

POLITICAL CONNECTIONS, FINANCIAL CONSTRAINTS, and CORPORATE TAXATION

ONLINE APPENDICES

Table OA1 Financial Performance and Investment Policies

Panel A presents results for financially constrained firms, and Panel B for financially unconstrained firms. Financial constraints are defined using the HP Index, with firms above the sample median in the pre-election year classified as constrained. The dependent variables include *PRETAX_MARGIN* (pre-tax income scaled by sales), *CAPEX* (capital expenditures scaled by lagged total assets), *RD_INTENSITY* (R&D expenditures scaled by sales), *MA_DUMMY* (indicator for firm-year with at least one merger or acquisition), and *MA_DEAL_VAL* (log of one plus the total value of M&A deals). *WinP* is the number of winning candidates involved in a close election that a firm donated to prior to the election scaled by 100. *LoseP* is the number of losing candidates involved in a close election that a firm donated to prior to the election scaled by 100. *TotalP* equals *WinP* minus *LoseP*. Control variables including *SIZE*, *ROA*, *LEVERAGE*, *SGA*, *R_D*, *NOLCF*, *CHG_NOLCF*, *FOR_INCOME*, *LOSS*, and *STR* are defined in [Appendix A](#). Robust standard errors clustered at the firm level are reported in the parentheses. ***, **, * indicate two-tailed significance at 1%, 5% and 10%.

Panel A: Financially Constrained Firms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	<i>PRETAX_MARGIN</i>		<i>CAPEX</i>		<i>RD_INTENSITY</i>		<i>MA_DUMMY</i>		<i>MA_DEAL_VAL</i>	
<i>TotalP</i>	-0.085 (0.241)		-0.036 (0.052)		0.001 (0.015)		-0.417 (0.541)		-2.247 (2.738)	
<i>WinP</i>		-0.044 (0.230)		-0.021 (0.054)		0.009 (0.017)		-0.246 (0.582)		-0.909 (3.057)
<i>LoseP</i>		0.201 (0.297)		0.077 (0.082)		0.022 (0.018)		0.925 (0.751)		6.230 (4.026)
<i>Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster	Firm	Firm	Firm	Firm	Firm	Firm	Firm	Firm	Firm	Firm
Observations	2,204	2,204	2,184	2,184	2,282	2,282	2,282	2,282	2,282	2,282
Adj. R-sq	0.48	0.48	0.65	0.65	0.96	0.96	0.24	0.24	0.28	0.28

Panel B: Financially Unconstrained Firms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	<i>PRETAX_MARGIN</i>		<i>CAPEX</i>		<i>RD_INTENSITY</i>		<i>MA_DUMMY</i>		<i>MA_DEAL_VAL</i>	
<i>TotalP</i>	-0.026 (0.059)		-0.003 (0.021)		0.007 (0.007)		-0.103 (0.353)		-0.311 (2.421)	
<i>WinP</i>		-0.021 (0.066)		-0.000 (0.023)		0.009 (0.009)		-0.128 (0.359)		-0.532 (2.548)
<i>LoseP</i>		0.043 (0.074)		0.011 (0.032)		-0.001 (0.008)		0.020 (0.532)		-0.419 (3.454)
<i>Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster	Firm	Firm	Firm	Firm	Firm	Firm	Firm	Firm	Firm	Firm
Observations	2,668	2,668	2,632	2,632	2,717	2,717	2,717	2,717	2,717	2,717
Adj. R-sq	0.56	0.56	0.67	0.67	0.94	0.94	0.30	0.30	0.31	0.31

