

Executives' Legal Records and the Deterrent Effect of Corporate Governance

Internet Appendix

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August, 2019

This Appendix reports the results of additional analyses and robustness tests we conduct in support of the main analyses in our paper. The list of tables in this Appendix is presented below.

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Appendix Table 1

Correlation matrix of executive characteristics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Record	1										
(2) Female	-0.06**	1									
(3) Born Recession	0.03	-0.02	1								
(4) Overconfidence	-0.08	0.07*	0.04	1							
(5) Narcissism	0.04	0.02	0.07	0.06	1						
(6) MBA	-0.04	-0.03	-0.04*	0.08*	-0.04	1					
(7) Top MBA	-0.04*	-0.02	-0.04	0.05	-0.05	0.67***	1				
(8) Military	-0.01	-0.06**	-0.01	0.08*	0.06	0.09***	0.10***	1			
(9) Work Recession	-0.02	-0.04*	-0.02	-0.04	0.01	0.02	0.05**	0.02	1		
(10) Wealth	-0.03	-0.02	0.03	0.03	-0.06	-0.01	0.01	0.04	-0.01	1	
(11) Material	0.02	-0.05**	0.01	0.04	-0.04	0.02	0.01	0.05**	0.02	-0.02	1

This table presents Pearson correlations between executive characteristics. All variables are defined in Appendix Table 20. Due to the relatively few executives for which all of these variables can be computed, we present results using all executives for which we have data regardless of whether they are in the intra-firm sample. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

Appendix Table 2

Regression analysis: Executive legal records and other executives traits

Female	-2.207** (-2.17)	omitted	omitted
Born Recession	0.120 (0.83)	0.400 (1.56)	0.049 (0.18)
Overconfidence	omitted	-0.371 (-1.45)	omitted
Narcissism	omitted	omitted	0.001 (0.49)
MBA	-0.042 (-0.22)	-0.907** (-1.99)	-0.085 (-0.26)
Top MBA	-0.125 (-0.53)	0.774 (1.49)	-0.114 (-0.27)
Military	-0.040 (-0.16)	0.309 (0.83)	0.323 (0.71)
Work Recession	-0.184 (-1.07)	-0.128 (-0.43)	-0.616* (-1.69)
Wealth	-0.027 (-1.18)	-0.071 (-1.25)	-0.071 (-1.42)
Material	0.039 (0.28)	0.434 (1.60)	0.107 (0.43)
Intercept	-1.539*** (-12.07)	-1.679*** (-5.91)	-1.544*** (-5.10)
Pseudo R-Squared	0.01	0.02	0.02
Observations	1,518	509	461

This table presents results from logistic regressions of executive recordholder status and individual characteristics for both CEOs and non-CEO senior executives. The dependent variable, *Record*, is an indicator variable that equals 1 if the executive was convicted of any legal infractions, and 0 otherwise. All other variables are defined in Appendix Table 20. Due to the relatively few executives for which all of these variables can be computed, we present results using all executives for which we have data regardless of whether they are in the intra-firm sample. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

Appendix Table 3

Recordholder status and routine versus opportunistic trades

	Recordholder	Nonrecordholder	Cohen et al. (2012)
% all purchases that are routine	43	39	64
% all purchases that are opportunistic	57	61	36
% all sales that are routine	38	43	52
% all sales that are opportunistic	62	57	48
% all trades that are routine	40	42	55
% all trades that are opportunistic	60	58	45

This table presents the percentage of trades that are classified as routine or opportunistic based on the primary classification method developed by Cohen et al. (2012) for our sample of recordholder and nonrecordholder executives and compares the percentages to those reported in Cohen et al. (2012). An executive is designated as a Recordholder if he was convicted of any legal infractions; otherwise the executive is designated as a Nonrecordholder. An executive is considered a routine trader if he trades in the same calendar month for the past three years; executives trading in three consecutive years but without trades in the same month are classified as opportunistic traders.

Appendix Table 4

Comparison of sample and Execucomp population

	Our Sample	Execucomp
Size	7.82***	6.91
Sales	7.42***	6.56
Market-to-Book	3.02	3.30
Return on Assets	0.11	0.11
CEO Wealth	10.14	10.08
Independence	0.72	0.73
Inst Holdings	0.67	0.64

This table provides mean values for several key firm characteristics for our sample and the Execucomp population. All variables are defined in Appendix Table 20. *** denotes significance at the 0.01 levels.

