

Internet Appendix

for

“Individual Investors and Local Bias” *

This internet appendix presents supplemental analyses and results to the main tables in “Individual Investors and Local Bias”. The additional results are presented in four primary areas. First, we explain the construction of an alternative measure of information asymmetry (Table IA.I). Next, we present results of alternative measures of local bias (Table IA.II). Thirdly, we present additional results on the holdings-based calendar-time portfolio results, with alternative definitions of local vs. remote stocks (Table IA.III through Table IA.VII). Finally, we present additional results on the transactions-based calendar-time portfolio results, with alternative definitions of local vs. remote stocks (Table IA.VIII through Table IA.XVIII).

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Table IA.I Alternative Measure of Information Asymmetry

This table extends the definition information symmetry used in Section I of the paper. We consider an alternative methodology for indentifying stocks with low levels of information asymmetry. We create a proxy variable using dollar trading volume, number of analysts, and inclusion in the S&P500 index. This proxy has a 88% to 98% overlap with a method that identifies stocks based on S&P500 index inclusion alone.

Step 1: Get stocks and data

2,346	Unique CUSIPs	Stocks chosen with three criteria: i) Held or traded in our data ii) Dollar volume available iii) Number of analysts available
302	S&P500	D(S&P500) = 1
2,044	Non-S&P500	D(S&P500) = 0

Step 2: Calculate standardized measures of two variables (based on cross-sectional means and stdevs)

$$Std[\ln(\text{Volume}\$)]_i = \frac{\ln(\text{Volume}\$)_i - \text{mean}[\ln(\text{Volume}\$)]}{\sigma[\ln(\text{Volume}\$)]}$$

$$Std[\ln(\text{NumAnalysts})]_i = \frac{\ln(\text{NumAnalysts})_i - \text{mean}[\ln(\text{NumAnalysts})]}{\sigma[\ln(\text{NumAnalysts})]}$$

Step 3: Create a proxy called “*LowInfoAsym_i*”, which captures stocks with low levels of information asymmetry

$$\text{LowInfoAsym}_i = Std[\ln(\text{Volume}\$)]_i + Std[\ln(\text{NumAnalysts})]_i + D(\text{S \& P500})_i$$

Being classified as having low information asymmetry is more likely for stocks with high volume, with many analysts, and that are in the S&P 500 index. Summary statistics for *LowInfoAsym_i*:

Mean	0.56	10-ptile	-1.81
Stdev	1.99	25-ptile	-0.94
		50-ptile	+0.24
		75-ptile	+1.71
		90-ptile	+3.62

Step 4: Rank the 2,346 stocks by our proxy variable “*LowInfoAsym_i*”

Of the top 302 stocks	87.75%	In S&P500
	12.25%	Non-S&P500
Of the bottom 2,044 stocks	1.81%	In S&P500
	98.19%	Non-S&P500

Table IA.II
Local Bias in Holdings—100 miles, 100 km, and State Level

This table extends results shown in Table II of the main paper on the degree to which households overweight local stocks. We report averages across households. In Panel A, we calculate the fraction of each household's portfolio invested within a 100 mile radius of the family's home. Distance is measured from the household's zip code to the zip code of the firm's headquarters. For each household, we also calculate the fraction of the market (all stocks) within the same radii. In Panel B, we calculate the fraction of each household's portfolio invested within a 100 km radius of the family's home. In Panel C, we calculate the fraction of each household's portfolio invested within an investor's home state. In all three panels, the difference or ratio of columns A and B represents a measure of local bias.

Panel A: Local Bias Measure by 100 mile Radius Around Each Household's Location					
Portfolio Date	(A)	(B)	Bias Measures		
	Average % of Household's Portfolio ≤100 miles	Average % of Market ≤100 miles	Difference A - B	Ratio #1 A/B - 1	Ratio #2 ln(A/B)
Dec-1991	22.4	7.1	15.3	2.15	1.15
Dec-1992	21.6	6.9	14.7	2.13	1.14
Dec-1993	22.4	6.8	15.6	2.29	1.19
Dec-1994	22.0	7.0	15.0	2.14	1.15
Dec-1995	22.4	6.9	15.5	2.25	1.18

Panel B: Local Bias Measure by 100 km Radius Around Each Household's Location					
Portfolio Date	(A)	(B)	Bias Measures		
	Average % of Household's Portfolio ≤100 km	Average % of Market ≤100 km	Difference A - B	Ratio #1 A/B - 1	Ratio #2 ln(A/B)
Dec-1991	19.8	5.7	14.1	2.47	1.25
Dec-1992	19.0	5.6	13.4	2.39	1.22
Dec-1993	19.7	5.5	14.2	2.58	1.28
Dec-1994	19.5	5.6	13.9	2.48	1.25
Dec-1995	19.9	5.5	14.4	2.62	1.29