Table OA2 Tax Reform List Between 1980-2010

Reform Year	Major Act	Election Year	Brief Description	Corporate-related Change
1981	Economic Recovery Tax Act of 1981	1980	Reagan's landmark tax cut: reduced individual and corporate rates, reinstated investment tax credit, accelerated depreciation.	Yes
1982	Tax Equity and Fiscal Responsibility Act (TEFRA)	1980	Rolled back ERTA provisions, tightened depreciation and leasing rules, raised excises and minimum tax to reduce deficits.	No
1983	Social Security Amendments of 1983	1982	Raised payroll taxes, expanded coverage, taxed benefits, and delayed retirement age to restore Social Security solvency.	No
1984	Deficit Reduction Act	1982	Raised revenues through limits on tax shelters, leasing rules, bond/debt treatment, and insurance taxation to curb deficits.	Yes
1986	Tax Reform Act of 1986 (TRA86)	1984	Lowered corporate rates but broadened base (eliminated preferences). Structural change, not pure net cut.	Yes
1987	Omnibus Budget Reconciliation Act (OBRA87)	1986	Enacted for deficit reduction, it raised revenues mainly through corporate provisions such as limits on accounting methods, paid-leave reserves, and estate stock sales.	Yes
1990	Omnibus Budget Reconciliation Act (OBRA90)	1988	Raised high-income individual rates, excise increases, payroll expansion.	No/Small
1993	Omnibus Budget Reconciliation Act (OBRA93)	1992	Raised top marginal tax rates (personal & corporate); expanded AMT.	No

1997	Taxpayer Relief Act	1996	Introduced child and education tax credits and cut capital gains taxes as part of a balanced budget package.	No
1997	Balanced Budget Act of 1997	1996	Primarily reduced spending but also raised cigarette excise taxes in 2000 and 2002 to support deficit reduction.	No
2001	Economic Growth and Tax Relief Reconciliation Act (EGTRRA)	2000	Large personal tax cuts; some provisions indirectly touched businesses.	No
2002	Job Creation and Worker Assistance Act of 2002	2000	Temporary stimulus bill responding to 9/11 and recession, centered on bonus depreciation and other short-term tax relief to boost investment and jobs.	No
2003	Jobs and Growth Tax Relief Reconciliation Act (JGTRRA)	2002	Lowered dividend and capital gains taxes, bonus depreciation extension. Indirect effect on corporate sector.	Yes

Table OA3 Tax Reform Years

Panel A examines the effect of *TaxReformYear*, and Panel B focuses on *CorporateTaxChange*. Financial constraints are defined using the HP Index, with firms above the sample median in the pre-election year classified as constrained. *CASH_ETR* is calculated as the sum of total tax paid scaled by pretax income. We multiply *CASH_ETR* by -1 so that it is increasing in tax planning. *BTD* is book-tax differences scaled by lagged total assets. *TotalP* is the net number of winning minus losing candidates in close elections to whom the firm contributed prior to the election, scaled by 100. *TaxReformYear* equals one in years of major federal tax reforms (1980, 1982, 1984, 1986, 1988, 1992, 1996, 2000, 2002) and zero otherwise, following [Romer and Romer \(2010\)](#). *CorporateTaxChange* equals one in years with major business-oriented tax changes (1980, 1982, 1984, 1986, 2002) and zero otherwise, based on [Mertens and Ravn \(2013\)](#). Control variables include *SIZE*, *ROA*, *LEVERAGE*, *SGA*, *R_D*, *NOLCF*, *CHG_NOLCF*, *FOR_INCOME*, *LOSS*, and *STR*. All other variables are defined in [Appendix A](#). Robust standard errors clustered at the firm level are reported in the parentheses. ***, **, * indicate two-tailed significance at 1%, 5% and 10%.

Panel A: Tax Reform Year

	(1)	(2)	(3)	(4)
	<i>Financially Constrained Firms</i>		<i>Financially Unconstrained Firms</i>	
	<i>CASH_ETR</i>	<i>BTD</i>	<i>CASH_ETR</i>	<i>BTD</i>
<i>TotalP</i>	-0.946*** (0.321)	-0.159** (0.064)	0.386** (0.176)	0.083*** (0.031)
<i>TaxReformYear</i> * <i>TotalP</i>	0.361 (0.566)	0.090 (0.101)	-0.115 (0.262)	-0.016 (0.050)
<i>SIZE</i>	-0.044*** (0.010)	-0.013*** (0.003)	-0.000 (0.016)	-0.011*** (0.003)
<i>ROA</i>	0.221*** (0.077)	0.029 (0.018)	0.623*** (0.100)	0.030 (0.021)
<i>LEVERAGE</i>	0.020 (0.035)	-0.007 (0.007)	0.008 (0.043)	-0.012** (0.006)
<i>SGA</i>	0.018 (0.064)	-0.014 (0.018)	-0.126** (0.062)	-0.021 (0.015)
<i>R_D</i>	-0.293 (0.254)	0.030 (0.080)	0.019 (0.252)	0.009 (0.093)
<i>NOLCF</i>	0.087* (0.048)	0.023* (0.012)	-0.000 (0.097)	0.000 (0.022)
<i>CHG_NOLCF</i>	-0.014 (0.102)	-0.058* (0.035)	0.141 (0.164)	-0.064* (0.037)
<i>FOR_INCOME</i>	1.125*** (0.398)	0.069 (0.072)	-0.307 (0.240)	0.040 (0.070)
<i>LOSS</i>	0.041** (0.017)	0.009*** (0.003)	0.026 (0.017)	0.005* (0.003)
<i>STR</i>	-1.425 (0.927)	-0.278 (0.213)	0.587 (0.555)	0.086 (0.181)
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Cluster	Firm	Firm	Firm	Firm
Observations	2,282	2,022	2,717	2,030
Adj. R-sq	0.29	0.42	0.24	0.31

