

Online Appendix for

“Directors’ career concerns: Evidence from proxy contests and board interlocks”

This Online Appendix reports additional empirical results that complement the results presented in the paper. The results reported here are summarized in the paper.

Table A.1: Standard errors clustered by firm.

Table A.2: Alternative dependent variables.

Table A.3: Robustness tests.

Table A.1

Standard errors clustered by firm.

This table reports regression results using the matched sample of treatment and control firms over the three-year period $[-1, +1]$ around proxy contests. The dependent variables are *Excess cash* in Column 1, *Shareholder payout* in Column 2, *Total compensation* in Column 3, and *Discretionary accruals* in Column 4. The indicator *Treatment* equals one for firms that share directors with proxy contest target firms and zero otherwise. The indicator *Post* equals one for the year after a proxy contest and zero otherwise. In parentheses are standard errors adjusted for heteroskedasticity and clustering at the firm level. Superscripts ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)
	<i>Excess cash</i>	<i>Shareholder payout</i>	<i>Total compensation</i>	<i>Discretionary accruals</i>
<i>Treatment</i> × <i>Post</i>	-0.017*** (0.006)	0.006** (0.002)	-0.051** (0.024)	-0.018* (0.009)
<i>Treatment</i>	0.009 (0.006)	0.001 (0.003)	-0.017 (0.028)	0.003 (0.005)
<i>Post</i>	0.006 (0.004)	-0.004* (0.002)	0.033 (0.024)	0.015* (0.008)
<i>Market capitalization</i>	0.024*** (0.009)	0.015*** (0.002)	0.141*** (0.041)	-0.013* (0.007)
<i>Market-to-book</i>	-0.004 (0.010)	-0.007*** (0.002)	0.022 (0.027)	0.005 (0.005)
<i>Stock return</i>	0.001 (0.006)	-0.002 (0.002)	0.100*** (0.029)	0.022** (0.009)
<i>Return volatility</i>	-0.013 (0.170)	-0.169*** (0.034)	-0.748 (0.463)	0.134 (0.088)
<i>Board size</i>	0.001 (0.001)	-0.001* (0.001)	-0.002 (0.008)	-0.001 (0.001)
<i>Board independence</i>	0.022 (0.028)	-0.006 (0.010)	-0.006 (0.138)	-0.013 (0.027)
<i>CEO duality</i>	0.008 (0.006)	-0.001 (0.002)	0.015 (0.027)	-0.002 (0.005)
<i>Director ownership</i>	-0.010 (0.037)	-0.001 (0.025)	-0.064 (0.214)	-0.046 (0.046)
<i>Director busyness</i>	0.001 (0.013)	-0.005 (0.005)	0.018 (0.071)	0.014 (0.013)
<i>Director co-option</i>	-0.003 (0.012)	-0.002 (0.004)	0.062 (0.055)	0.020* (0.011)
Year fixed effects	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes
Adjusted <i>R</i> -squared	0.855	0.418	0.753	0.153
Observations	4,884	5,910	5,556	5,052

Table A.2

Alternative dependent variables.

This table reports results from regressions of alternative dependent variables. Panel A reports results on the individual components of shareholder payouts. In Column 1, the dependent variable *Dividend* is defined as cash dividends declared on common stock divided by the lagged market value of equity. In Column 2, the dependent variable *Repurchase* is defined as the purchase of common and preferred stock minus any reduction in the value of preferred stocks outstanding divided by the lagged market value of equity. *Repurchase* is set to zero if the amount is smaller than 1% of the lagged market value of equity. Panel B reports results on the structure of CEO compensation. In Columns 1 and 2, the dependent variable *Cash compensation* is defined as the natural logarithm of CEO salary and bonus. In Columns 3 and 4, the dependent variable *Equity compensation* is defined as the natural logarithm of CEO stocks and option grants. In Columns 5 and 6, the dependent variable *Equity intensity* is defined as the proportion of stocks and option grants in CEO compensation. Panel C reports results on alternative measures of earnings management. In Column 1, the dependent variable *Alternative accruals* is defined as the absolute value of discretionary accruals estimated from the modified Jones model without performance matching. In Column 2, the dependent variable *Beat forecast* is an indicator equal to one if the firm's reported earnings per share meets or beats the most recent analyst consensus forecast by up to one cent and zero otherwise. In parentheses are standard errors adjusted for heteroskedasticity and clustering by both firm and year. Superscripts ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

