

Internet Appendix for

**Antitakeover Provisions and Shareholder Wealth:
A Survey of the Literature**

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Abstract:

In this appendix, we provide summaries of the studies discussed in the survey of the empirical evidence on antitakeover provisions and shareholder wealth (Straska and Waller (2014)). The summaries are tabulated in Table A.1. Each summary provides details on the types of provisions examined, sample size, sample period, methodology, main results, and interpretations of the results. The summaries are grouped into five Panels, Panel A through E, based on the type of evidence provided in the empirical studies. This grouping corresponds to the sections A through E of part IV in the published survey in the Journal of Financial and Quantitative Analysis (Straska and Waller (2014)).

Table A.1

Studies of Antitakeover Provisions. Panel A summarizes the evidence from short term event studies. Panel B summarizes the studies on managerial policies and performance changes around the adoption or repeal of antitakeover provisions or around passing state antitakeover laws. Panel C summarizes the studies on the impact of antitakeover provisions or state antitakeover laws on takeovers. Panel D summarizes the studies on the relation between the likelihood of having or adopting antitakeover provisions and firm characteristics. Panel E summarizes the studies that provide evidence on the long-term relation between antitakeover provisions and stock returns, firm value, other performance measures, and other firm policies. Studies within each panel are organized by publication year from least recent to most recent. Several studies appear in more than one Panel. If that is the case, the text in the parentheses below the citation indicates the additional Panels in which the study appears. In Panel A, *, **, and *** indicate 10%, 5%, and 1% statistical significance. The abbreviations for the provisions are explained at the end of the table. Some studies use the IRRC sample for their analyses. The IRRC sample includes firms for which Investor Responsibility Research Center (now Risk Metrics) collected data on antitakeover and other provisions. The sample covers approximately 1500 large firms in the years 1990-1995 and approximately 1900 large and smaller firms in the years 1998-2006.

Table A.1, continued

Panel A: Evidence from short term event studies

Panel A.1: Evidence on short-term market reaction to the announcements proposing the adoption of antitakeover provisions

Study	Provisions	Sample Characteristics Size (dates)	Main Findings / Results			Effect on shareholder wealth.
			Event Date	CAR window	mean CAR	
DeAngelo and Rice (1983)	SM, CB, FP	100 (1974-1979)	proxy statement mailing date	(0, +1)	not significant	No effect.
Linn and McConnell (1983) (also in Panels A.2 and A.3)	SM, CB, LAB, LAC, FP, LWC	172 (1960-1980)	board of directors proposes to adopt provisions	(0, 0)	not significant	Positive effect or no effect.
		170 (1960-1980)		(+1, +90)	+2.58%***	
		388 (1960-1980)	proxy statement mailing date	(0, 0)	not significant	
		308 (1960-1980)		(+1, +90)	+1.20%**	
Lambert and Larcker (1985)	GP	90 (1975-1982)	proxy statement received by SEC	(0, +4)	not significant	Positive effect.
		Subsample of 61 obs. without confounding events		(-5, +10)	not significant	
Jarrell and Poulsen (1987)	SM, CB, FP, BCPS	551 (1979-1985) Subsamples: 408 obs. FP only 143 obs. non-FP only	proxy statement signing date	(0, +4)	+ 1.1%*	Negative effect except FP. Additional results— inverse relationship between insider ownership and CAR and positive relationship between institutional ownership and CAR
				(-20, +10)	+ 3.4%**	
				(-20, +10)	-1.25%**	
Malatesta and Walkling (1988) (also in Panels C and D)	Pill	113 (1982-1986)	announcement of adoption in press	(-20, +10)	not significant	Negative effect.
				(-20, +10)	-2.95%**	
				(-1, 0)	-0.915%***	