Panel B: Corporate-oriented Tax Changes

	(1)	(2)	(3)	(4)
	Financially Constrained Firms		Financially Unconstrained Firms	
	<i>CASH_ETR</i>	<i>BTD</i>	<i>CASH_ETR</i>	<i>BTD</i>
<i>TotalP</i>	-0.897*** (0.283)	-0.160*** (0.059)	0.340** (0.164)	0.073** (0.031)
<i>CorporateTaxChange</i> * <i>TotalP</i>	0.530 (0.649)	0.118 (0.106)	0.067 (0.346)	0.004 (0.054)
<i>SIZE</i>	-0.043*** (0.010)	-0.013*** (0.003)	-0.000 (0.016)	-0.011*** (0.003)
<i>ROA</i>	0.222*** (0.078)	0.029 (0.018)	0.623*** (0.101)	0.030 (0.021)
<i>LEVERAGE</i>	0.020 (0.035)	-0.007 (0.007)	0.008 (0.043)	-0.012** (0.006)
<i>SGA</i>	0.020 (0.063)	-0.014 (0.018)	-0.127** (0.062)	-0.021 (0.015)
<i>R_D</i>	-0.295 (0.254)	0.029 (0.080)	0.022 (0.251)	0.009 (0.093)
<i>NOLCF</i>	0.089* (0.048)	0.023* (0.012)	-0.001 (0.097)	0.001 (0.022)
<i>CHG_NOLCF</i>	-0.017 (0.102)	-0.058* (0.035)	0.141 (0.164)	-0.065* (0.038)
<i>FOR_INCOME</i>	1.126*** (0.400)	0.069 (0.072)	-0.304 (0.240)	0.040 (0.070)
<i>LOSS</i>	0.041** (0.017)	0.009*** (0.003)	0.026 (0.017)	0.005* (0.003)
<i>STR</i>	-1.409 (0.927)	-0.273 (0.212)	0.589 (0.555)	0.086 (0.181)
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Cluster	Firm	Firm	Firm	Firm
Observations	2,282	2,022	2,717	2,030
Adj. R-sq	0.29	0.42	0.24	0.31

Table OA4 Impact of Firm Lifecycle

The table uses a matched sample in which each financially constrained firm is paired with a financially unconstrained counterpart from the same industry and of similar age (age difference $\leq$ two years). Columns (1)-(4) report the results for financially constrained firms. Columns (5)-(8) report the results for financially unconstrained firms. Financial constraints are defined using the HP Index, with firms above the sample median in the pre-election year classified as constrained. *CASH_ETR* is calculated as the sum of total tax paid scaled by pretax income. We multiply *CASH_ETR* by -1 so that it is increasing in tax planning. *BTD* is book-tax differences scaled by lagged total assets. *WinP* is the number of winning candidates involved in a close election that a firm donated to prior to the election scaled by 100. *LoseP* is the number of losing candidates involved in a close election that a firm donated to prior to the election scaled by 100. *TotalP* equals *WinP* minus *LoseP*. We divided these three variables by 100,000 to obtain sizeable coefficients. Control variables including *SIZE*, *ROA*, *LEVERAGE*, *SGA*, *R_D*, *NOLCF*, *CHG_NOLCF*, *FOR_INCOME*, *LOSS*, and *STR* are defined in [Appendix A](#). Robust standard errors clustered at the firm level are reported in the parentheses. ***, **, * indicate two-tailed significance at 1%, 5% and 10%.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<i>Financially Constrained Firms</i>				<i>Financially Unconstrained Firms</i>			
	<i>CASH ETR</i>		<i>BTD</i>		<i>CASH ETR</i>		<i>BTD</i>	
<i>TotalP</i>	-0.971*** (0.309)		-0.161** (0.063)		0.582** (0.257)		0.118** (0.052)	
<i>WinP</i>		-0.663* (0.353)		-0.149* (0.079)		0.499** (0.240)		0.112** (0.051)
<i>LoseP</i>		1.441*** (0.472)		0.189** (0.076)		-0.963** (0.459)		-0.139* (0.079)
<i>Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster	Firm	Firm	Firm	Firm	Firm	Firm	Firm	Firm
Observations	865	865	765	765	969	969	875	875
Adj. R-sq	0.39	0.39	0.53	0.53	0.44	0.44	0.51	0.51