<i>Panel A: Individual components of shareholder payouts</i>		
	(1) <i>Dividend</i>	(2) <i>Repurchase</i>
<i>Treatment</i> × <i>Post</i>	0.002** (0.001)	0.004** (0.002)
<i>Treatment</i>	0.001 (0.001)	0.001 (0.002)
<i>Post</i>	-0.001 (0.001)	-0.001 (0.002)
<i>Market capitalization</i>	0.001 (0.001)	0.013*** (0.003)
<i>Market-to-book</i>	-0.001** (0.001)	-0.006*** (0.002)
<i>Stock return</i>	-0.001 (0.001)	-0.001 (0.002)
<i>Return volatility</i>	-0.099*** (0.023)	-0.063** (0.024)
<i>Board size</i>	0.001 (0.001)	-0.001 (0.001)
<i>Board independence</i>	0.001 (0.003)	-0.008 (0.009)
<i>CEO duality</i>	0.001* (0.001)	-0.002 (0.002)
<i>Director ownership</i>	0.008 (0.006)	-0.009 (0.027)
<i>Director busyness</i>	-0.003* (0.001)	-0.002 (0.005)
<i>Director co-option</i>	-0.002 (0.001)	-0.001 (0.004)
Year fixed effects	Yes	Yes
Firm fixed effects	Yes	Yes
Adjusted <i>R</i> -squared	0.699	0.399
Observations	5,910	5,910

Panel B: CEO compensation structure

	(1)	(2)	(3)	(4)	(5)	(6)
	Cash compensation		Equity compensation		Equity intensity	
Committee =	Compensation committee					
<i>Treatment</i> × <i>Post</i>	-0.075** (0.030)		-0.043 (0.031)		0.057** (0.025)	
<i>Treatment</i>	-0.016 (0.028)		-0.024 (0.106)		-0.011 (0.030)	
<i>Treatment_committee member</i> × <i>Post</i>		-0.142*** (0.030)		-0.082** (0.035)		0.091** (0.039)
<i>Treatment_not committee member</i> × <i>Post</i>		-0.009 (0.032)		-0.006 (0.038)		0.023 (0.043)
<i>Treatment_committee member</i>		0.024 (0.032)		0.046 (0.182)		0.003 (0.013)
<i>Treatment_not committee member</i>		-0.037 (0.023)		-0.080 (0.120)		-0.011 (0.012)
<i>Post</i>	0.031 (0.020)	0.025 (0.019)	0.078* (0.043)	0.080* (0.042)	0.013 (0.011)	0.011 (0.010)
<i>Market capitalization</i>	0.057 (0.041)	0.057 (0.041)	0.240 (0.148)	0.239 (0.147)	0.042** (0.016)	0.042** (0.016)
<i>Market-to-book</i>	0.028 (0.021)	0.028 (0.021)	0.042 (0.089)	0.042 (0.088)	0.008 (0.008)	0.009 (0.008)
<i>Stock return</i>	0.047* (0.024)	0.047* (0.025)	0.135* (0.071)	0.137* (0.076)	0.012 (0.010)	0.011 (0.010)
<i>Return volatility</i>	-0.184 (0.358)	-0.183 (0.356)	-0.293 (1.709)	-0.260 (1.712)	0.136 (0.224)	0.142 (0.223)
<i>Board size</i>	0.008 (0.009)	0.008 (0.010)	-0.025 (0.034)	-0.024 (0.034)	-0.003 (0.003)	-0.003 (0.003)
<i>Board independence</i>	0.053 (0.129)	0.050 (0.129)	-0.438 (0.547)	-0.433 (0.546)	-0.058 (0.049)	-0.059 (0.049)
<i>CEO duality</i>	0.006 (0.028)	0.006 (0.027)	-0.029 (0.108)	-0.027 (0.108)	-0.001 (0.012)	-0.001 (0.012)
<i>Director ownership</i>	0.028 (0.192)	0.030 (0.192)	0.355 (1.066)	0.370 (1.068)	-0.004 (0.085)	-0.005 (0.085)
<i>Director busyness</i>	0.019 (0.053)	0.018 (0.052)	-0.155 (0.305)	-0.168 (0.303)	-0.003 (0.029)	-0.005 (0.029)
<i>Director co-option</i>	0.130** (0.044)	0.129** (0.044)	-0.389* (0.199)	-0.385* (0.201)	-0.037* (0.020)	-0.037* (0.020)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	0.692	0.692	0.458	0.458	0.462	0.462
Observations	5,556	5,556	5,556	5,556	5,556	5,556

