Internet Appendix for
"Time Variation in Extrapolation and Anomalies"

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This Internet Appendix provides additional results.

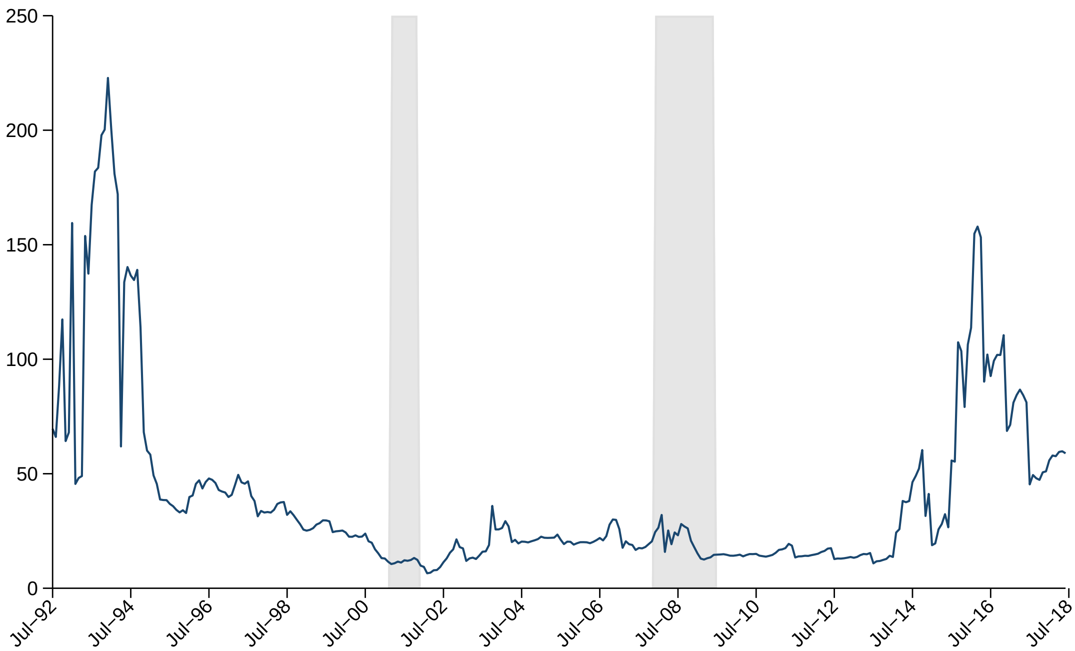
Figure IA1. Parameter b

Panel A plots the constructed b series. The parameter b is estimated recursively by way of nonlinear least squares from the equation

$$Exp_t = a + b\sum_{i=0}^{59} w_i R_{t-(i+1)\Delta t, t-i\Delta t},\ w_i = \frac{\lambda^i}{\sum_{i=0}^{59}\lambda^k},\ 0 \leq \lambda < 1,$$

where the extrapolative expectation (Exp) is the principal component of two surveys, the Investor Intelligence Survey (II) and the Survey of Individual Investors from the American Association (AA). The stock market return is the quarterly aggregate value-weighted stock market from CRSP. The sample period is from 1992:07 to 2018:06. The shaded bars indicate NBER recessions. Panel B reports the summary statistics of the parameter b.

Panel A



Panel B

N	Mean	Std	Min	P5	P50	P95	Max
312	40.09	40.22	6.53	11.91	24.51	139.04	222.84

Table IA1. DOX and b: predictive regressions

The table reports estimates of β and γ in the regression $R_t = \alpha + \beta DOX_{t-1} + \gamma b_{t-1} + \epsilon_t$, where R_t is the excess return (in percentages) in month t on the long leg, the short leg, or the difference and b is the estimated parameter in the equation $Exp_t = a + b\sum_{i=0}^{59} w_i R_{t-(i+1)\Delta t, t-i\Delta t}$, $w_i = \frac{\lambda^i}{\sum_{i=0}^{59}\lambda^k}$, $0 \leq \lambda < 1$. Also reported are returns on a strategy that equally combines the strategies available within a given month, *Comb*. Panel A reports the results of predictive regressions on excess returns. Panel B reports the CAPM-adjusted results. Both DOX and b are standardized to have a standard deviation of one. The sample period is from 1992:08 to 2018:07. All t-statistics are based on the heteroskedasticity-consistent standard errors of White (1980).

