a	0.9794 ^a	0.9570 ^a	0.9168 ^a	0.8999 ^a	0.9092 ^a	0.9373 ^a	1.0369 ^a	-0.0179
HML	0.5997 ^a	0.4744 ^a	0.4369 ^a	0.4150 ^a	0.3958 ^a	0.3803 ^a	0.3989 ^a	0.3345 ^a	0.3485 ^a	0.2498 ^a	-0.3498 ^a
SMB	0.6755 ^a	0.6139 ^a	0.6146 ^a	0.6129 ^a	0.6287 ^a	0.6463 ^a	0.6686 ^a	0.6229 ^a	0.7000 ^a	0.6034 ^a	-0.0721
AM	-0.6603 ^a	-0.3268 ^a	-0.0975 ^b	0.0726 ^b	0.0978 ^a	0.1573 ^a	0.2233 ^a	0.2680 ^a	0.1947 ^a	0.4014 ^a	1.0617 ^a
Adjusted R ²	0.7786	0.8367	0.8306	0.8841	0.9076	0.8856	0.8593	0.8476	0.8399	0.8134	0.4483
AIC	-7.0406	-7.7968	-7.9489	-8.3567	-8.6772	-8.5588	-8.3819	-8.2563	-8.1313	-7.7200	-6.7522
GRS	1.2620										
AM3											
INTERCEPT	0.0000	-0.0001	-0.0001	-0.0001	0.0000	-0.0001	0.0000	-0.0002	0.0000	0.0000	0.0000
MKT	1.0319 ^a	0.9491 ^a	0.9241 ^a	0.9756 ^a	0.9536 ^a	0.9163 ^a	0.8984 ^a	0.9073 ^a	0.9362 ^a	1.0371 ^a	0.0052
HML	0.5202 ^a	0.4411 ^a	0.3998 ^a	0.4016 ^a	0.3839 ^a	0.3784 ^a	0.3937 ^a	0.3281 ^a	0.3446 ^a	0.2505 ^a	-0.2696 ^a
SMB	0.8359 ^a	0.6810 ^a	0.6894 ^a	0.6400 ^a	0.6526 ^a	0.6502 ^a	0.6789 ^a	0.6359 ^a	0.7079 ^a	0.6021 ^a	-0.2338 ^a
MOM	-0.3166 ^a	-0.1324 ^a	-0.1477 ^a	-0.0534 ^a	-0.0472 ^a	-0.0075	-0.0204 ^b	-0.0256 ^b	-0.0156	0.0027	0.3193 ^a
AM	-0.8062 ^a	-0.3879 ^a	-0.1656 ^a	0.0479	0.0760 ^a	0.1539 ^a	0.2139 ^a	0.2562 ^a	0.1875 ^a	0.4027 ^a	1.2089 ^a
Adjusted R ²	0.8391	0.8533	0.8556	0.8874	0.9104	0.8856	0.8598	0.8485	0.8401	0.8133	0.5632
AIC	-7.3591	-7.9032	-8.1075	-8.3849	-8.7077	-8.5582	-8.3850	-8.2611	-8.1320	-7.7188	-6.9850
GRS	.8578										

Appendix A.17 (Continued)