Table OA5 Including Firms with Loss

This table reports results using the full sample that retains firms with negative pretax income (loss firms). Columns (1)-(4) report the results for financially constrained firms. Columns (5)-(8) report the results for financially unconstrained firms. Financial constraints are defined using the HP Index, with firms above the sample median in the pre-election year classified as constrained. *CASH_ETR* is calculated as the sum of total tax paid scaled by pretax income. We multiply *CASH_ETR* by -1 so that it is increasing in tax planning. *BTD* is book-tax differences scaled by lagged total assets. *WinP* is the number of winning candidates involved in a close election that a firm donated to prior to the election scaled by 100. *LoseP* is the number of losing candidates involved in a close election that a firm donated to prior to the election scaled by 100. *TotalP* equals *WinP* minus *LoseP*. We divided these three variables by 100,000 to obtain sizeable coefficients. Control variables including *SIZE*, *ROA*, *LEVERAGE*, *SGA*, *R_D*, *NOLCF*, *CHG_NOLCF*, *FOR_INCOME*, *LOSS*, and *STR* are defined in [Appendix A](#). Robust standard errors clustered at the firm level are reported in the parentheses. ***, **, * indicate two-tailed significance at 1%, 5% and 10%.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<i>Financially Constrained Firms</i>				<i>Financially Unconstrained Firms</i>			
	<i>CASH ETR</i>		<i>BTD</i>		<i>CASH ETR</i>		<i>BTD</i>	
<i>TotalP</i>	-1.521*** (0.443)		-0.257** (0.102)		0.663** (0.288)		0.086** (0.037)	
<i>WinP</i>		-1.590*** (0.470)		-0.280** (0.120)		0.565* (0.314)		0.085** (0.040)
<i>LoseP</i>		1.310** (0.551)		0.193* (0.112)		-0.981*** (0.359)		-0.090* (0.048)
<i>Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster	Firm	Firm	Firm	Firm	Firm	Firm	Firm	Firm
Observations	2,668	2,668	2,771	2,771	2,881	2,881	2,317	2,317
Adj. R-sq	0.11	0.11	0.58	0.58	0.10	0.10	0.25	0.25