Panel A: Excess return

	Long leg				Short leg				Long-Short			
Anomaly	β	*t-Statistic*	γ	*t-Statistic*	β	*t-Statistic*	γ	*t-Statistic*	β	*t-Statistic*	γ	*t-Statistic*
BM	0.16	(0.37)	0.17	(0.43)	-1.13	(-2.98)	-0.77	(-2.62)	1.29	(3.64)	0.94	(2.98)
AM	-0.13	(-0.31)	-0.11	(-0.29)	-1.19	(-2.94)	-0.78	(-2.56)	1.06	(2.95)	0.66	(2.14)
REV	-0.30	(-0.61)	-0.27	(-0.63)	-1.40	(-2.88)	-0.92	(-2.66)	1.10	(2.95)	0.65	(1.98)
EP	-0.03	(-0.08)	-0.08	(-0.26)	-1.13	(-2.41)	-0.66	(-1.97)	1.09	(3.12)	0.58	(2.25)
EFP	-0.34	(-0.93)	-0.33	(-1.10)	-1.08	(-2.10)	-0.65	(-1.74)	0.74	(1.88)	0.32	(1.17)
CP	-0.04	(-0.09)	-0.05	(-0.13)	-1.16	(-2.10)	-0.89	(-2.05)	1.12	(2.63)	0.84	(2.82)
DP	-0.02	(-0.06)	-0.11	(-0.42)	-1.10	(-2.52)	-0.68	(-1.99)	1.08	(2.52)	0.57	(1.59)
OP	-0.13	(-0.42)	-0.17	(-0.58)	-1.05	(-2.01)	-0.80	(-1.94)	0.92	(2.33)	0.63	(2.19)
NOP	-0.07	(-0.21)	-0.06	(-0.21)	-0.61	(-1.26)	-0.34	(-0.88)	0.54	(1.55)	0.28	(0.99)
SG	-0.58	(-1.51)	-0.29	(-0.89)	-1.29	(-2.56)	-0.80	(-2.12)	0.71	(2.17)	0.51	(1.73)
LTG	-0.03	(-0.10)	-0.05	(-0.14)	-1.57	(-2.51)	-0.91	(-2.13)	1.54	(2.71)	0.86	(1.91)
DUR	-0.15	(-0.35)	0.03	(0.10)	-1.18	(-2.48)	-0.77	(-2.03)	1.03	(3.31)	0.80	(2.91)
Comb	-0.14	(-0.42)	-0.11	(-0.38)	-1.16	(-2.51)	-0.75	(-2.19)	1.02	(3.70)	0.64	(3.21)

Panel B: CAPM adjusted

	Long leg				Short leg				Long-Short			
Anomaly	β	*t-Statistic*	γ	*t-Statistic*	β	*t-Statistic*	γ	*t-Statistic*	β	*t-Statistic*	γ	*t-Statistic*
BM	1.03	(3.85)	0.68	(2.73)	-0.39	(-2.87)	-0.34	(-2.43)	1.43	(4.01)	1.02	(3.26)
AM	0.74	(2.58)	0.40	(1.79)	-0.42	(-2.84)	-0.32	(-2.11)	1.16	(3.11)	0.72	(2.36)
REV	0.73	(2.41)	0.33	(1.18)	-0.52	(-2.43)	-0.41	(-2.07)	1.25	(3.20)	0.74	(2.27)
EP	0.69	(3.05)	0.35	(2.22)	-0.23	(-1.19)	-0.14	(-0.82)	0.93	(2.80)	0.48	(1.86)
EFP	0.35	(1.72)	0.07	(0.43)	-0.10	(-0.49)	-0.08	(-0.56)	0.45	(1.33)	0.15	(0.60)
CP	0.73	(2.67)	0.41	(1.96)	-0.09	(-0.36)	-0.26	(-1.23)	0.82	(2.11)	0.67	(2.29)
DP	0.36	(1.47)	0.11	(0.50)	-0.27	(-1.41)	-0.19	(-1.16)	0.62	(1.80)	0.30	(0.92)
OP	0.49	(2.57)	0.20	(1.22)	-0.08	(-0.26)	-0.23	(-1.03)	0.57	(1.62)	0.42	(1.60)
NOP	0.55	(2.72)	0.30	(1.82)	0.35	(1.62)	0.22	(1.27)	0.20	(0.67)	0.07	(0.28)
SG	0.23	(1.25)	0.18	(1.26)	-0.36	(-1.75)	-0.26	(-1.26)	0.60	(1.93)	0.44	(1.51)
LTG	0.42	(1.80)	0.22	(0.82)	-0.49	(-1.74)	-0.27	(-1.19)	0.91	(2.16)	0.49	(1.18)
DUR	0.69	(3.04)	0.53	(3.11)	-0.25	(-1.35)	-0.22	(-1.20)	0.93	(3.09)	0.75	(2.72)
Comb	0.58	(3.87)	0.31	(2.76)	-0.24	(-1.63)	-0.21	(-1.65)	0.82	(3.54)	0.52	(2.72)