Appendix Table 5

Abnormal profits from purchases and blackout policies pre-Rule 10b5-1

	Record (1)	Traffic (2)	Serious (3)
Record	0.0171** (2.53)		
Traffic		0.0159*** (2.67)	
Serious			0.0442*** (2.80)
Restrict	0.0123 (1.25)	0.0146 (1.23)	0.0039 (0.19)
Record * Restrict	-0.0324 (-1.34)		
Record Type * Restrict		-0.0532** (-2.56)	0.0345 (0.65)
<i>P-values: Summations</i>			
Restrict + Record Type * Restrict	0.43	0.03	0.48
Record Type + Record Type * Restrict	0.54	0.08	0.01
<i>P-values: Tests of differences</i>			
Serious > Traffic			0.03
Restrict + Serious * Restrict > Restrict + Traffic * Restrict			0.01
Serious + Restrict + Serious * Restrict > Traffic + Restrict + Traffic * Restrict			0.01
Controls	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Adjusted R-squared	0.31	0.27	0.43
Observations	4,032	2,864	1,324
Firms	144	108	61
Executives	617	457	254

This table presents the results of OLS regressions that examine the relation between executives' trading profits from purchases as a function of blackout policies and executive type. All trades in the sample occur before the initiation of Rule 10b5-1 in October 2000. The dependent variable, *Trading profits*, for purchases equals α from a four factor alpha model, where α is obtained from estimating transaction-day specific regressions of daily returns over the 180-days following each transaction. All other variables are defined in Appendix Table 20. T-statistics appear in parentheses and are based on standard errors clustered by executive. ***, and ** denote statistical significance at the .01, and .05 levels respectively.

Appendix Table 6

Abnormal profits from sales and blackout policies pre-Rule 10b5-1

	Record (1)	Traffic (2)	Serious (3)
Record	0.0176*** (3.13)		
Traffic		0.0120 (1.61)	
Serious			0.0282** (2.39)
Restrict	-0.0014 (-0.13)	-0.0005 (-0.04)	0.0186 (0.90)
Record * Restrict	-0.0291*** (-2.89)		
Record Type * Restrict		-0.0310** (-2.08)	-0.0202 (-1.49)
<i>P-values: Summations</i>			
Restrict + Record Type * Restrict	0.01	0.05	0.28
Record Type + Record Type * Restrict	0.22	0.09	0.08
<i>P-values: Tests of differences</i>			
Serious > Traffic			0.04
Restrict + Serious * Restrict > Restrict + Traffic * Restrict			0.05
Serious + Restrict + Serious * Restrict > Traffic + Restrict + Traffic * Restrict			0.01
Controls	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Adjusted R-squared	0.23	0.19	0.26
Observations	11,765	8,791	3,003
Firms	176	132	73
Executives	872	673	302

This table presents the results of OLS regressions that examine the relation between executives' trading profits from sales as a function of blackout policies and executive type. All trades in the sample occur before the initiation of Rule 10b5-1 in October 2000. The dependent variable, *Trading profits*, for sales equals $-\alpha$ from a four factor alpha model, where α is obtained from estimating transaction-day specific regressions of daily returns over the 180-days following each transaction. *All other variables are defined in Appendix Table 20.* T-statistics appear in parentheses and are based on standard errors clustered by executive. ***, and ** denote statistical significance at the .01, and .05 levels respectively.

Appendix Table 7

Abnormal profits from purchases and blackout policies: Blackout policies computed using purchases only

	Record	Traffic	Serious
	(1)	(2)	(3)
Record	0.0206*** (3.27)		
Traffic	-0.0095	0.0138** (2.25)	
Serious			0.0337*** (3.16)
Restrict-P	0.0008 (0.08)	-0.0002 (-0.06)	0.0040 (0.27)
Record * Restrict-P	-0.0180** (-2.28)		
Record Type * Restrict-P		-0.0231** (-2.54)	-0.0086 (-0.39)
<i>P-values: Summations</i>			
Restrict-P + Record Type * Restrict-P	0.02	0.02	0.84
Record Type + Record Type * Restrict-P	0.86	0.14	0.01
<i>P-values: Tests of differences</i>			
Serious > Traffic			0.02
Restrict-P + Serious * Restrict-P > Restrict-P + Traffic * Restrict-P			0.02
Serious + Restrict-P + Serious * Restrict-P > Traffic + Restrict-P + Traffic * Restrict-P			0.01
Controls	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Adjusted R-Squared	0.25	0.23	0.36
Observations	7,406	5,230	2,476
Firms	206	155	89
Executives	854	627	362

This table presents the results of OLS regressions that examine the relation between executives' trading profits from purchases as a function of blackout policies (computed using purchases only) and executive type. The dependent variable, *Trading profits*, for purchases equals α from a four factor alpha model, where α is obtained from estimating transaction-day specific regressions of daily returns over the 180-days following each transaction. All other variables are defined in Appendix Table 20. T-statistics appear in parentheses and are based on standard errors clustered by executive. ***, and ** denote statistical significance at the .01, and .05 levels respectively.