Table OA6 Donation-weighted Measures of Political Connections

This table examines the effect of political connections on corporate tax planning using donation-weighted measures of political connections. Columns (1)-(4) report the results for financially constrained firms. Columns (5)-(8) report the results for financially unconstrained firms. Financial constraints are defined using the HP Index, with firms above the sample median in the pre-election year classified as constrained. *CASH_ETR* is calculated as the sum of total tax paid scaled by pretax income. We multiply *CASH_ETR* by -1 so that it is increasing in tax planning. *BTD* is book-tax differences scaled by lagged total assets. *AmountWinP* is the number of winning candidates involved in a close election that a firm donated to prior to the election multiplied by the firm's contribution to the candidates. *AmountLoseP* is the number of losing candidates involved in a close election that a firm donated to prior to the election multiplied by the firm's contribution to the candidates. *AmountTotalP* is *AmountWinP* minus *AmountLoseP*. We divided these three variables by 100,000 to obtain sizeable coefficients. Control variables including *SIZE*, *ROA*, *LEVERAGE*, *SGA*, *R_D*, *NOLCF*, *CHG_NOLCF*, *FOR_INCOME*, *LOSS*, and *STR* are defined in [Appendix A](#). Robust standard errors clustered at the firm level are reported in the parentheses. ***, **, * indicate two-tailed significance at 1%, 5% and 10%.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<i>Financially Constrained Firms</i>				<i>Financially Unconstrained Firms</i>			
	<i>CASH_ETR</i>		<i>BTD</i>		<i>CASH_ETR</i>		<i>BTD</i>	
<i>AmountTotalP</i>	-0.165** (0.072)		-0.035*** (0.013)		0.053* (0.028)		0.022*** (0.008)	
<i>AmountWinP</i>		-0.163* (0.085)		-0.037** (0.014)		0.055* (0.031)		0.021** (0.009)
<i>AmountLoseP</i>		0.165** (0.083)		0.031* (0.016)		-0.052* (0.028)		-0.023*** (0.009)
<i>Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster	Firm	Firm	Firm	Firm	Firm	Firm	Firm	Firm
Observations	2,282	2,282	2,022	2,022	2,717	2,717	2,030	2,030
Adj. R-sq	0.29	0.28	0.42	0.42	0.24	0.24	0.31	0.31

Table OA7 An Alternative Measure of Tax Planning

This table presents the regression results of using *TXPD_AT* as an alternative measure of tax planning. Columns (1) and (2) report the results using the full sample. Columns (3) and (4) report the results for financially constrained firms. Columns (5) and (6) report the results for financially unconstrained firms. Financial constraints are defined using the HP Index, with firms above the sample median in the pre-election year classified as constrained. *TXPD_AT* is calculated as the sum of total tax paid scaled by lagged total assets. We multiply *TXPD_AT* by -1 so that it is increasing in tax planning. *WinP* is the number of winning candidates involved in a close election that a firm donated to prior to the election scaled by 100. *LoseP* is the number of losing candidates involved in a close election that a firm donated to prior to the election scaled by 100. *TotalP* equals *WinP* minus *LoseP*. Control variables include *SIZE*, *ROA*, *LEVERAGE*, *SGA*, *R_D*, *NOLCF*, *CHG_NOLCF*, *FOR_INCOME*, *LOSS*, and *STR*. All variables are defined in [Appendix A](#). Robust standard errors clustered at the firm level are reported in the parentheses. ***, **, * indicate two-tailed significance at 1%, 5% and 10%.

	(1)	(2)	(3)	(4)	(5)	(6)
	<i>Full Sample</i>		<i>Financially Constrained Firms</i>		<i>Financially Unconstrained Firms</i>	
	<i>TXPD AT</i>		<i>TXPD AT</i>		<i>TXPD AT</i>	
<i>TotalP</i>	0.001		-0.059**		0.030***	
	(0.011)		(0.023)		(0.011)	
<i>WinP</i>		0.003		-0.056**		0.030***
		(0.011)		(0.024)		(0.012)
<i>LoseP</i>		0.004		0.067*		-0.030*
		(0.017)		(0.034)		(0.016)
<i>Controls</i>	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Cluster	Firm	Firm	Firm	Firm	Firm	Firm
Observations	4,999	4,999	2,282	2,282	2,717	2,717
Adj. R-sq	0.64	0.64	0.61	0.61	0.68	0.68