Panel C: Results from 4th November 2003 to 29th June 2007

Model	Portfolio1	Portfolio2	Portfolio3	Portfolio4	Portfolio5	Portfolio6	Portfolio7	Portfolio8	Portfolio9	Portfolio10	Diff(10-1)
CAPM											
INTERCEPT	-0.0002	0.0001	0.0000	0.0001	0.0002	0.0002	0.0002	0.0003 ^b	0.0003 ^b	0.0005 ^a	0.0006 ^a
MKT	1.1110 ^a	1.0256 ^a	0.9260 ^a	0.9415 ^a	0.8908 ^a	0.8577 ^a	0.7778 ^a	0.6884 ^a	0.6586 ^a	0.7272 ^a	-0.3838 ^a
Adjusted R ²	0.7907	0.8589	0.8337	0.8201	0.8155	0.7538	0.7113	0.6506	0.6212	0.6210	0.2117
AIC	-7.8780	-8.5149	-8.5256	-8.3967	-8.4771	-8.1854	-8.1640	-8.1281	-8.0900	-7.8907	-7.3638
GRS	2.4224										
F&F											
INTERCEPT	-0.0003 ^c	0.0000	-0.0002 ^c	-0.0001	-0.0001	-0.0001	-0.0001 ^c	0.0000	0.0000	0.0001	0.0004 ^b
MKT	1.2038 ^a	1.1299 ^a	1.0510 ^a	1.0796 ^a	1.0523 ^a	1.0595 ^a	0.9984 ^a	0.9165 ^a	0.8764 ^a	0.9522 ^a	-0.2516 ^a
HML	0.2531 ^a	0.1754 ^a	0.1984 ^a	0.2966 ^a	0.2912 ^a	0.3343 ^a	0.3521 ^a	0.3440 ^a	0.3050 ^a	0.2419 ^a	-0.0111
SMB	0.3853 ^a	0.4011 ^a	0.4775 ^a	0.5495 ^a	0.6269 ^a	0.7750 ^a	0.8432 ^a	0.8660 ^a	0.8202 ^a	0.8261 ^a	0.4408 ^a
Adjusted R ²	0.8143	0.8911	0.8884	0.8887	0.9148	0.9057	0.9182	0.9064	0.8620	0.8266	0.2993
AIC	-7.9959	-8.7720	-8.9224	-8.8751	-9.2479	-9.1431	-9.4231	-9.4435	-9.0978	-8.6705	-7.4795
GRS	.8623										
C-F&F											
INTERCEPT	-0.0003 ^c	-0.0001	-0.0002	-0.0001	-0.0001	-0.0001	-0.0001 ^c	0.0000	0.0000	0.0001	0.0004 ^b
MKT	1.1931 ^a	1.1142 ^a	1.0632 ^a	1.0757 ^a	1.0458 ^a	1.0649 ^a	0.9960 ^a	0.9317 ^a	0.8843 ^a	0.9411 ^a	-0.2520 ^a
HML	0.2419 ^a	0.1591 ^a	0.2111 ^a	0.2927 ^a	0.2844 ^a	0.3399 ^a	0.3495 ^a	0.3598 ^a	0.3132 ^a	0.2304 ^a	-0.0116
SMB	0.3711 ^a	0.3804 ^a	0.4935 ^a	0.5445 ^a	0.6183 ^a	0.7821 ^a	0.8399 ^a	0.8860 ^a	0.8305 ^a	0.8114 ^a	0.4403 ^a
MOM	0.0357	0.0523 ^b	-0.0405 ^b	0.0127	0.0217	-0.0179	0.0082	-0.0506 ^a	-0.0262	0.0370	0.0013
Adjusted R ²	0.8145	0.8920	0.8890	0.8887	0.9150	0.9057	0.9182	0.9078	0.8623	0.8271	0.2986
AIC	-7.9957	-8.7788	-8.9265	-8.8736	-9.2483	-9.1425	-9.4215	-9.4577	-9.0988	-8.6724	-7.4774
GRS	1.0563										
AM1											
INTERCEPT	-0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002 ^c	0.0004 ^b
MKT	1.0420 ^a	0.9993 ^a	0.9581 ^a	0.9970 ^a	0.9905 ^a	1.0140 ^a	0.9659 ^a	0.9362 ^a	0.9052 ^a	0.9981 ^a	-0.0439
AM	-0.1943 ^a	-0.0741	0.0904 ^b	0.1562 ^a	0.2808 ^a	0.4404 ^a	0.5298 ^a	0.6977 ^a	0.6944 ^a	0.7629 ^a	0.9572 ^a
Adjusted R ²	0.7958	0.8597	0.8353	0.8249	0.8334	0.7978	0.7846	0.7993	0.7750	0.7731	0.5058
AIC	-7.9020	-8.5199	-8.5342	-8.4230	-8.5780	-8.3816	-8.4560	-8.6818	-8.6097	-8.4027	-7.8296
GRS	.8985										
AM2											
INTERCEPT	-0.0003 ^c	0.0000	-0.0001 ^c	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0001	0.0004 ^b
MKT	1.0533 ^a	1.0115 ^a	0.9695 ^a	1.0067 ^a	1.0011 ^a	1.0262 ^a	0.9785 ^a	0.9466 ^a	0.9151 ^a	1.0090 ^a	-0.0443
HML	0.3957 ^a	0.2876 ^a	0.2757 ^a	0.3656 ^a	0.3397 ^a	0.3659 ^a	0.3710 ^a	0.3154 ^a	0.2683 ^a	0.1881 ^a	-0.2076 ^a
SMB	0.8908 ^a	0.7986 ^a	0.7514 ^a	0.7940 ^a	0.7987 ^a	0.8870 ^a	0.9100 ^a	0.7648 ^a	0.6903 ^a	0.6354 ^a	-0.2554 ^a
AM	-0.8130 ^a	-0.6394 ^a	-0.4406 ^a	-0.3933 ^a	-0.2764 ^a	-0.1801 ^a	-0.1075 ^a	0.1627 ^a	0.2089 ^a	0.3068 ^a	1.1198 ^a
Adjusted R ²	0.8664	0.9322	0.9116	0.9063	0.9244	0.9097	0.9198	0.9108	0.8696	0.8400	0.5219
AIC	-8.3241	-9.2448	-9.1543	-9.0457	-9.3665	-9.1855	-9.4418	-9.4905	-9.1533	-8.7503	-7.8608
GRS	1.3171										
AM3											
INTERCEPT	-0.0002 ^c	0.0000	-0.0001	-0.0001	0.0000	-0.0001	-0.0001	0.0000	0.0000	0.0001	0.0004 ^b
MKT	1.0713 ^a	1.0202 ^a	0.9925 ^a	1.0164 ^a	1.0051 ^a	1.0359 ^a	0.9801 ^a	0.9527 ^a	0.9143 ^a	0.9910 ^a	-0.0803 ^b
HML	0.4305 ^a	0.3045 ^a	0.3205 ^a	0.3844 ^a	0.3474 ^a	0.3848 ^a	0.3741 ^a	0.3272 ^a	0.2667 ^a	0.1532 ^a	-0.2773 ^a
SMB	0.9522 ^a	0.8284 ^a	0.8303 ^a	0.8272 ^a	0.8123 ^a	0.9203 ^a	0.9155 ^a	0.7857 ^a	0.6875 ^a	0.5737 ^a	-0.3785 ^a
MOM	-0.0867 ^b	-0.0421 ^b	-0.1115 ^a	-0.0469 ^c	-0.0192	-0.0470 ^b	-0.0077	-0.0294 ^b	0.0040	0.0871 ^a	0.1738 ^a
AM	-0.8564 ^a	-0.6604 ^a	-0.4964 ^a	-0.4167 ^a	-0.2860 ^a	-0.2037 ^a	-0.1114 ^a	0.1479 ^a	0.2109 ^a	0.3504 ^a	1.2068 ^a
Adjusted R ²	0.8682	0.9327	0.9164	0.9070	0.9245	0.9105	0.9197	0.9112	0.8695	0.8435	0.5390
AIC	-8.3366	-9.2513	-9.2087	-9.0523	-9.3664	-9.1935	-9.4400	-9.4938	-9.1512	-8.7708	-7.8960
GRS	1.0291										