Appendix Table 8

Abnormal profits from sales and blackout policies: Blackout policies computed using purchases only

	Record	Traffic	Serious
	(1)	(2)	(3)
Record	0.0152*** (2.64)		
Traffic	0.0203	0.0051 (1.31)	
Serious			0.0265*** (3.75)
Restrict-P	0.0059 (1.04)	0.0025 (0.40)	0.0072 (0.95)
Record * Restrict-P	-0.0130** (-2.16)		
Record Type * Restrict-P		-0.0118 (-1.53)	-0.0134 (-1.17)
<i>P-values: Summations</i>			
Restrict-P + Record Type * Restrict-P	0.19	0.16	0.55
Record Type + Record Type * Restrict-P	0.80	0.43	0.04
<i>P-values: Tests of differences</i>			
Serious > Traffic			0.01
Restrict-P + Serious * Restrict-P > Restrict-P + Traffic * Restrict-P			0.83
Serious + Restrict-P + Serious * Restrict-P > Traffic + Restrict-P + Traffic * Restrict-P			0.01
Controls	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Adjusted R-Squared	0.16	0.12	0.19
Observations	22,861	17,530	6,231
Firm-CEO Pairs	263	202	111
Executives	1,291	1,021	458

This table presents the results of OLS regressions that examine the relation between executives' trading profits from purchases as a function of blackout policies (computed using purchases only) and executive type. The dependent variable, *Trading profits*, for sales equals $-\alpha$ from a four factor alpha model, where α is obtained from estimating transaction-day specific regressions of daily returns over the 180-days following each transaction. All other variables are defined in Appendix Table 20. T-statistics appear in parentheses and are based on standard errors clustered by executive. ***, and ** denote statistical significance at the .01, and .05 levels respectively.

Appendix Table 9

Intra-firm analysis: Abnormal trading profits, trade size, and trade frequency from purchases and sales

	Trading Profits		Trade Volume		Trade Frequency	
	Purchases	Sales	Purchases	Sales	Purchases	Sales
	(1)	(2)	(3)	(4)	(5)	(6)
Record	0.0171*** (3.70)	0.0137*** (3.00)	-0.0008 (-0.06)	0.0527** (2.01)	-1.0284 (-0.61)	0.6184 (0.80)
CEO	0.0020 (0.56)	0.0004 (0.11)	-0.0469*** (-4.01)	-0.1639*** (-9.10)	-0.7274 (-0.45)	2.6198** (2.09)
Record * CEO	-0.0045 (-0.62)	-0.0029 (-0.45)	0.0101 (0.45)	-0.0432 (-1.16)	-1.0309 (-0.36)	-0.8325 (-0.45)
<i>P-values: Summations</i>						
Record + Record * CEO	0.01	0.01	0.57	0.73	0.24	0.89
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	No	No
Adjusted R-Squared	0.24	0.17	0.25	0.26	0.20	0.25
Observations	7,406	22,861	6,062	18,197	854	1,291
Firms	206	263	199	255	206	263
Executives	854	1,291	831	1,054	854	1,291

This table presents the results of OLS regressions of executive type and trading profits, trade volume and trade frequency. The dependent variables are: *Trading profits*, which for purchases (sales) equals α ($-\alpha$) from a four factor alpha model, where α is obtained from estimating transaction-day specific regressions of daily returns over the 180-days following each transaction; *Trade Volume*, which is the number of shares traded scaled by the number of shares held; and *Trade Frequency*, which is the average number of trades an executive engages in per year. All other variables are defined in Appendix Table 20. T-statistics appear in parentheses and are based on standard errors clustered by executive. ***, and ** denote statistical significance at the .01, and .05 levels respectively.