Panel C: Local Bias Measured by State					
Portfolio Date	(A)	(B)	Bias Measures		
	Average % of Household's Portfolio In-State	Average % of Market In Same Area	Difference A - B	Ratio #1 A/B - 1	Ratio #2 ln(A/B)
Dec-1991	24.2	2.5	21.7	8.78	2.28
Dec-1992	24.1	2.4	21.7	8.97	2.30
Dec-1993	23.6	2.5	21.1	8.58	2.26
Dec-1994	23.4	2.6	20.8	7.98	2.19
Dec-1995	23.9	2.8	21.1	7.50	2.14

Table IA. III
Holdings-based Calendar-time Portfolios—100mi Radius

This table extends results shown in Table IV of the main paper. We report results from analysis of holdings-based calendar-time portfolios. Panel A presents summary statistics of monthly return variables. Panel B presents pooled regression results with $R_{local,i} - R_f$ as the dependent variable. $R_{local,i} - R_f$ is the monthly excess return of an individual's local holdings. Local stocks are defined as those headquartered within a 100 mile radius of an investor's home. R_f is the risk-free return from Ken French's website. $R_m^* - R_f$ is the value-weighted excess market return for all stocks with zip code information. $R_z - R_f$ is the excess return of a passive zip code-level index. t -statistics are based on Rogers (1993) standard errors (clustered by month) and are robust to heteroskedasticity.

Panel A: Summary Statistics of Monthly Returns

	Mean (%)	Stdev (%)
$R_{local,i}$	1.4496	10.99
R_m^*	1.2528	2.88
R_z	1.3570	3.59
R_f	0.3462	0.09
$R_{local,i} - R_f$	1.1034	10.99
$R_{local,i} - R_m^*$	0.1968	10.52
$R_{local,i} - R_{z,i}$	0.0926	10.39

Panel B: Regressions with $R_{local,i} - R_f$ as the Dependent Variable

	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7
$Alpha$ (bp)	110.34	9.58	8.93	7.24	8.49	14.25	8.49
(t -stat)	(2.43)	(0.41)	(0.48)	(0.37)	(0.57)	(1.20)	(0.68)
$R_m^* - R_f$		1.1114		0.0835	1.1594		0.2383
(t -stat)		(11.84)		(0.68)	(27.25)		(5.08)
$R_z - R_f$			1.0033	0.9451		1.0054	0.8484
(t -stat)			(20.39)	(15.34)		(36.24)	(24.99)
SMB					0.5657	0.4574	0.4722
(t -stat)					(8.03)	(7.98)	(8.26)
HML					0.0870	0.0479	0.0778
(t -stat)					(1.28)	(0.98)	(1.48)
MOM					-0.2371	-0.2094	-0.2301
(t -stat)					(-4.80)	(-5.25)	(-5.99)
# of Obs	728,262	728,262	728,262	728,262	728,262	728,262	728,262
# of Months	71	71	71	71	71	71	71

Table IA.IV
Holdings-based Calendar-time Portfolios—100km Radius

This table extends results shown in Table IV of the main paper. We report results from analysis of holdings-based calendar-time portfolios. Panel A presents summary statistics of monthly return variables. Panel B presents pooled regression results with $R_{local,i} - R_f$ as the dependent variable. $R_{local,i} - R_f$ is the monthly excess return of an individual's local holdings. Local stocks are defined as those headquartered within a 100 km radius of an investor's home. R_f is the risk-free return from Ken French's website. $R_m^* - R_f$ is the value-weighted excess market return for all stocks with zip code information. $R_z - R_f$ is the excess return of a passive, zip code-level index. t -statistics are based on Rogers (1993) standard errors (clustered by month) and are robust to heteroskedasticity.