Table A.1, continued

Panel A.1, continued

Study	Provisions	Sample Characteristics Size (dates)	Main Findings / Results			Effect on shareholder wealth.
			Event Date	CAR window	mean CAR	
Brickley, Lease, and Smith (1988)	SM, CB, FP, BCPS, LAC, LAB	133 (1984)	proxy statement mailing date	(-5, +5)	not significant	No effect. Additional results—inverse relationship between insider ownership and CAR and positive relationship between institutional ownership and CAR
Ryngaert (1988) (also in Panel C)	Pill	380 (1982-1986) Subsamples: - 283 clean obs. with no confounding events - 57 clean obs. subject to takeover - 221 clean obs. not subject to takeover - 27 discriminatory pills subject to takeover - 90 discriminatory pills not subject to takeover	announcement of adoption in press	(-1,0) (-1,0) (-1,0) (-1,0) (-1,0)	not significant -0.34* -1.51%*** not significant -2.12*** -0.61**	Negative effect when adopting firm is subject to takeover. Discriminatory pills (flip-in, back-end, and voting pills) have negative effect even for firms not subject to takeover.
Agrawal and Mandelker (1990)	FP, CB, BCPS, SM	356 (1979-1985) Difference in CARs for subsamples with: - low and high % institutional ownership - low and high % held by two largest blockholders - low and high % held by managers	proxy statement mailing date	(-40, +1) (-20, +1) (-1, 0) (-40, +1) (-40, +1) (-40, +1)	-2.6%*** -1.3%* not significant -5.8%** not significant not significant	Unconditional results—negative effect or no effect. Conditional and regression results—the higher the institutional ownership the less negative is the effect.

Table A.1, continued

Panel A.1, continued

Study	Provisions	Sample Characteristics Size (dates)	Main Findings / Results			Effect on shareholder wealth.
			Event Date	CAR window	mean CAR	
Eckbo (1990)	AG	32 (1984-1985)	two days = proxy statement mailing date and stockholders meeting date	(0, +1) + (0, +1)	-1.24%*	Negative effect.
		Subsample of 14 obs. with no other confounding proposals in proxy		(0, +1) + (0, +1)	-2.28%**	
McWilliams (1990)	CB, SM, FP, WC, LAC, other	325 (1980-1984)	proxy statement mailing date	(0, +1) (0, stockholders meeting date)	not significant +1.77%**	Unconditional results—positive or no effect. Regression results—the higher the managerial ownership the more negative is the effect.
		Subsamples: - 194 obs. with managerial ownership <10%		(0, +1) (0, stockholders meeting date)	+0.49* not significant	
		- other managerial ownership groups		(0, +1) (0, stockholders meeting date)	not significant not significant	
Bhagat and Jefferis (1991) (also in Panel D)	SM, LWC, LSM, CB, FP, BCPS, AG	191 (1984-1985)	proxy statement mailing date	(-1, +1)	-1.38%** after controlling for sample selection bias	Negative effect.
Mahoney and Mahoney (1993)	SM, CB	409 (1974-1988)	proxy statement mailing date	(-50, +10)	-1.60%**	Negative effect. Negative effect is larger in 1980s.
		93 (1974-1979)		(-50, +10)	not significant	
		316 (1980-1988)		(-50, +10)	-1.97%*	
Brickley, Coles, and Terry (1994)	Pill	274 (1984-1986)	announcement of adoption in press	(-1, 0)	not significant	Unconditional results—no effect. Conditional and regression results—the higher the % of outside directors on the board the more positive is the effect.
		Subsamples: - ≥ 50% outside directors on board (54 obs.)		(-1, 0)	+0.94***	
		- < 50% outside directors on board (193 obs.)		(-1, 0)	-0.31**	
Comment and Schwert (1995) (also in Panel C)	Pill	1459 (1983-1991)	announcement of adoption in press	(-1, +1)	unreported	Negative effect when firm is under takeover speculation. Explanations: Pills (1) are expected to deter takeovers or (2) convey bad news that a deal has yet to be struck.
		Subsamples: - 242 obs. with takeover speculation		(-1, +1)	-1.55%***	
		- 100 obs. with simultaneous Pill and M&A event announcement		(-1, +1)	+4.04%***	