Appendix Table 10

Executives' revelation of type and real time analysis

	Intra-Executive Analysis		Cross Sectional Analysis	
	Purchases	Sales	Purchaes	Sales
	(1)	(2)	(3)	(4)
Record	0.045 (1.13)	0.008 (0.57)	0.025*** (3.24)	0.016*** (2.99)
Size	-0.042** (-2.21)	0.011 (1.39)	-0.014*** (-5.25)	0.001 (0.55)
Market-to-Book	0.012** (2.35)	0.001 (0.001)	0.008*** (3.33)	-0.005*** (-4.45)
Return	0.011 (0.42)	-0.008 (-0.57)	-0.006 (-0.92)	-0.008 (-1.13)
Intercept	0.297*** (2.69)	-0.136** (-2.23)	0.142*** (7.21)	-0.020 (-1.27)
Executive Fixed Effects	Yes	Yes	No	No
Adjusted R-Squared	0.18	0.13	0.03	0.03
Observations	1,165	3,804	15,162	47,226

This table presents the results of intra-executive OLS regressions of the relation between recordholder status and executives' trading profits before and after the executive revealed his type (columns (1) and (2)). It also presents results from cross-sectional regressions of recordholder status and trading profits with recordholder status measured in real time (as of the start of year t) (columns (3) and (4)). The dependent variable, *Trading profits*, for purchases (sales) equals α ($-\alpha$) from a four factor alpha model, where α is obtained from estimating transaction-day specific regressions of daily returns over the 180-days following each transaction. All other variables are defined in Appendix Table 20. Due to the small number of transactions in the intra-executive model we analyze trades for all executives we acquired background checks for even if they are not in the intra-firm sample. T-statistics are based on standard errors clustered by executive. ***, and ** denote statistical significance at the .01, and .05 levels respectively.

Appendix Table 11

Abnormal profits from purchases and blackout policies: Blackout policies as per Lee et al. (2014)

	Record	Traffic	Serious
	(1)	(2)	(3)
Record	0.0137** (2.30)		
Traffic		0.0143** (2.18)	
Serious			0.0244*** (2.83)
Restrict Lee	0.0142 (0.83)	0.0041 (0.19)	0.0252 (1.26)
Record * Restrict Lee	-0.0225** (-2.11)		
Record Type * Restrict Lee		-0.0364** (-2.28)	0.0035 (0.15)
<i>P-values: Summations</i>			
Restrict Lee + Record Type * Restrict Lee	0.46	0.05	0.19
Record Type + Record Type * Restrict Lee	0.53	0.22	0.01
<i>P-values: Tests of differences</i>			
Serious > Traffic			0.06
Restrict Lee + Serious * Restrict Lee > Restrict Lee + Traffic * Restrict Lee			0.04
Serious + Restrict Lee + Serious * Restrict Lee > Traffic + Restrict Lee + Traffic * Restrict Lee			0.01
Controls	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Adjusted R-Squared	0.25	0.21	0.24
Observations	7,406	5,230	2,476
Firms	206	155	89
Executives	854	627	362

This table presents the results of OLS regressions that examine the relation between executives' trading profits from purchases as a function of blackout policies (computed based on Lee et al. (2014)) and executive type. The dependent variable, *Trading profits*, for purchases equals α from a four factor alpha model, where α is obtained from estimating transaction-day specific regressions of daily returns over the 180-days following each transaction. All other variables are defined in Appendix Table 20. T-statistics appear in parentheses and are based on standard errors clustered by executive. ***, and ** denote statistical significance at the .01, and .05 levels respectively.

Appendix Table 12

Abnormal profits from sales and blackout policies: Blackout policies as per Lee et al. (2014)

	Record	Traffic	Serious
	(1)	(2)	(3)
Record	0.0123** (2.30)		
Traffic		0.0086 (1.32)	
Serious			0.0497*** (2.91)
Restrict Lee	-0.0014 (-0.12)	-0.0010 (-0.82)	0.0243 (0.63)
Record * Restrict Lee	-0.0220** (-2.50)		
Record Type * Restrict Lee		-0.0247* (-1.92)	-0.0245 (-0.86)
<i>P-values: Summations</i>			
Restrict Lee + Record Type * Restrict Lee	0.05	0.04	0.99
Record Type + Record Type * Restrict Lee	0.42	0.15	0.05
<i>P-values: Tests of differences</i>			
Serious > Traffic			0.01
Restrict Lee + Serious * Restrict Lee > Restrict Lee + Traffic * Restrict Lee			0.10
Serious + Restrict Lee + Serious * Restrict Lee > Traffic + Restrict Lee + Traffic * Restrict Lee			0.02
Controls	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Adjusted R-Squared	0.19	0.16	0.29
Observations	22,861	17,530	6,231
Firms	263	202	111
Executives	1,291	1,021	458

This table presents the results of OLS regressions that examine the relation between executives' trading profits from purchases as a function of blackout policies (computed based on Lee et al. (2014)) and executive type. The dependent variable, *Trading profits*, for sales equals α from a four factor alpha model, where α is obtained from estimating transaction-day specific regressions of daily returns over the 180-days following each transaction. All other variables are defined in Appendix Table 20. T-statistics appear in parentheses and are based on standard errors clustered by executive. ***, **, and * denote statistical significance at the .01, .05, and .10 levels respectively.