Table IA2. Controlling for prospect theory effect

The table reports estimates of b in the regression $R_t^* = a + bDOX_{t-1} + \epsilon_t$, where R_t^* is the excess return (in percentages) on the portfolio that controls for the prospect theory value (TK). The value TK is constructed following the approach of Barberis, Mukherjee, and Wang (2016). We use a dependent sort to construct the anomaly portfolios. We first sort stocks into terciles of the firm-level TK value. Within each TK tercile, we further sort firms into deciles of firm characteristics and form long-short portfolios. We finally create long-short anomaly portfolios as the average return on the three individual portfolios. Also reported are returns on a strategy that equally combines the strategies available within a given month, *Comb*. Panel B reports the CAPM-adjusted results. DOX is standardized to have a standard deviation of one. The sample period is from 1992:08 to 2018:07. All t-statistics are based on the heteroskedasticity-consistent standard errors of White (1980).

Panel A: Excess return

	Long leg		Short leg		Long-Short	
Anomaly	b	*t-Statistic*	b	*t-Statistic*	b	*t-Statistic*
BM	0.17	(0.54)	-0.36	(-1.15)	0.54	(2.10)
AM	0.10	(0.31)	-0.42	(-1.30)	0.52	(1.89)
REV	0.25	(0.55)	-0.66	(-1.44)	0.92	(2.53)
EP	-0.05	(-0.15)	-0.35	(-1.10)	0.30	(1.22)
EFP	0.08	(0.27)	-0.40	(-1.09)	0.48	(1.82)
CP	-0.00	(-0.00)	-0.36	(-0.92)	0.36	(1.21)
DP	0.07	(0.30)	-0.03	(-0.11)	0.10	(0.38)
OP	-0.06	(-0.22)	-0.32	(-0.88)	0.25	(0.97)
NOP	-0.06	(-0.22)	-0.23	(-0.68)	0.18	(0.79)
SG	-0.22	(-0.74)	-0.43	(-1.16)	0.21	(0.98)
LTG	-0.06	(-0.25)	-0.75	(-1.78)	0.69	(2.03)
DUR	-0.09	(-0.27)	-0.39	(-1.14)	0.30	(1.36)
COMB	0.01	(0.05)	-0.39	(-1.16)	0.40	(2.29)

Panel B: CAPM adjusted

	Long leg		Short leg		Long-Short	
Anomaly	b	*t-Statistic*	b	*t-Statistic*	b	*t-Statistic*
BM	0.66	(3.32)	0.14	(0.95)	0.52	(2.10)
AM	0.60	(2.78)	0.09	(0.62)	0.51	(1.86)
REV	0.95	(2.75)	-0.00	(-0.01)	0.96	(2.54)
EP	0.43	(2.20)	0.18	(1.23)	0.25	(1.03)
EFP	0.56	(2.75)	0.19	(1.21)	0.36	(1.47)
CP	0.48	(2.19)	0.25	(1.33)	0.23	(0.80)
DP	0.38	(2.07)	0.46	(2.21)	-0.08	(-0.31)
OP	0.37	(2.20)	0.23	(1.04)	0.13	(0.51)
NOP	0.36	(2.21)	0.32	(1.93)	0.04	(0.19)
SG	0.30	(1.95)	0.14	(0.83)	0.15	(0.73)
LTG	0.27	(1.58)	-0.10	(-0.57)	0.38	(1.41)
DUR	0.41	(2.14)	0.17	(1.23)	0.24	(1.10)
COMB	0.48	(3.37)	0.17	(1.35)	0.31	(1.93)