Panel A: Overview Statistics of Monthly Returns		
	Mean (%)	Stdev (%)
$R_{local,i}$	1.4834	11.10
R_m^*	1.2529	2.88
R_z	1.3617	3.60
R_f	0.3462	0.09
$R_{local,i} - R_f$	1.1362	11.10
$R_{local,i} - R_m^*$	0.2295	10.63
$R_{local,i} - R_{z,i}$	0.1207	10.49

Panel B: Regressions with $R_{local,i} - R_f$ as the Dependent Variable							
	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7
$Alpha$ (bp)	113.62	11.88	10.48	9.03	10.07	15.37	9.78
(t -stat)	(2.46)	(0.48)	(0.55)	(0.45)	(0.66)	(1.29)	(0.78)
$R_m^* - R_f$		1.1221		0.0717	1.1697		0.2303
(t -stat)		(11.66)		(0.58)	(26.51)		(4.90)
$R_z - R_f$			1.0156	0.9659		1.0161	0.8648
(t -stat)			(20.30)	(15.38)		(36.29)	(24.87)
SMB					0.5873	0.4747	0.4913
(t -stat)					(8.03)	(8.11)	(8.34)
HML					0.0906	0.0509	0.0803
(t -stat)					(1.27)	(1.01)	(1.48)
MOM					-0.2368	-0.2094	-0.2295
(t -stat)					(-4.66)	(-5.18)	(-5.89)
# of Obs	650,512	650,512	650,512	650,512	650,512	650,512	650,512
# of Months	71	71	71	71	71	71	71

Table IA.V
Holdings-based Calendar-time Portfolios—Aggregated at the State Level

This table extends results shown in Table IV of the main paper. We report results from analysis of holdings-based calendar-time portfolios. Panel A presents summary statistics of monthly return variables. Panel B presents pooled regression results with $R_{local,s} - R_f$ as the dependent variable. $R_{local,s} - R_f$ is the excess return of a portfolio that aggregates the local holdings of all investors living in a given state. Local stocks are defined as those headquartered within the same state as an investor's home. R_f is the risk-free return from Ken French's website. $R_m^* - R_f$ is the value-weighted excess market return for all stocks with zip code information. $R_s - R_f$ is the excess return of a passive, state-level index. t -statistics are based on Rogers (1993) standard errors (clustered by month) and are robust to heteroskedasticity.

Panel A: Overview Statistics of Monthly Returns		
	Mean (%)	Stdev (%)
$R_{local,s}$	1.5270	5.88
R_m^*	1.3339	2.86
R_s	1.3718	3.94
R_f	0.3609	0.09
$R_{local,s} - R_f$	1.1661	5.87
$R_{local,s} - R_m^*$	0.1931	5.17
$R_{local,s} - R_s$	0.1552	4.34

Panel B: Regressions with $R_{local,s} - R_f$ as the Dependent Variable							
	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7
<i>Alpha (bp)</i>	116.61	21.21	15.00	10.89	2.04	8.38	1.59
<i>(t-stat)</i>	(3.17)	(1.32)	(1.50)	(1.02)	(0.19)	(0.95)	(0.18)
$R_m^* - R_f$		0.9806		0.0852	0.9997		0.1218
<i>(t-stat)</i>		(22.95)		(1.61)	(29.47)		(2.69)
$R_s - R_f$			1.0051	0.9639		0.9887	0.9344
<i>(t-stat)</i>			(39.70)	(21.53)		(38.36)	(23.30)
<i>SMB</i>					0.4171	0.2014	0.2151
<i>(t-stat)</i>					(7.21)	(3.46)	(3.91)
<i>HML</i>					0.1644	0.0479	0.0824
<i>(t-stat)</i>					(3.07)	(0.91)	(1.64)
<i>MOM</i>					0.0298	0.0277	0.0141
<i>(t-stat)</i>					(0.68)	(0.76)	(0.40)
<i># of Obs</i>	3,190	3,190	3,190	3,190	3,190	3,190	3,190
<i># of Months</i>	71	71	71	71	71	71	71

Table IA.VI
Holdings-based Calendar-time Portfolios—20 Most Represented States

This table extends results shown in Table IV of the main paper. We report results from analysis of holdings-based calendar-time portfolios. Panel A presents summary statistics of monthly return variables. Panel B presents pooled regression results with $R_{local,s} - R_f$ as the dependent variable. $R_{local,s} - R_f$ is the excess return of a portfolio that aggregates the local holdings of all investors living in a given state. Local stocks are defined as those headquartered within the same state as an investor's home. R_f is the risk-free return from Ken French's website. $R_m^* - R_f$ is the value-weighted excess market return for all stocks with zip code information. $R_s - R_f$ is the excess return of a passive, state-level index. t -statistics are based on Rogers (1993) standard errors (clustered by month) and are robust to heteroskedasticity.