Appendix Table 13

Executive type and trades during blackout periods: Blackout policies as per Lee et al. (2014)

	Sample of Firms with a Blackout Policy		
	Record (1)	Traffic (2)	Serious (3)
Record	0.2157** (2.42)		
Traffic		0.0543 (0.51)	
Serious			0.3533** (2.40)
<i>P-values: Tests of differences</i>			
Serious > Traffic			0.04
Controls	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Pseudo R-Squared	0.01	0.01	0.01
Observations	13,978	9,819	3,646
Firms	148	112	48
Executives	773	577	210

This table presents the results of conditional logistic regressions that examine the relation between an executive's type and his propensity to trade in blackout periods (blackout policies computed based on Lee et al. (2014)). The dependent variable is *Blackout Trade Lee*, which is an indicator variable that equals 1 if the trade was executed during a blackout period, and 0 otherwise. All other variables are defined in Appendix Table 20. Z-statistics appear in parentheses and are based on standard errors clustered by executive. ** denotes statistical significance at the .05 level.

Appendix Table 14

Intra-firm analysis: Abnormal trading profits and executives with multiple infractions

	Traffic Violations				Multiple Violations			
	Purchases		Sales		Purchases		Sales	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Traffic	0.0114*** (2.81)	0.0131** (2.20)	0.0060** (2.18)	0.0056 (1.25)				
Multiple					0.0171*** (3.43)	0.0252*** (2.96)	0.0123*** (2.87)	0.0192*** (3.17)
Restrict		0.0028 (0.25)		-0.0043 (-0.72)		0.0051 (0.33)		-0.0047 (-0.69)
Record Type * Restrict		-0.0270*** (-2.61)		-0.0165 (-1.56)		-0.0058 (-0.26)		-0.0141 (-1.31)
<i>P-values: Summations</i>								
Restrict + Record Type * Restrict		0.02		0.08		0.97		0.19
Record Type + Record Type * Restrict		0.29		0.45		0.05		0.63
<i>P-values: Tests of differences</i>								
Multiple > Traffic					0.07	0.04	0.04	0.02
Restrict + Multiple * Restrict > Restrict + Traffic * Restrict						0.02		0.94
Multiple + Blackout Trade + Multiple * Blackout Trade > Traffic + Blackout Trade + Traffic * Blackout Trade						0.01		0.08
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-Squared	0.20	0.23	0.15	0.16	0.20	0.34	0.12	0.06
Observations	5,230	5,230	17,530	17,530	3,199	3,199	9,161	9,161
Firms	155	155	202	202	110	110	140	140
Executives	627	627	1,021	1,021	463	463	594	594

This table presents the results of OLS regressions that examine the relation between executives' trading profits from purchases and sales and their executive type. The dependent variable, *Trading profits*, for purchases (sales) equals α ($-\alpha$) from a four factor alpha model, where α is obtained from estimating transaction-day specific regressions of daily returns over the 180-days following each transaction. All other variables are defined in Appendix Table 20. T-statistics appear in parentheses and are based on standard errors clustered by executive. ***, and ** denote statistical significance at the .01, and .05 levels respectively.

Appendix Table 15

Trading during blackout periods and before large information events and executives with multiple infractions

	Traffic Violations			Multiple Violations		
	Blackout Trade	Trade Size	CAR Trade	Blackout Trade	Trade Size	CAR Trade
	(1)	(2)	(3)	(4)	(5)	(6)
Traffic	-0.1406 (-1.29)	-34.84 (-0.77)	0.1931** (2.10)			
Multiple				0.3099** (2.20)	14.10 (1.09)	0.2609*** (2.61)
Blackout Trade		-127.75* (-1.90)			-33.46*** (-3.73)	
Record * Blackout Trade						
Record Type * Blackout Trade		26.44 (0.33)			-44.89* (-1.86)	
<i>P-values: Summations</i>						
Blackout Trade + Record Type * Blackout Trade		0.02			0.01	
Record Type + Record Type * Restrict		0.96			0.17	
<i>P-values: Tests of differences</i>						
Multiple > Traffic				0.01	0.15	0.05
Blackout Trade + Multiple * Blackout Trade > Blackout Trade + Traffic * Blackout Trade					0.85	
Multiple + Blackout Trade + Multiple * Blackout Trade > Traffic + Blackout Trade + Traffic * Blackout Trade					0.34	
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo (Adjusted) R-Squared	0.02	0.01	0.01	0.02	0.01	0.01
Observations	4,440	4,440	20,178	2,835	2,835	10,960
Firms	121	121	184	77	77	132
Executives	492	492	971	324	324	563