Table IA3. Long-horizon predictive regressions

The table reports long-horizon overlapping predictive regression results. We regress future (1-month, 3-month, 12-month, 3-year, and 5-year) anomalies' long-short returns (in percentages) onto corresponding past DOX. Also reported are returns on a strategy that equally combines the strategies available within a given month, *Comb*. Panel A reports the results of overreaction- and underreaction-related anomalies based on the three-month moving average DOX series. Panels B, C, and D are robustness tests. Panel B uses the raw series of DOX, and panel C lags the smoothed DOX series for one more month. Panel D uses Hodrick (1992) overlapping-adjusted t-statistics. The sample period is from 1992:08 to 2018:07 for panel A, panel B, and panel D. The sample period is from 1992:09 to 2018:08 for panel C. The Newey-West (1987) t-statistics given in parentheses control for heteroskedasticity and autocorrelation.

Panel A: 3-month moving average DOX

		1-month		3-month		12-month		3-year		5-year	
	Anomaly	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*
	BM	0.64	(2.04)	1.89	(2.06)	5.90	(2.70)	11.96	(2.68)	13.18	(1.79)
	AM	0.61	(1.79)	1.72	(1.82)	4.74	(2.12)	9.90	(3.50)	13.75	(3.45)
	REV	0.66	(2.16)	1.95	(2.30)	6.45	(2.80)	6.34	(1.35)	-7.19	(-0.90)
	EP	0.70	(2.85)	1.99	(3.02)	6.02	(3.37)	10.48	(3.46)	8.23	(1.72)
	EFP	0.52	(1.76)	1.39	(1.74)	5.64	(2.20)	1.49	(0.22)	-20.14	(-1.88)
	CP	0.54	(1.59)	1.48	(1.63)	3.81	(1.99)	6.20	(2.41)	12.12	(3.57)
Overreaction	DP	0.69	(2.33)	2.10	(2.63)	7.07	(3.77)	17.14	(5.27)	19.15	(4.25)
	OP	0.49	(1.44)	1.62	(1.62)	6.64	(2.14)	-0.99	(-0.26)	-19.06	(-3.12)
	NOP	0.35	(1.34)	1.16	(1.59)	4.06	(1.73)	-2.37	(-0.78)	-18.64	(-4.74)
	SG	0.37	(1.62)	1.12	(1.89)	2.85	(2.08)	6.27	(3.13)	7.18	(3.25)
	LTG	0.95	(2.59)	2.83	(2.95)	9.48	(4.04)	14.02	(4.37)	12.99	(3.97)
	DUR	0.48	(1.87)	1.44	(1.99)	4.43	(2.56)	10.71	(3.44)	18.06	(3.98)
	Comb	0.58	(2.63)	1.73	(2.88)	5.71	(3.67)	8.54	(3.41)	5.67	(1.38)