Panel C: Alternative measures of earnings management

	(1)	(2)
	<i>Alternative accruals</i>	<i>Beat forecast</i>
<i>Treatment</i> × <i>Post</i>	-0.010** (0.004)	-0.063** (0.029)
<i>Treatment</i>	0.001 (0.005)	0.017 (0.020)
<i>Post</i>	0.006* (0.004)	0.009 (0.024)
<i>Market capitalization</i>	-0.008** (0.003)	0.002 (0.020)
<i>Market-to-book</i>	0.010*** (0.002)	0.001 (0.012)
<i>Stock return</i>	0.003 (0.003)	0.001 (0.016)
<i>Return volatility</i>	-0.023 (0.032)	0.263 (0.233)
<i>Board size</i>	-0.001 (0.001)	0.001 (0.004)
<i>Board independence</i>	0.006 (0.009)	0.094 (0.094)
<i>CEO duality</i>	0.001 (0.003)	-0.015 (0.016)
<i>Director ownership</i>	0.022 (0.017)	0.088 (0.172)
<i>Director busyness</i>	-0.001 (0.004)	0.008 (0.050)
<i>Director co-option</i>	0.007** (0.003)	0.007 (0.041)
Year fixed effects	Yes	Yes
Firm fixed effects	Yes	Yes
Adjusted R-squared	0.289	0.127
Observations	5,052	5,256

Table A.3

Robustness tests.

This table reports robustness tests. The regressions include all firm and board characteristics as well as year and firm fixed effects. The coefficients on the control variables are omitted for brevity. In Panel A, treatment firms in the same Fama-French 48 industry as target firms are excluded. In Panel B, *Industry contests* is the total number of proxy contests in the firm's industry. In Panel C, treatment firms headquartered in the same state as target firms are excluded. In Panel D, *State contests* is the total number of proxy contests in the firm's state. In Panel E, *Total interlocks* is the total number of the firm's board interlocks with other companies. In Panel F, *Treatment_outside director* indicates treatment firms for which the interlocking director is an outside director at both the interlocked and target firms, and *Treatment_inside director* indicates the rest of treatment firms. In Panel G, the regressions are estimated using an alternative matched sample. To construct this sample, a probit model is estimated in which the dependent variable is an indicator for treatment firms and independent variables include all firm and board characteristics. In the year before proxy contests, each treatment firm is matched to a control firm with the closest propensity score in the same Fama-French 48 industry. In parentheses are standard errors adjusted for heteroskedasticity and clustering by both firm and year. Superscripts ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

<i>Panel A: Exclude treatment firms in the same industry as target firms</i>				
	(1)	(2)	(3)	(4)
	<i>Excess cash</i>	<i>Shareholder payout</i>	<i>Total compensation</i>	<i>Discretionary accruals</i>
<i>Treatment</i> × <i>Post</i>	−0.016** (0.006)	0.006** (0.002)	−0.040** (0.018)	−0.019** (0.007)
<i>Treatment</i>	0.009 (0.007)	0.001 (0.003)	−0.023 (0.030)	0.003 (0.004)
<i>Post</i>	0.006 (0.004)	−0.004 (0.003)	0.034 (0.021)	0.014* (0.008)
<i>Panel B: Control for the total number of proxy contests in the firm's industry</i>				
	(1)	(2)	(3)	(4)
	<i>Excess cash</i>	<i>Shareholder payout</i>	<i>Total compensation</i>	<i>Discretionary accruals</i>
<i>Treatment</i> × <i>Post</i>	−0.017*** (0.006)	0.006** (0.003)	−0.051** (0.019)	−0.017** (0.007)
<i>Treatment</i>	0.009 (0.007)	0.001 (0.003)	−0.017 (0.030)	0.002 (0.004)
<i>Post</i>	0.006 (0.004)	−0.004 (0.003)	0.033 (0.029)	0.014* (0.007)
<i>Industry contests</i>	−0.001 (0.001)	0.001 (0.001)	0.003 (0.005)	0.003 (0.002)