This table presents the results of conditional logistic (*Blackout Trade* and *CAR Trade*) and OLS (*Trade Size*) regressions that examine the relation between an executive's trading behavior in blackout periods and before large information events and executive type. The dependent variables are: *Blackout trade*, an indicator variable that equals 1 if the trade was executed during a blackout period, and 0 otherwise; *Trade Size*, the number of share traded in thousands; and *CAR Trade* an indicator variable that equals 1 for purchases (sales) executed within the 60 days preceding a positive (negative) 3-day cumulative abnormal return (CAR) at least 3 standard deviations from the mean CAR, and 0 otherwise. All other variables are defined in Appendix Table 20. Z(T)-statistics appear in parentheses and are based on standard errors clustered by executive. ***, **, and * denote statistical significance at the .01, .05, and .10 levels respectively.

Appendix Table 16

Form 4 filing and executives with multiple infractions

	Traffic Violations		Multiple Violations	
	Pre 8/29/2002	Post 8/29/2002	Pre 8/29/2002	Post 8/29/2002
	(1)	(2)	(3)	(4)
Traffic	-0.0743 (-0.91)	-0.0624 (-0.75)		
Multiple			-0.0446 (-0.45)	0.0311 (0.44)
<i>P-values: Tests of differences</i>				
Multiple > Traffic			0.81	0.35
Controls	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Adjusted (Pseudo) R-Squared	0.01	0.01	0.01	0.01
Observations	9,120	13,592	3,495	5,256
Firms	141	144	78	78
Executives	659	724	298	341

This table presents the results of conditional logistic regressions of executive type and the time to file Form 4 with the SEC. The dependent variable is *Late Filing*, an indicator variable equal to 1 if Form 4 is filed late, and 0 otherwise. We conduct the analyses in two reporting regimes: prior to August 29, 2002 when the filing deadline was the 10th day of the next calendar month, and August 29, 2002 onwards, when the filing deadline was shortened to 2 trading days after the trade was executed. All other variables are defined in Appendix Table 20. Z-statistics appear in parentheses and are based on standard errors clustered by executive.

Appendix Table 17
Abnormal profits and board independence

	Purchases			Sales		
	Record	Traffic	Serious	Record	Traffic	Serious
	(1)	(2)	(3)	(5)	(6)	(7)
Record	0.0183** (2.33)			0.0144** (-2.19)		
Traffic		0.0167** (2.15)			0.0096* (1.82)	
Serious			0.0357*** (2.78)			0.0328*** (2.69)
Independence	0.0087 (1.06)	0.0092 (1.03)	0.0134 (0.74)	0.0051 (0.54)	0.0047 (0.50)	-0.0081 (-1.30)
Record * Independence	-0.0198** (-2.10)			-0.0178** (-2.05)		
Record type * Independence		-0.0197** (-2.26)	-0.0239 (-1.17)		-0.0235** (-2.26)	-0.0100 (-1.41)
<i>P-values: Summations</i>						
Independence + Record Type * Independence	0.22	0.31	0.62	0.13	0.09	0.15
Record Type + Record Type * Independence	0.92	0.80	0.06	0.81	0.16	0.02
<i>P-values: Tests of differences</i>						
Serious > Traffic			0.03			0.04
Independence + Serious * Independence >			0.91			0.94
Independence + Traffic * Independence						
Serious + Independence + Serious * Independence >			0.05			0.04
Traffic + Independence + Traffic * Independence						
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	0.19	0.20	0.17	0.20	0.19	0.28
Observations	4,165	2,915	1,228	15,569	11,692	3,544
Firms	175	129	77	214	163	92
Executives	672	460	259	1,037	782	347

This table presents the results of OLS regressions that examine the relation between executives' trading profits, executive type, and board independence. The dependent variable, *Trading profits*, for purchases (sales) equals α (- α) from a four factor alpha model, where α is obtained from estimating transaction-day specific regressions of daily returns over the 180-days following each transaction. All other variables are defined in Appendix Table 20. T-statistics appear in parentheses and are based on standard errors clustered by executive. ***, **, and * denote statistical significance at the .01, .05, and .10 levels respectively.