Table A.1, continued

Panel A.1, continued

Study	Provisions	Sample Characteristics Size (dates)	Main Findings / Results			Effect on shareholder wealth.
			Event Date	CAR window	mean CAR	
McWilliams and Sen (1997)	SM, CB, FP	265 (1980-1990) Subsamples by board composition: - 79 obs. with majority insiders and affiliated outsiders - 30 obs. with majority insiders - 186 obs. with majority independent directors	proxy statement date	(0, +1)	unreported	Conditional or regression results: The higher the proportion of and ownership by inside and affiliated outside directors on the board the more negative is the effect. These relations hold in the whole sample and the subsample where the CEO also chairs the board.
				(0, +1)	-0.72% **	
				(0, +1)	-1.58% ***	
				(0, +1)	not significant	
Faleye (2007) (also in Panels A.2 and E)	CB	159 (1986-2002)	min(date of signing, filing, or mailing proxy statement or announcement in press)	(-1, +1)	-0.34% *	Negative effect.
				(-5, 0)	not significant	
				(-5, +1)	-0.70% *	
				(-5, +5)	-1.78% **	
Caton and Goh (2008) (also in Panel B)	Pill	449 (1990-2004) Pill adopters sorted based on E index <i>prior</i> to adoption	announcement of adoption in press	(0,+1)	+2.12% *** only for firms with E index = 0. Insignificant for other E index levels.	Positive effect but only for firms that prior to Pill adoption have no other antitakeover provisions included in the E index.

Table A.1, continued

Panel A.2: Evidence on short-term market reaction to the announcements proposing the repeal of antitakeover provisions

Study	Provisions	Sample Characteristics Size (dates)	Main Findings / Results			Effect on shareholder wealth.
			Event Date	CAR window	CAR	
Linn and McConnell (1983) (also in Panels A.1 and A.3)	SM, CB	49 (1960-1980)	board proposes to repeal provisions	(0, proxy mailing date – 1)	-3.631%**	Negative effect or no effect.
		49 (1960-1980)	proxy statement mailing date	(0, stockholders meeting date -1)	not significant	
Gillan and Starks (2000)	Pill	157 (1987-1994) proposals sponsored by institutions and coordinated groups	proxy statement mailing date	(-1, +7)	-1.07%**	Negative effect for Pills. Note: the negative effect may reflect the expectation that the proposals will not pass.
	CV	46 (1987-1994) proposals sponsored by individuals 263 (1987-1994) proposals sponsored by individuals		(-1, +7)	not significant	
Faleye (2007) (also in Panels A.1 and E)	CB	24 (1996-2002)	min(signing, filing, or mailing proxy statement date or announcement in press)	(-1, +1)	not significant	Positive effect.
				(-5, 0)	+1.34%**	
Guo, Kruse, and Nohel (2008)	CB	188 (1987-2004) Subsamples: - 118 obs. with immediate de-staggering - 70 obs. with gradual de-staggering	min(announcement in press, proxy or preliminary proxy release date)	(-5, +1)	+1.28%*	Positive effect for firms that implement annual elections immediately upon repealing CB. Regression results: CAR increases in managerial ownership and M&A volume.
				(-5, +5)	not significant	
				(-1, +1)	+1.08%**	
Cunat, Gine, and Guadalupe (2012) (also in Panel B)	CB, Pill, CV, GP, SM, LSM, CP, AG, Other G-index provisions	1558 (1997-2007) shareholder proposals to repeal antitakeover provisions and 2426 other shareholder proposals.	Stockholders meeting date	(-1, +1)	-074%*	Positive effect. Note: Authors estimate that if passing the proposal increases value by 1.3%, eliminating antitakeover provision would increase the value by approximately 2.8%.
				(0, 0)	+1.3%* to +1.4%**	
					- value effect of passing versus not passing the proposal to repeal a provision using a regression discontinuity design which controls for endogeneity.	