		1-month		3-month		12-month		3-year		5-year	
	Anomaly	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*
	SUE1	-0.02	(-0.14)	-0.19	(-0.47)	-1.17	(-1.11)	-7.66	(-3.20)	-14.82	(-5.27)
	SUE6	-0.05	(-0.36)	-0.25	(-0.78)	-0.95	(-1.28)	-6.19	(-4.71)	-12.07	(-8.34)
	ABR1	-0.18	(-0.94)	-0.80	(-1.51)	-4.33	(-3.20)	-13.99	(-7.21)	-17.90	(-6.13)
	ABR6	-0.19	(-1.36)	-0.78	(-2.08)	-3.79	(-3.74)	-9.34	(-3.72)	-11.36	(-3.17)
	RE1	-0.29	(-0.91)	-0.92	(-1.09)	-4.01	(-2.00)	-10.16	(-3.66)	-7.67	(-2.00)
Underreaction	RE6	0.08	(0.34)	0.23	(0.36)	0.47	(0.29)	-0.76	(-0.30)	0.72	(0.28)
	R6_1	-0.52	(-1.22)	-1.95	(-1.95)	-9.38	(-3.59)	-37.70	(-6.93)	-64.32	(-6.91)
	R6_6	-0.28	(-0.78)	-1.06	(-1.06)	-5.10	(-1.87)	-29.58	(-5.50)	-64.79	(-6.69)
	R11	-0.42	(-0.90)	-1.44	(-1.19)	-6.84	(-2.24)	-33.81	(-6.56)	-71.32	(-8.78)
	IM	0.01	(0.02)	-0.38	(-0.43)	-4.08	(-1.95)	-12.25	(-2.29)	-17.81	(-3.02)
	Comb	-0.19	(-0.85)	-0.75	(-1.32)	-3.86	(-2.76)	-15.93	(-6.05)	-28.02	(-7.67)

Table IA3 (cont.). Long-horizon predictive regressions

Panel B: raw DOX

		1-month		3-month		12-month		3-year		5-year	
	Anomaly	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*
Overreaction	BM	0.56	(1.79)	1.89	(2.11)	6.15	(2.80)	12.56	(2.85)	13.95	(1.87)
	AM	0.56	(1.62)	1.82	(1.91)	4.97	(2.25)	10.20	(3.69)	13.85	(3.37)
	REV	0.57	(1.90)	1.92	(2.30)	6.80	(2.92)	7.73	(1.65)	-5.87	(-0.76)
	EP	0.67	(2.61)	2.06	(3.08)	6.21	(3.52)	11.10	(3.73)	8.55	(1.73)
	EFP	0.60	(1.86)	1.61	(1.86)	5.86	(2.17)	3.38	(0.49)	-18.33	(-1.61)
	CP	0.56	(1.57)	1.72	(1.81)	4.13	(2.18)	6.48	(2.57)	12.23	(3.49)
	DP	0.71	(2.34)	2.08	(2.57)	7.15	(3.61)	17.26	(5.24)	19.80	(4.46)
	OP	0.48	(1.44)	1.52	(1.56)	6.62	(2.18)	0.13	(0.03)	-18.21	(-2.99)
	NOP	0.35	(1.26)	1.16	(1.56)	4.16	(1.80)	-1.24	(-0.40)	-17.89	(-4.59)
	SG	0.33	(1.42)	1.07	(1.78)	2.96	(2.11)	6.73	(3.38)	7.31	(3.32)
	LTG	0.90	(2.38)	2.79	(2.89)	9.65	(4.00)	14.58	(4.50)	13.50	(4.02)
	DUR	0.42	(1.63)	1.49	(2.10)	4.57	(2.70)	10.82	(3.52)	18.17	(3.89)
	Comb	0.56	(2.40)	1.76	(2.83)	5.89	(3.72)	9.22	(3.62)	6.28	(1.50)

		1-month		3-month		12-month		3-year		5-year	
	Anomaly	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*
Underreaction	SUE1	0.07	(0.44)	-0.10	(-0.25)	-1.00	(-0.98)	-7.25	(-3.06)	-14.95	(-5.31)
	SUE6	0.01	(0.11)	-0.16	(-0.48)	-0.91	(-1.24)	-5.80	(-4.27)	-12.20	(-8.44)
	ABR1	-0.10	(-0.54)	-0.58	(-1.13)	-4.06	(-3.01)	-13.51	(-6.91)	-17.91	(-6.07)
	ABR6	-0.13	(-0.93)	-0.61	(-1.68)	-3.60	(-3.67)	-9.18	(-3.89)	-10.94	(-3.00)
	RE1	-0.17	(-0.51)	-0.93	(-1.07)	-4.01	(-1.98)	-10.09	(-3.55)	-8.68	(-2.28)
	RE6	0.19	(0.76)	0.22	(0.34)	0.52	(0.32)	-0.45	(-0.17)	-0.14	(-0.05)
	R6_1	-0.35	(-0.76)	-1.75	(-1.68)	-9.15	(-3.56)	-36.38	(-6.70)	-63.99	(-6.80)
	R6_6	-0.13	(-0.36)	-0.93	(-0.95)	-4.81	(-1.80)	-28.09	(-5.23)	-64.02	(-6.64)
	R11	-0.24	(-0.50)	-1.39	(-1.13)	-6.62	(-2.19)	-32.19	(-6.09)	-70.95	(-8.77)
	IM	0.16	(0.46)	-0.15	(-0.17)	-3.93	(-1.93)	-11.71	(-2.26)	-17.20	(-2.92)
	Comb	-0.07	(-0.31)	-0.63	(-1.11)	-3.69	(-2.66)	-15.22	(-5.74)	-27.96	(-7.53)