Panel A: Overview Statistics of Monthly Returns		
	Mean (%)	Stdev (%)
$R_{local,s}$	1.5056	4.20
R_m^*	1.3365	2.86
R_s	1.4196	3.44
R_f	0.3609	0.09
$R_{local,s} - R_f$	1.1446	4.19
$R_{local,s} - R_m^*$	0.1691	2.99
$R_{local,s} - R_s$	0.0860	2.42

Panel B: Regressions with $R_{local,s} - R_f$ as the Dependent Variable							
	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7
<i>Alpha (bp)</i>	114.46	13.45	8.76	5.59	10.17	10.43	5.27
<i>(t-stat)</i>	(3.05)	(0.95)	(0.80)	(0.48)	(0.97)	(1.16)	(0.56)
$R_m^* - R_f$		1.0355		0.1273	1.0367		0.1669
<i>(t-stat)</i>		(26.94)		(1.82)	(26.58)		(3.13)
$R_s - R_f$			0.9985	0.9112		0.9877	0.8792
<i>(t-stat)</i>			(39.88)	(18.09)		(37.80)	(21.67)
<i>SMB</i>					0.3273	0.2355	0.2471
<i>(t-stat)</i>					(5.37)	(4.46)	(5.03)
<i>HML</i>					0.0409	0.0101	0.0358
<i>(t-stat)</i>					(0.70)	(0.21)	(0.74)
<i>MOM</i>					-0.0509	-0.0588	-0.0696
<i>(t-stat)</i>					(-1.33)	(-1.45)	(-1.91)
<i># of Obs</i>	1,420	1,420	1,420	1,420	1,420	1,420	1,420
<i># of Months</i>	71	71	71	71	71	71	71

Table IA.VII
Holdings-Based Calendar-Time Portfolios—Variable Market Betas

This table extends results shown in Table IV of the main paper. We report results from analysis of holdings-based calendar-time portfolios. Panel A presents summary statistics of monthly return variables. Panel B presents pooled regression results with $R_{local,s} - R_f$ as the dependent variable. $R_{local,s} - R_f$ is the excess return of portfolio that aggregates the local holdings of all investors living in a given state. Local stocks are defined as being headquartered within the same state as an investor's home. R_f is the risk-free return from Ken French's website. $R_m^* - R_f$ is the value-weighted excess market return for all stocks with zip-code information. $R_s - R_f$ is the excess return of a passive, state-level index. t -statistics are based on Rogers (1993) standard errors (clustered by month) and are robust to heteroskedasticity.

Panel A: Overview Statistics of Monthly Returns		
	Mean (%)	Stdev (%)
$R_{local,s}$	1.5270	5.88
R_m^*	1.3339	2.86
R_s	1.3718	3.94
R_f	0.3609	0.09
$R_{local,s} - R_f$	1.1661	5.87
$R_{local,s} - R_m^*$	0.1931	5.17
$R_{local,s} - R_s$	0.1552	4.34

Panel B: Regressions with $R_{local,s} - R_f$ as the Dependent Variable							
	Reg 1	Reg 2	Reg 3	Reg 4	Reg 5	Reg 6	Reg 7
<i>Alpha (bp)</i>	116.61	21.19	14.33	11.02	2.01	7.88	2.20
<i>(t-stat)</i>	(3.17)	(1.31)	(1.50)	(1.15)	(0.18)	(0.90)	(0.26)
$R_m^* - R_f$		Varied		Varied	Varied		Varied
<i>(t-stat)</i>		Coefs		Coefs	Coefs		Coefs
$R_s - R_f$			Varied	Varied		Varied	Varied
<i>(t-stat)</i>			Coefs	Coefs		Coefs	Coefs
<i>SMB</i>					0.4174	0.1814	0.1860
<i>(t-stat)</i>					(7.17)	(3.20)	(3.62)
<i>HML</i>					0.1645	0.0495	0.0845
<i>(t-stat)</i>					(3.05)	(0.95)	(1.70)
<i>MOM</i>					0.0300	0.0259	0.0122
<i>(t-stat)</i>					(0.68)	(0.66)	(0.34)
<i># of Obs</i>	3,190	3,190	3,190	3,190	3,190	3,190	3,190
<i># of Months</i>	71	71	71	71	71	71	71

Table IA.VIII
Transactions-based Calendar-time Portfolios—100 mile Radius

This table extends results shown in Table VII of the main paper. We report average returns of transactions-based calendar-time portfolios. Portfolios are formed by mimicking the trades of all investors in our sample between 1991 and 1996. Stocks are held in a calendar-time portfolio for one year. For a given group of stocks, we form one calendar-time portfolio based on stocks bought (“Buys”) and another portfolio based on stocks sold (“Sells”). We present the difference of returns between the Buys and Sells portfolios (“Diff”) in both basis points per day and annualized in percentages. The “Alpha” reports the annualized constant from a regression of the Buys-minus-Sells portfolio returns on the market’s excess returns. Local stocks are defined as those headquartered within a 100 mile radius of an investor’s home. In Panels C and D, we consider whether a stock is part of the S&P500 index. *t*-statistics are based on Newey-West standard errors with five lags and are robust to heteroskedasticity and serial correlation of residuals.