Table OA8 Special Elections

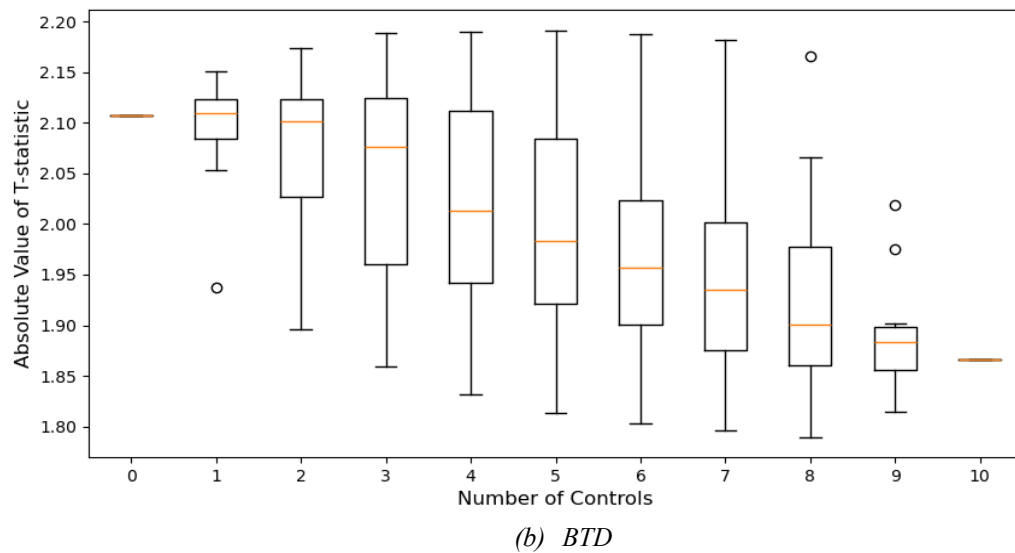
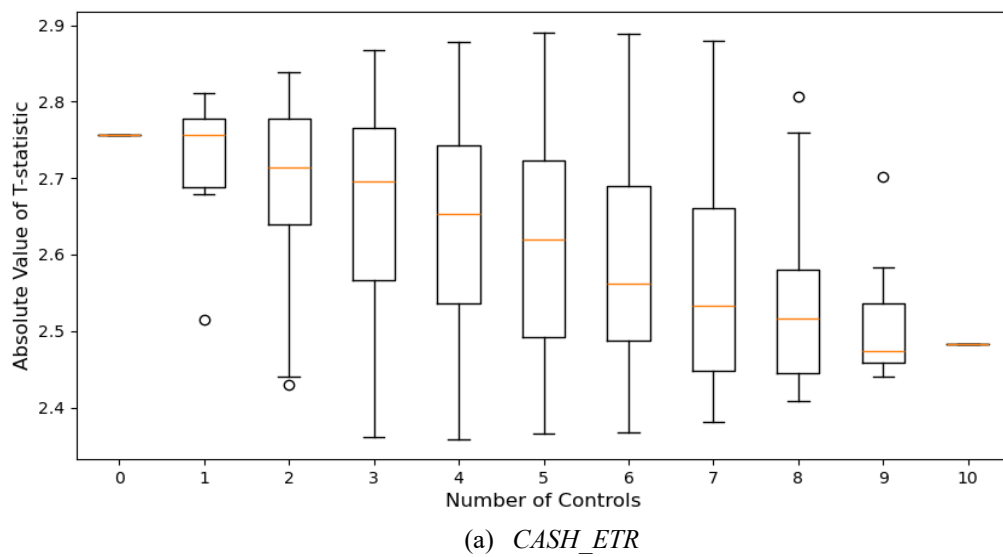
This table uses special elections to examine the effect of political connections on tax planning. Columns (1) and (2) present the regression results for financially constrained firms. Columns (3) and (4) present the regression results for financially unconstrained firms. Financial constraints are defined using the HP Index, with firms above the sample median in the pre-election year classified as constrained. *CASH_ETR* is calculated as the sum of total tax paid scaled by pretax income. We multiply *CASH_ETR* by -1 so that it is increasing in tax planning. *BTD* is book-tax differences scaled by lagged total assets. *Win* is a dummy variable that takes the value of one if the candidate to whom the firm donated won a close election, and zero otherwise. The estimation is performed using various polynomial functional forms, as suggested by [Lee \(2008\)](#). Robust standard errors clustered at the firm level are reported in the parentheses. ***, **, * indicate two-tailed significance at 1%, 5% and 10%.

	(1)	(2)	(3)	(4)
	<i>Financially Constrained Firms</i>		<i>Financially Unconstrained Firms</i>	
	<i>CASH_ETR</i>	<i>BTD</i>	<i>CASH_ETR</i>	<i>BTD</i>
<i>Win</i>	-0.104*	-0.019*	0.061*	0.026**
	(0.056)	(0.010)	(0.033)	(0.010)
Observations	271	313	454	331
Adj. R-sq	0.01	0.01	0.01	0.01
Functional Form	linear	linear	linear	linear
<i>Win</i>	-0.177**	-0.017*	0.062*	0.020**
	(0.069)	(0.010)	(0.036)	(0.009)
Observations	271	313	454	331
Adj. R-sq	0.02	0.00	0.00	0.00
Functional Form	quadratic	quadratic	quadratic	quadratic