Table IA3 (cont.). Long-horizon predictive regressions

Panel C: 3-month moving average DOX, lagged one more month

		1-month		3-month		12-month		3-year		5-year	
	Anomaly	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*
Overreaction	BM	0.63	(1.96)	1.72	(1.85)	5.69	(2.72)	11.23	(2.54)	12.42	(1.68)
	AM	0.56	(1.67)	1.45	(1.57)	4.59	(2.09)	9.50	(3.37)	13.68	(3.51)
	REV	0.67	(2.15)	1.80	(2.14)	6.06	(2.73)	4.80	(1.03)	-8.69	(-1.05)
	EP	0.67	(2.82)	1.85	(2.88)	5.75	(3.24)	9.63	(3.17)	8.07	(1.72)
	EFP	0.44	(1.59)	1.22	(1.68)	5.32	(2.20)	-0.40	(-0.06)	-21.17	(-2.07)
	CP	0.48	(1.46)	1.25	(1.45)	3.43	(1.77)	5.75	(2.21)	12.12	(3.60)
	DP	0.70	(2.36)	2.05	(2.61)	6.89	(3.87)	16.52	(5.07)	18.23	(3.93)
	OP	0.52	(1.51)	1.63	(1.64)	6.43	(2.06)	-2.25	(-0.60)	-19.80	(-3.21)
	NOP	0.37	(1.46)	1.17	(1.66)	3.86	(1.62)	-3.55	(-1.19)	-19.33	(-4.78)
	SG	0.39	(1.73)	1.08	(1.85)	2.79	(2.08)	5.71	(2.86)	7.12	(3.21)
	LTG	0.97	(2.65)	2.75	(2.88)	9.16	(3.99)	12.98	(4.07)	12.44	(3.80)
	DUR	0.47	(1.77)	1.35	(1.86)	4.29	(2.49)	10.49	(3.39)	18.15	(4.09)
	Comb	0.57	(2.67)	1.61	(2.83)	5.46	(3.62)	7.64	(3.11)	5.10	(1.24)

		1-month		3-month		12-month		3-year		5-year	
	Anomaly	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*	*b*	*t-Statistic*
Underreaction	SUE1	-0.07	(-0.46)	-0.16	(-0.38)	-1.31	(-1.19)	-7.98	(-3.32)	-14.70	(-5.20)
	SUE6	-0.09	(-0.73)	-0.25	(-0.78)	-0.99	(-1.31)	-6.44	(-5.02)	-11.88	(-8.11)
	ABR1	-0.27	(-1.36)	-0.97	(-1.83)	-4.49	(-3.34)	-14.12	(-7.27)	-17.72	(-6.06)
	ABR6	-0.25	(-1.80)	-0.92	(-2.36)	-3.89	(-3.81)	-9.30	(-3.59)	-11.82	(-3.37)
	RE1	-0.34	(-1.12)	-0.82	(-1.00)	-3.92	(-1.98)	-10.03	(-3.75)	-6.55	(-1.67)
	RE6	0.05	(0.21)	0.30	(0.47)	0.46	(0.29)	-0.98	(-0.40)	1.74	(0.68)
	R6_1	-0.64	(-1.62)	-2.04	(-2.09)	-9.50	(-3.65)	-38.35	(-7.08)	-64.49	(-7.01)
	R6_6	-0.38	(-1.05)	-1.08	(-1.09)	-5.22	(-1.90)	-30.38	(-5.64)	-65.45	(-6.74)
	R11	-0.48	(-1.07)	-1.38	(-1.16)	-6.74	(-2.23)	-34.60	(-6.83)	-71.19	(-8.73)
	IM	-0.12	(-0.33)	-0.61	(-0.67)	-4.00	(-1.90)	-12.42	(-2.27)	-18.42	(-3.13)
	Comb	-0.26	(-1.21)	-0.79	(-1.40)	-3.91	(-2.81)	-16.28	(-6.21)	-27.99	(-7.80)