	Average Returns (bp/Day)			Annual Diff		Alpha	
	Buys	Sells	Diff	%	<i>t-stat</i>	%	<i>t-stat</i>
Panel A: All Stocks							
All	6.083	6.889	-0.805	-2.01%	-2.50	-2.16%	-2.66
Panel B: Sorted by Location							
Local	7.104	7.729	-0.625	-1.56%	-1.50	-1.43%	-1.35
Remote	6.064	6.874	-0.810	-2.02%	-2.47	-2.25%	-2.73
Panel C: S&P500 Stocks and Location							
Local	7.472	7.849	-0.377	-0.95%	-0.57	-0.85%	-0.51
Remote	6.349	7.150	-0.801	-2.00%	-1.63	-2.22%	-1.77
Panel D: Non-S&P500 Stocks and Location							
Local	6.981	7.769	-0.788	-1.97%	-1.88	-1.76%	-1.65
Remote	5.971	6.807	-0.836	-2.08%	-2.79	-2.31%	-3.09

Table IA.IX
Transactions-based Calendar-time Portfolios—100 km Radius

This table extends results shown in Table VII of the main paper. We report average returns of transactions-based calendar-time portfolios. Portfolios are formed by mimicking the trades of all investors in our sample between 1991 and 1996. Stocks are held in a calendar-time portfolio for one year. For a given group of stocks, we form one calendar-time portfolio based on stocks bought (“Buys”) and another portfolio based on stocks sold (“Sells”). We present the difference of returns between the Buys and Sells portfolios (“Diff”) in both basis points per day and annualized in percentages. The “Alpha” reports the annualized constant from a regression of the Buys-minus-Sells portfolio returns on the market’s excess returns. Local stocks are defined as those headquartered within a 100 km radius of an investor’s home. In Panels C and D, we consider whether or not a stock is part of the S&P500 index. *t*-statistics are based on Newey-West standard errors with five lags and are robust to heteroskedasticity and serial correlation of residuals.

	Average Returns (bp/Day)			Annual Diff		Alpha	
	Buys	Sells	Diff	%	<i>t-stat</i>	%	<i>t-stat</i>
Panel A: All Stocks							
All	6.083	6.889	-0.805	-2.01%	-2.50	-2.16%	-2.66
Panel B: Sorted by Location							
Local	7.300	7.850	-0.550	-1.38%	-1.29	-1.20%	-1.11
Remote	6.055	6.872	-0.817	-2.04%	-2.48	-2.27%	-2.75
Panel C: S&P500 Stocks and Location							
Local	7.606	7.893	-0.287	-0.72%	-0.43	-0.60%	-0.36
Remote	6.357	7.160	-0.803	-2.00%	-1.62	-2.22%	-1.77
Panel D: Non-S&P500 Stocks and Location							
Local	7.208	7.941	-0.733	-1.83%	-1.68	-1.58%	-1.42
Remote	5.950	6.796	-0.846	-2.11%	-2.82	-2.33%	-3.13

Table IA.X
Transactions-based Calendar-time Portfolios—Equal Weighted

This table extends results shown in Table VII of the main paper. We report average returns of equal-weighted transactions-based calendar-time portfolios. Portfolios are formed by mimicking the trades of all investors in our sample between 1991 and 1996. Stocks are held in a calendar-time portfolio for one year. For a given group of stocks, we form one calendar-time portfolio based on stocks bought (“Buys”) and another portfolio based on stocks sold (“Sells”). We present the difference of returns between the Buys and Sells portfolios (“Diff”) in both basis points per day and annualized in percentages. The “Alpha” reports the annualized constant from a regression of the Buys-minus-Sells portfolio returns on the market’s excess returns. Local stocks are defined as being headquartered within a 250 mile radius of an investor’s home. In Panels C and D, we consider whether or not a stock is part of the S&P500 Index. *t*-statistics are based on Newey-West standard errors with five lags and are robust to heteroskedasticity and serial correlation of residuals.