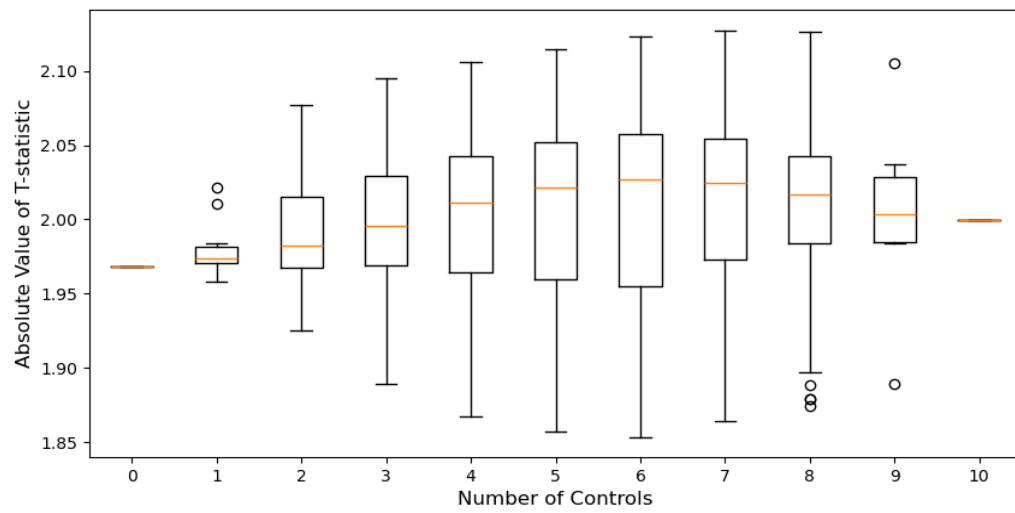
Figure OA1 P-Hacking Test

This figure presents p-hacking tests following [Brodeur, Cook, and Heyes \(2020\)](#). Panel A presents the regression results of tax planning on political connections for financially constrained firms. Panel B presents the regression tax planning on political connections for unconstrained firms. Financial constraints are defined using the HP Index, with firms above the sample median in the pre-election year classified as constrained. Both panels present the t-statistics for our main independent variable of interest by number of control variables, *TotalP*, when the dependent variables are *CASH_ETR* and *BTD*.

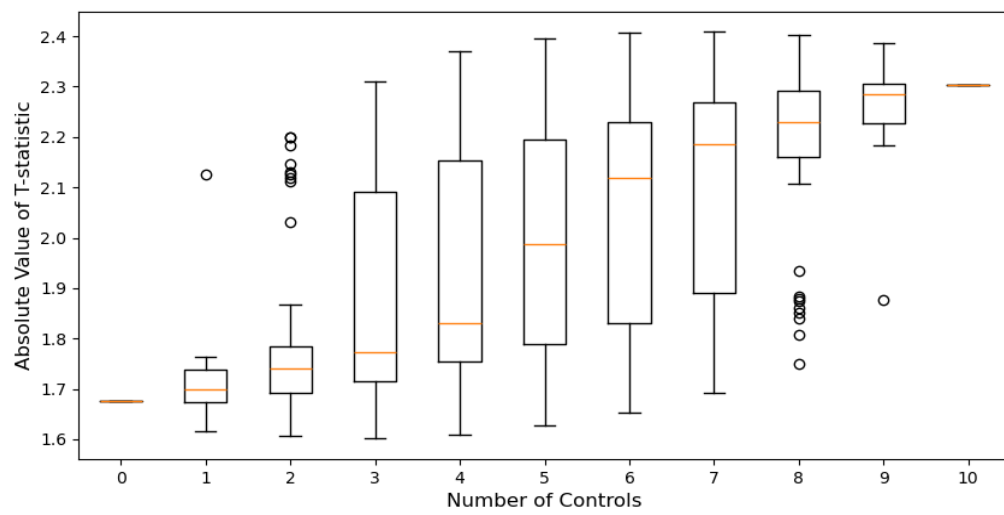
Panel A: Financially Constrained Firms



Panel B: Financially Unconstrained Firms



(a) CASH_ETR



(b) BTD