Table IA3 (cont.). Long-horizon predictive regressions

Panel D: 3-month moving average DOX, Hodrick (1992) t-statistics

		1-month		3-month		12-month		3-year		5-year	
	Anomaly	b	*t-Statistic*	b	*t-Statistic*	b	*t-Statistic*	b	*t-Statistic*	b	*t-Statistic*
Overreaction	BM	0.64	(2.04)	1.89	(2.30)	5.90	(1.99)	11.96	(1.63)	13.18	(1.38)
	AM	0.61	(1.79)	1.72	(2.07)	4.74	(1.55)	9.90	(1.25)	13.75	(1.25)
	REV	0.66	(2.16)	1.95	(2.34)	6.45	(2.16)	6.34	(0.73)	-7.19	(-0.56)
	EP	0.70	(2.85)	1.99	(2.68)	6.02	(2.32)	10.48	(1.41)	8.23	(0.72)
	EFP	0.52	(1.76)	1.39	(1.70)	5.64	(2.00)	1.49	(0.21)	-20.14	(-1.73)
	CP	0.54	(1.59)	1.48	(1.64)	3.81	(1.20)	6.20	(0.74)	12.12	(0.87)
	DP	0.69	(2.33)	2.10	(2.41)	7.07	(2.24)	17.14	(1.89)	19.15	(1.26)
	OP	0.49	(1.44)	1.62	(1.83)	6.64	(1.98)	-0.99	(-0.11)	-19.06	(-1.38)
	NOP	0.35	(1.34)	1.16	(1.58)	4.06	(1.57)	-2.37	(-0.33)	-18.64	(-1.61)
	SG	0.37	(1.62)	1.12	(1.56)	2.85	(1.07)	6.27	(0.85)	7.18	(0.67)
	LTG	0.95	(2.59)	2.83	(2.41)	9.48	(2.42)	14.02	(1.36)	12.99	(0.72)
	DUR	0.48	(1.87)	1.44	(2.00)	4.43	(1.66)	10.71	(1.64)	18.06	(1.87)
	Comb	0.58	(2.63)	1.73	(2.98)	5.71	(2.99)	8.54	(1.69)	5.67	(0.66)

		1-month		3-month		12-month		3-year		5-year	
	Anomaly	b	*t-Statistic*	b	*t-Statistic*	b	*t-Statistic*	b	*t-Statistic*	b	*t-Statistic*
Underreaction	SUE1	-0.02	(-0.14)	-0.19	(-0.33)	-1.17	(-0.53)	-7.66	(-1.37)	-14.82	(-1.77)
	SUE6	-0.05	(-0.36)	-0.25	(-0.50)	-0.95	(-0.49)	-6.19	(-1.39)	-12.07	(-1.81)
	ABR1	-0.18	(-0.94)	-0.80	(-1.31)	-4.33	(-1.90)	-13.99	(-2.35)	-17.90	(-1.95)
	ABR6	-0.19	(-1.36)	-0.78	(-1.77)	-3.79	(-2.33)	-9.34	(-2.18)	-11.36	(-1.80)
	RE1	-0.29	(-0.91)	-0.92	(-0.87)	-4.01	(-1.09)	-10.16	(-1.15)	-7.67	(-0.57)
	RE6	0.08	(0.34)	0.23	(0.28)	0.47	(0.16)	-0.76	(-0.10)	0.72	(0.07)
	R6_1	-0.52	(-1.22)	-1.95	(-1.46)	-9.38	(-1.93)	-37.70	(-2.82)	-64.32	(-3.36)
	R6_6	-0.28	(-0.78)	-1.06	(-1.02)	-5.10	(-1.35)	-29.58	(-2.89)	-64.79	(-4.33)
	R11	-0.42	(-0.90)	-1.44	(-1.04)	-6.84	(-1.35)	-33.81	(-2.52)	-71.32	(-3.74)
	IM	0.01	(0.02)	-0.38	(-0.31)	-4.08	(-0.92)	-12.25	(-1.10)	-17.81	(-1.07)
	Comb	-0.19	(-0.85)	-0.75	(-1.02)	-3.86	(-1.44)	-15.93	(-2.36)	-28.02	(-2.94)