	Average Returns (bp/Day)			Annual Diff		Alpha	
	Buys	Sells	Diff	%	<i>t-stat</i>	%	<i>t-stat</i>
Panel A: All Stocks							
All	6.393	7.145	-0.752	-1.88%	-2.67	-1.87%	-2.61
Panel B: Sorted by Location							
Local	7.372	7.852	-0.480	-1.20%	-1.28	-0.92%	-0.98
Remote	6.209	6.979	-0.770	-1.92%	-2.80	-1.97%	-2.81
Panel C: S&P500 Stocks and Location							
Local	7.265	7.401	-0.136	-0.34%	-0.30	-0.29%	-0.24
Remote	5.821	6.657	-0.836	-2.08%	-2.12	-2.24%	-2.22
Panel D: Non-S&P500 Stocks and Location							
Local	7.503	8.320	-0.817	-2.04%	-1.62	-1.52%	-1.21
Remote	6.505	7.404	-0.899	-2.24%	-2.39	-2.33%	-2.45

Table IA.XI
Transactions-based Calendar-time Portfolios—Expanded

This table extends results shown in Table VII, Panel A of the main paper. We report the average daily returns of two calendar-time portfolios: Buys (using all stocks) and Sells (using all stocks). The Buy and Sell portfolios are formed by mimicking the trades of all investors in our sample between 1991 and 1996. Positions are held for three months, six months, or one year. Panel B presents the average returns of the difference between the two calendar-time portfolios (Buys minus Sells). “Alpha” reports the constant from a regression of the Buys-minus-Sells portfolio returns on the market’s excess returns. **Boldfaced numbers match results shown in Table VII, Panel A of the main paper.** *t*-statistics are based on Newey-West standard errors with five lags and are robust to heteroskedasticity and serial correlation of residuals.

Panel A: Average Daily Return of Calendar-time Portfolio (in Basis Points per Day)		
Holding Period	Buys	Sells
3 months	5.575	6.588
6 months	5.846	6.629
1 year	6.083	6.889

Panel B: Differences of Calendar-Time Portfolio Returns (Buys – Sells)						
Holding Period	Buys – Sells Avg. Return (b.p. per Day)	Buys – Sells Annualized	<i>t-stat</i>	Alpha (b.p. per Day)	Alpha Annualized	<i>t-stat</i>
3 months	-1.013	-2.52%	-2.10	-1.176	-2.92%	-2.45
6 months	-0.782	-1.95%	-1.98	-0.903	-2.25%	-2.27
1 year	-0.805	-2.01%	-2.50	-0.868	-2.16%	-2.66

Table IA.XII
Transactions-based Calendar-time Portfolios—Local Expanded

This table extends results shown in Table VII, Panel B of the main paper. We report the average daily returns of two calendar-time portfolios: (Local Buys and Local Sells). Portfolios are formed based on mimicking the trades of all investors in our sample between January 1, 1991 and November 30, 1996. Positions are held for three months, six months, or one year. Panel B presents the average daily returns of the difference between two calendar-time portfolios (Local Buys minus Local Sells). “Alpha” reports the constant from a regression of the Buys-minus-Sells portfolio returns on the market’s excess returns. **Boldfaced numbers match results shown in Table VII, Panel B of the main paper.** *t*-statistics are based on Newey-West standard errors with five lags and are robust to heteroskedasticity and serial correlation of residuals.

Panel A: Average Daily Return of Calendar-Time
Portfolio (in Basis Points per Day)

Holding Period	Buys	Sells
3 months	6.508	6.972
6 months	6.697	7.156
1 year	6.725	7.421

Panel B: Differences of Calendar-Time Portfolio Returns (Buys – Sells)

Holding Period	Buys – Sells Avg. Return (b.p. per Day)	Buys – Sells Annualized	<i>t-stat</i>	Alpha (b.p. per Day)	Alpha Annualized	<i>t-stat</i>
3 months	-0.464	-1.16%	-0.85	-0.537	-1.34%	-0.97
6 months	-0.459	-1.15%	-0.99	-0.475	-1.19%	-1.01
1 year	-0.696	-1.74%	-1.81	-0.663	-1.66%	-1.69

Table IA.XIII

Transactions-Based Calendar-Time Portfolios—Remote Expanded

This table extends results shown in Table VII, Panel B of the main paper. We present the average daily returns of two calendar-time portfolios: (Remote Buys and Remote Sells). Portfolios are formed based on mimicking the trades of all investors in our sample between January 1, 1991 and November 30, 1996. Positions are held for three months, six months, or one year. Panel B shows the average daily returns of the difference between two calendar-time portfolios (Remote Buys minus Remote Sells). “Alpha” reports the constant from a regression of the Buys-minus-Sells portfolio returns on the market’s excess returns. **Boldfaced numbers match results shown in Table VII, Panel B of the main paper.** *t*-statistics are based on Newey-West standard errors with five lags and are robust to heteroskedasticity and serial correlation of residuals.