Appendix Table 18
Abnormal profits and institutional holdings

	Purchases			Sales		
	Record	Traffic	Serious	Record	Traffic	Serious
	(1)	(2)	(3)	(5)	(6)	(7)
Record	0.0139** (2.35)			0.0190* (1.96)		
Traffic		0.0137** (2.06)			0.0075 (0.88)	
Serious			0.0317*** (2.70)			0.0481*** (2.75)
Inst Holdings	0.0073 (0.52)	0.0202 (1.29)	-0.0048 (-0.61)	-0.0169* (-1.91)	-0.0095 (-0.89)	-0.0038 (-0.19)
Record * Inst Holdings	-0.0219** (-2.02)			-0.0136* (-1.67)		
Record type * Inst Holdings		-0.0334** (-2.33)	-0.0084 (-1.20)		-0.0252** (-2.17)	-0.0237 (-1.32)
<i>P-values: Summations</i>						
Inst Holdings + Record Type * Inst Holdings	0.08	0.10	0.15	0.05	0.02	0.13
Record Type + Record Type * Inst Holdings	0.35	0.14	0.01	0.77	0.09	0.02
<i>P-values: Tests of differences</i>						
Serious > Traffic			0.05			0.01
Inst Holdings + Serious * Inst Holdings > Inst Holdings + Traffic * Inst Holdings			0.60			0.19
Serious + Inst Holdings + Serious * Inst Holdings > Traffic + Inst Holdings + Traffic * Inst Holdings			0.05			0.01
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	0.21	0.21	0.24	0.21	0.18	0.31
Observations	6,334	4,508	2,139	19,813	15,022	5,200
Firms	190	137	70	239	181	95
Executives	792	567	281	1,169	931	412

This table presents the results of OLS regressions that examine the relation between executives' trading profits, executive type, and institutional holdings. The dependent variable, *Trading profits*, for purchases (sales) equals α (- α) from a four factor alpha model, where α is obtained from estimating transaction-day specific regressions of daily returns over the 180-days following each transaction. All other variables are defined in Appendix Table 20. T-statistics appear in parentheses and are based on standard errors clustered by executive. ***, **, and * denote statistical significance at the .01, .05, and .10 levels respectively.

Appendix Table 19

Insider trading before large stock price movements: Using alternate CAR trade measures

	3 Standard Deviation CAR		4 Standard Deviation CAR	
	Trade within 60	Trade within 30	Trade within 60	Trade within 30
	days	days	days	days
	(1)	(2)	(3)	(4)
Record	0.2387*** (3.39)	0.2476*** (3.03)	0.3225*** (3.17)	0.3768*** (2.74)
Controls	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Pseudo R-squared	0.01	0.01	0.01	0.01
Observations	26,844	24,796	20,722	17,033
Firms	237	214	184	150
Executives	1,225	1,120	950	782

This table presents the results of conditional logistic regressions that examine the relation between recordholder status and propensity to trade before large changes to their firm's stock price. The dependent variable is *CAR Trade* which is an indicator variable that equals 1 for purchases (sales) executed preceding a positive (negative) large change in stock price, and 0 otherwise. We consider trades executed within 60 or 30 days of both a 3 and 4 standard deviation 3-day cumulative abnormal return. All other variables are defined in Appendix Table 20. Z-statistics appear in parentheses and are based on standard errors clustered by executive. *** denotes statistical significance at the .01 level.