Panel C: Exclude treatment firms located in the same state as target firms

	(1)	(2)	(3)	(4)
	<i>Excess cash</i>	<i>Shareholder payout</i>	<i>Total compensation</i>	<i>Discretionary accruals</i>
<i>Treatment</i> × <i>Post</i>	−0.016** (0.007)	0.006** (0.003)	−0.064*** (0.018)	−0.017** (0.008)
<i>Treatment</i>	0.008 (0.007)	0.001 (0.004)	−0.019 (0.031)	0.004 (0.004)
<i>Post</i>	0.008 (0.005)	−0.004 (0.003)	0.035 (0.029)	0.015* (0.008)

Panel D: Control for the total number of proxy contests in the firm's state

	(1)	(2)	(3)	(4)
	<i>Excess cash</i>	<i>Shareholder payout</i>	<i>Total compensation</i>	<i>Discretionary accruals</i>
<i>Treatment</i> × <i>Post</i>	−0.016*** (0.005)	0.006** (0.003)	−0.051** (0.020)	−0.018** (0.007)
<i>Treatment</i>	0.009 (0.007)	0.001 (0.003)	−0.018 (0.030)	0.003 (0.004)
<i>Post</i>	0.007 (0.005)	−0.004 (0.003)	0.031 (0.021)	0.013* (0.006)
<i>State contests</i>	0.001 (0.001)	0.001 (0.001)	0.005 (0.007)	−0.001 (0.001)

Panel E: Control for the total number of the firm's board interlocks with other companies

	(1)	(2)	(3)	(4)
	<i>Excess cash</i>	<i>Shareholder payout</i>	<i>Total compensation</i>	<i>Discretionary accruals</i>
<i>Treatment</i> × <i>Post</i>	−0.017*** (0.006)	0.006** (0.003)	−0.055** (0.020)	−0.018** (0.007)
<i>Treatment</i>	0.009 (0.009)	0.001 (0.003)	−0.022 (0.030)	0.003 (0.004)
<i>Post</i>	0.005 (0.004)	−0.004 (0.003)	0.032 (0.028)	0.015* (0.008)
<i>Total interlocks</i>	−0.001 (0.001)	−0.001 (0.001)	0.016*** (0.005)	−0.001 (0.001)

Panel F: Differentiate between outside and inside interlocking directors

	(1)	(2)	(3)	(4)
	<i>Excess cash</i>	<i>Shareholder payout</i>	<i>Total compensation</i>	<i>Discretionary accruals</i>
<i>Treatment_outside director</i> × <i>Post</i>	−0.019*** (0.005)	0.007*** (0.002)	−0.056** (0.019)	−0.019** (0.007)
<i>Treatment_inside director</i> × <i>Post</i>	−0.010 (0.007)	0.001 (0.005)	−0.016 (0.051)	0.001 (0.010)
<i>Treatment_outside director</i>	0.010 (0.008)	−0.001 (0.003)	−0.018 (0.031)	0.004 (0.004)
<i>Treatment_inside director</i>	0.006 (0.008)	0.003 (0.003)	−0.017 (0.055)	−0.002 (0.005)
<i>Post</i>	0.006 (0.004)	−0.004 (0.003)	0.031 (0.028)	0.013* (0.007)

Panel G: An alternative sample based on propensity score matching

	(1)	(2)	(3)	(4)
	<i>Excess cash</i>	<i>Shareholder Payout</i>	<i>Total compensation</i>	<i>Discretionary accruals</i>
<i>Treatment</i> × <i>Post</i>	−0.014** (0.006)	0.004** (0.002)	−0.049** (0.022)	−0.014** (0.006)
<i>Treatment</i>	0.011 (0.010)	−0.001 (0.002)	−0.001 (0.026)	0.002 (0.004)
<i>Post</i>	0.002 (0.004)	−0.002 (0.001)	0.022 (0.020)	0.013* (0.006)