Panel A: Average Daily Return of Calendar-Time
Portfolio (in Basis Points per Day)

Holding Period	Buys	Sells
3 months	5.282	6.380
6 months	5.687	6.534
1 year	6.072	6.878

Panel B: Differences of Calendar-Time Portfolio Returns (Buys – Sells)

Holding Period	Buys – Sells Avg. Return (b.p. per Day)	Buys – Sells Annualized	<i>t-stat</i>	Alpha (b.p. per Day)	Alpha Annualized	<i>t-stat</i>
3 months	-1.097	-2.73%	-2.27	-1.282	-3.18%	-2.67
6 months	-0.847	-2.11%	-2.11	-1.000	-2.49%	-2.49
1 year	-0.806	-2.01%	-2.46	-0.902	-2.25%	-2.72

Table IA.XIV
Transactions-Based Calendar-Time Portfolios—S&P500 Local Expanded

This table extends results shown in Table VII, Panel C of the main paper. We only consider trades of S&P 500 stocks and reports the average daily returns between two calendar-time portfolios (Local Buys and Local Sells). Portfolios are formed based on mimicking the trades of all investors in our sample between January 1, 1991 and November 30, 1996. Positions are held for three months, six months, or one year. Panel B presents the average daily returns of the difference of two calendar-time portfolios (Local Buys minus Local Sells). “Alpha” reports the constant from a regression of the Buys-minus-Sells portfolio returns on the market’s excess returns. **Boldfaced numbers match results shown in Table VII, Panel C of the main paper.** *t*-statistics are based on Newey-West standard errors with five lags and are robust to heteroskedasticity and serial correlation of residuals.

Panel A: Average Daily Return of Calendar-Time
Portfolio (in Basis Points per Day)

Holding Period	Buys	Sells
3 months	7.098	7.045
6 months	7.351	7.055
1 year	7.260	7.638

Panel B: Differences of Calendar-Time Portfolio Returns (Buys – Sells)

Holding Period	Buys – Sells Avg. Return (b.p. per Day)	Buys – Sells Annualized	<i>t-stat</i>	Alpha (b.p. per Day)	Alpha Annualized	<i>t-stat</i>
3 months	0.053	0.13%	<i>0.06</i>	-0.025	-0.06%	<i>-0.03</i>
6 months	0.296	0.75%	<i>0.41</i>	0.253	0.64%	<i>0.35</i>
1 year	-0.378	-0.95%	<i>-0.64</i>	-0.347	-0.87%	<i>-0.58</i>

Table IA.XV Transactions-Based Calendar-Time Portfolios—S&P500 Remote Expanded

This table extends results shown in Table VII, Panel C of the main paper. We only consider trades of S&P 500 stocks and reports the average daily returns between two calendar-time portfolios (Remote Buys and Remote Sells). Portfolios are formed based on mimicking the trades of all investors in our sample between January 1, 1991 and November 30, 1996. Positions are held for three months, six months, or one year. Panels B presents the average daily returns of the difference of two calendar-time portfolios (Remote Buys minus Sells). “Alpha” reports the constant from a regression of the Buys-minus-Sells portfolio returns on the market’s excess returns. **Boldfaced numbers match results shown in Table VII, Panel C of the main paper.** *t*-statistics are based on Newey-West standard errors with five lags and are robust to heteroskedasticity and serial correlation of residuals.

Panel A: Average Daily Return of Calendar-Time Portfolio (in Basis Points per Day)

Holding Period	Buys	Sells
3 months	6.068	6.641
6 months	6.273	6.616
1 year	6.324	7.153

Panel B: Differences of Calendar-Time Portfolio Returns (Buys – Sells)

Holding Period	Buys – Sells Avg. Return (b.p. per Day)	Buys – Sells Annualized	<i>t-stat</i>	Alpha (b.p. per Day)	Alpha Annualized	<i>t-stat</i>
3 months	-0.573	-1.43%	-0.82	-0.746	-1.86%	-1.06
6 months	-0.343	-0.86%	-0.56	-0.484	-1.21%	-0.78
1 year	-0.829	-2.07%	-1.67	-0.921	-2.29%	-1.83

Table IA.XVI
Transactions-Based Calendar-Time Portfolios—Non-S&P500 Local Expanded

This table extends results shown in Table VII, Panel D of the main paper. We only consider trades of non-S&P 500 stocks and reports the average daily returns between two calendar-time portfolios (local Buys and Sell). Portfolios are formed based on mimicking the trades of all investors in our sample between January 1, 1991 and November 30, 1996. Positions are held for three months, six months, or one year. Panel B presents the average daily returns of the difference of two calendar-time portfolios (local Buys minus Sells). “Alpha” reports the constant from a regression of the Buys-minus-Sells portfolio returns on the market’s excess returns. **Boldfaced numbers match results shown in Table VII, Panel D of the main paper.** *T*-statistics are based on Newey-West standard errors with five lags and are robust to heteroskedasticity and serial correlation of residuals.