Appendix Table 20: Definition of Main Variables and Data Sources

Variable	Measurement	Data Source
Record	An indicator variable that equals 1 if an executive has any legal infractions, and 0 otherwise. Legal infractions include driving under the influence of alcohol, other drug-related charges, domestic violence, reckless behavior, sexual assault and traffic violations (including speeding tickets).	Find Out the Truth.com (FOTT)
Traffic	An indicator variable that equals 1 if an executive has any traffic, but no other, legal infractions, and 0 otherwise.	Find Out the Truth.com (FOTT)
Serious	An indicator variable that equals 1 if an executive has any serious legal infractions, and 0 otherwise. Serious legal infractions include driving under the influence of alcohol, other drug-related charges, domestic violence, reckless behavior, and sexual assault.	Find Out the Truth.com (FOTT)
Multiple	An indicator variable that equals 1 if an executive has multiple legal infractions, and 0 otherwise. Legal infractions include driving under the influence of alcohol, other drug-related charges, domestic violence, reckless behavior, sexual assault, and traffic violations (including speeding tickets).	Find Out the Truth.com (FOTT)
Trading Profits	Equals α (- α) for purchases (sales) made by insiders (who file SEC Form 16), where α is obtained from estimating transaction-day specific regressions of daily returns on common factors over the 180-days following each transaction: $(R_i - R_f) = \alpha + \beta_1 (R_{mkt} - R_f) + \beta_2 SMB + \beta_3 HML + \beta_4 UMD + e$. R_i is the daily return to firm i 's equity, R_f is the daily risk-free interest rate, R_{mkt} is the CRSP value-weighted market return, and SMB , HML , and UMD are the size, book-to-market, and momentum factors.	Thomson Reuters, CRSP and Fama-French data
Female	An indicator variable that equals 1 if the executive is female, and 0	Boardex
Born Recession	An indicator variable that equals 1 if the executive was born during a recession, and 0 otherwise.	Boardex/ NBER
Overconfidence	An indicator variable that equals 1 if the executive is overconfident following the net buyer measure developed in Malmendier and Tate [2005], and 0 otherwise.	Execucomp
Narcissism	The area (length times width) of the executive's signature divided by the number of characters in their signature.	10-K Filings
MBA	An indicator variable that equals 1 if the executive has an MBA, and 0 otherwise.	Boardex
Top MBA	An indicator variable that equals 1 if the executive has an MBA from a top 10 ranked program, and 0 otherwise,	Boardex
Military	An indicator variable that equals 1 if the executive served in the military, and 0 otherwise.	Boardex
Work Recession	An indicator variable that equals 1 if the executive began their career during a recession, and 0 otherwise.	Boardex/ NBER
Wealth	The natural logarithm of the sum of firm-based wealth (measured as in Coles et al. 2013) and non-firm-based wealth (measured as in Dittmann and Maug 2007).	ExecuComp and the website of Ingolf Dittmann
Material	An indicator variable that equals 1 if the executive is materialistic following Davidson et al. (2015), and 0 otherwise.	Find Out the Truth.com (FOTT)

Appendix Table 20: Continued

Variable	Measurement	Data Source
Routine	An indicator variable that equals 1 for an insider who trades in the same calendar month for three straight years, and 0 otherwise.	Thomson Reuters
Opportunistic	An indicator variable that equals 1 for an insider who trades in three consecutive years but not in the same month, and 0 otherwise.	Thomson Reuters
Size	The natural logarithm of the firm's market capitalization.	Compustat
Sales	The natural logarithm of the firm's sales.	Compustat
Market-to-Book	The ratio of the market and book values of a firm's equity.	Compustat
Return on Assets	The firm's operating income before depreciation and amortization scaled by average total assets.	Compustat
CEO Wealth	The natural logarithm of the sum of firm-based wealth (measured as in Coles et al. 2013) and non-firm-based wealth (measured as in Dittmann and Maug 2007).	ExecuComp and the website of Ingolf Dittmann
Independence	An indicator variable that equals 1 if the percentage of the firm's board of directors who are classified as independent is above the median, and 0 otherwise.	IRRC
Inst Holdings	An indicator variable that equals 1 if the proportion of a firm's outstanding common shares held by institutions is above the median, and 0 otherwise.	Thomson Reuters
Return	The firm's annual stock return	CRSP
Restrict	An indicator that equals 1 if 75% or more of the firm's trading volume occurs outside of the blackout period, and 0 otherwise. The blackout period is the period outside the 21 trading days following a quarterly earnings	Thomson Reuters and Compustat
Restrict-P	An indicator that equals 1 if 75% or more of the firm's purchase trading volume occurs outside of the blackout period, and 0 otherwise. The blackout period is the period outside the 21 trading days following a	Thomson Reuters and Compustat
CEO	An indicator variable that equals 1 if the executive is a CEO, and 0 otherwise.	BoardEx and ExecuComp
Trade Volume	The number of shares traded scaled by the number of shares held.	Thomson Reuters
Trade Frequency	The average number of trades an executive makes per year.	Thomson Reuters
Restrict Lee	An indicator variable that equals 1 in firm years denoted to have a blackout period using a modified estimate of blackout periods from Lee et al. 2014, and 0 otherwise.	Thomson Reuters and Compustat
Blackout Trade Lee	An indicator variable that equals 1 if the trade was executed during a blackout period, and 0 otherwise where blackout policies are measured as in Lee et al. 2014.	Thomson Reuters and Compustat
CAR Trade	An indicator variable that equals 1 for purchases (sales) executed within the 60 days preceding a positive (negative) 3-day cumulative abnormal return (CAR) at least 3 standard deviations from the mean CAR, and 0 otherwise.	Thomson Reuters and CRSP