Table IA4. Longer DOX and anomalies

The table reports estimates of b in the regression $R_t = a + bDOX_{t-1} + \epsilon_t$, where R_t is the excess return (in percentages) in month t on the long leg, the short leg, or the difference. Also reported are returns on a strategy that equally combines the strategies available within a given month, *Comb*. Panel B reports CAPM-adjusted results. DOX is standardized to have a standard deviation of one. This DOX uses the DOX extracted from the Investor Intelligence Survey during the period 1969:06–1992:06. The subsequent DOX series are estimated based on the principal component time series of two surveys as before. The sample period is from 1974:08 to 2018:07. All t-statistics are based on the heteroskedasticity-consistent standard errors of White (1980).

Panel A: Excess return

	Long leg		Short leg		Long-Short	
Anomaly	b	*t-Statistic*	b	*t-Statistic*	b	*t-Statistic*
BM	0.04	(0.17)	-0.45	(-1.87)	0.49	(2.45)
AM	0.03	(0.11)	-0.46	(-1.91)	0.49	(2.46)
REV	0.08	(0.30)	-0.55	(-1.95)	0.64	(3.13)
EP	-0.09	(-0.41)	-0.38	(-1.37)	0.29	(1.42)
EFP	-0.06	(-0.30)	-0.46	(-1.63)	0.40	(2.02)
CP	-0.05	(-0.22)	-0.26	(-0.82)	0.21	(0.90)
DP	0.10	(0.63)	-0.41	(-1.54)	0.50	(2.13)
OP	0.04	(0.20)	-0.37	(-1.21)	0.41	(1.80)
NOP	0.01	(0.06)	-0.21	(-0.81)	0.22	(1.28)
SG	-0.21	(-0.91)	-0.56	(-1.95)	0.35	(1.93)
LTG	-0.02	(-0.08)	-0.64	(-1.68)	0.63	(1.85)
DUR	-0.17	(-0.72)	-0.39	(-1.39)	0.22	(1.19)
Comb	-0.03	(-0.15)	-0.42	(-1.57)	0.39	(2.54)

Panel B: CAPM adjusted

	Long leg		Short leg		Long-Short	
Anomaly	b	*t-Statistic*	b	*t-Statistic*	b	*t-Statistic*
BM	0.36	(2.57)	-0.12	(-1.41)	0.49	(2.47)
AM	0.37	(2.51)	-0.13	(-1.55)	0.50	(2.52)
REV	0.47	(3.03)	-0.18	(-1.68)	0.65	(3.21)
EP	0.20	(1.65)	-0.01	(-0.13)	0.22	(1.12)
EFP	0.23	(2.17)	-0.08	(-0.74)	0.31	(1.74)
CP	0.25	(1.77)	0.15	(1.10)	0.10	(0.48)
DP	0.26	(2.04)	-0.04	(-0.41)	0.30	(1.62)
OP	0.28	(2.61)	0.02	(0.13)	0.26	(1.32)
NOP	0.26	(2.42)	0.15	(1.41)	0.12	(0.78)
SG	0.11	(0.92)	-0.18	(-1.66)	0.29	(1.67)
LTG	0.17	(1.19)	-0.17	(-1.07)	0.34	(1.36)
DUR	0.15	(1.18)	-0.02	(-0.14)	0.16	(0.92)
Comb	0.26	(3.13)	-0.05	(-0.61)	0.31	(2.32)