Panel A: Average Daily Return of Calendar-Time Portfolio (in Basis Points per Day)

Holding Period	Buys	Sells
3 months	6.499	7.176
6 months	6.343	7.187
1 year	6.313	7.215

Panel B: Differences of Calendar-Time Portfolio Returns (Buys – Sells)

Holding Period	Buys – Sells Avg. Return (b.p. per Day)	Buys – Sells Annualized	<i>t-stat</i>	Alpha (b.p. per Day)	Alpha Annualized	<i>t-stat</i>
3 months	-0.677	-1.69%	-1.20	-0.733	-1.83%	-1.30
6 months	-0.844	-2.10%	-1.85	-0.831	-2.07%	-1.80
1 year	-0.902	-2.25%	-2.49	-0.846	-2.11%	-2.28

Table IA.XVII
Transactions-Based Portfolios—Non-S&P500 Remote Expanded

This table extends results shown in Table VII, Panel D of the main paper. We only consider trades of non-S&P 500 stocks and reports the average daily returns of two calendar-time portfolios (remote Buys and Sells). Portfolios are formed based on mimicking the trades of all investors in our sample between January 1, 1991 and November 30, 1996. Positions are held for three months, six months, or one year. Panels B presents the average daily returns of the difference of two calendar-time portfolios (remote Buys minus Sells). “Alpha” reports the constant from a regression of the Buys-minus-Sells portfolio returns on the market’s excess returns. **Boldfaced numbers match results shown in Table VII, Panel D of the main paper.** *t*-statistics are based on Newey-West standard errors with five lags and are robust to heteroskedasticity and serial correlation of residuals.

Panel A: Average Daily Return of Calendar-Time
Portfolio (in Basis Points per Day)

Holding Period	Buys	Sells
3 months	5.040	6.518
6 months	5.280	6.484
1 year	5.736	6.603

Panel B: Differences of Calendar-Time Portfolio Returns (Buys – Sells)

Holding Period	Buys – Sells Avg. Return (b.p. per Day)	Buys – Sells Annualized	<i>t-stat</i>	Alpha (b.p. per Day)	Alpha Annualized	<i>t-stat</i>
3 months	-1.478	-3.66%	-2.96	-1.674	-4.13%	-3.42
6 months	-1.204	-2.99%	-2.96	-1.375	-3.41%	-3.43
1 year	-0.867	-2.16%	-2.83	-0.975	-2.43%	-3.20

Table IA.XVIII
Transactions-based Calendar-time Portfolios—Expanded by Year

This table extends results shown in Table VIII of the main paper. We show the average return of the Buys-minus-Sells calendar-time portfolio in basis points per day. Portfolios are formed based on mimicking the trades of all investors in our sample between 1991 and 1996. **Boldfaced numbers match results shown in Table VIII of the main paper.**

Panel A: All Stocks							
Holding Period	1991	1992	1993	1994	1995	1996	All Years
3 months	1.000	-2.736	-2.174	-0.961	-1.011	0.519	-1.013
6 months	0.888	-1.389	-1.729	-1.070	-0.819	-0.143	-0.782
1 year	0.663	-1.359	-1.793	-1.400	-0.629	0.165	-0.805

Panel B: Local Stocks							
Holding Period	1991	1992	1993	1994	1995	1996	All Years
3 months	1.459	-1.804	-1.322	-1.129	-0.101	0.724	-0.464
6 months	1.531	-0.652	-1.646	-1.246	-0.107	-0.263	-0.459
1 year	1.379	-0.856	-1.649	-2.258	-0.003	-0.385	-0.696

Panel C: Remote Stocks							
Holding Period	1991	1992	1993	1994	1995	1996	All Years
3 months	0.936	-2.516	-2.686	-0.809	-1.326	0.567	-1.097
6 months	0.742	-1.394	-1.896	-0.953	-1.013	-0.128	-0.847
1 year	0.483	-1.432	-1,757	-1.064	-0.865	0.278	-0.806