Table A.1, continued

Panel A.3: Evidence on short-term market reaction related to passing or repeal of state antitakeover laws

Study	State laws	Sample Characteristics Size (dates)	Main Findings / Results			Effect on shareholder wealth.
			Event Dates	CAR window	CAR	
Linn and McConnell (1983) (also in Panels A.1 and A.2)	Repeal of SM in Delaware	120 firms (1969) incorporated in Delaware	legislation was passed in June, 1969	Month of June 1969	-1.663%**	Repeal of SM in Delaware had negative effect.
				Month of July 1969	-1.332%**	
Karpoff and Malatesta (1989)	Passing of CSAL, BCL, FPL, and other laws in 26 states	1505 firms (1982-1987) incorporated in 26 states Subsamples: -1107 firms without other provisions in place -368 firms with other provisions in place	initial press announcement of a state antitakeover law (40 event days)	(-1, 0)	-0.29%**	Introduction of state antitakeover laws in 26 states had negative effect. No effect for firms with prior firm-level provisions—state antitakeover laws and firm-level provisions might be substitutes.
				(-1, 0)	-0.39%**	
				(-1, 0)	not significant	
Jahera and Pough (1991)	Passing of BCL in Delaware	920 firms (1987) incorporated in Delaware	8 event days associated with progress toward the Delaware legislation becoming law	(0, 1) for legislative action and (-1, 0) for newspaper announcement	Aggregate CARs over 8 event days: not significant or +0.84%* or +1.72%*** depending on method	Passing of BCL in Delaware had no effect or positive effect.
Giroud and Mueller (2010) (also in Panels B and C)	Passing of BCL in 19 states	Compustat firms (1985-1991) incorporated in 19 states Subsamples: - Above median Herfindahl Index (less competitive industries) - Below median Herfindahl Index (more competitive industries)	initial press announcement of a state antitakeover law	(-1, 0)	-0.32%***	Introduction of BCL in 19 states had negative effect. Introduction of BCL had negative effect on firms in non-competitive industries. Firms in competitive industries experienced no effect.
				(-1, 0)	-0.54%**	
				(-1, 0)	not significant	

Table A.1, continued

Panel B: Evidence on managerial policies and performance changes around the adoption or repeal of antitakeover provisions or around passing state antitakeover laws

Study	Provisions/ State laws	Sample Size (dates) and Characteristics	Attribute Studied	Result	Interpretation
Meulbroek, Mitchell, Mulherin, Netter, and Poulsen (1990)	SM, CB, FP, BCPS	203 adopting firms with reported R&D (1979-1985)	R&D/sales	In years surrounding provision adoption, R&D decreases.	Provisions do not facilitate long-term focus as suggested by Stein (1988). Rather, they likely <i>entrench managers</i> .
Borokhovich, Brunarski, and Parrino (1997) (also in Panel C)	SM, FP	129 (1979-1987) firms adopting provisions and 129 matching firms	GP CEO compensation	Firms adopting provisions are more likely to have GP In firms adopting provisions, CEO excess compensation is higher in the year before adoption and increases more in 3 years after adoption Other result: Provisions likely deter takeovers.	GP and provisions are complements not substitutes as suggested by Knoeber (1986). Provisions are adopted to protect and extract higher managerial compensation and <i>entrench managers</i> .
Boyle, Carter, and Stover (1998)	Extraordinary provisions (e.g. SM, CP) beyond those required by law	51 (1985-1986) savings and loan associations converting to common stock form	Managerial Ownership	In firms with low managerial ownership (<10.3%), ownership is negatively related to takeover protection level adopted after conversion. There is no relation between ownership and takeover protection adopted in firm with higher managerial ownership.	In firms with low managerial ownership, managerial ownership and takeover protection appear substitutes in <i>entrenching managerial positions</i> .
Garvey and Hanka (1999)	Second generation state antitakeover laws	12777 firm-years (1983-1993) for 1203 firms	Leverage Investment and disinvestment Firm size Profitability	After passing the laws, firms incorporated in passing states: - decrease leverage. - decrease capital expenditures, cash acquisitions, and are less likely to discontinue operations. - do not significantly change size or profitability.	Leverage and state antitakeover laws appear substitutes in <i>takeover protection</i> . Protected managers prefer to use less debt than what might be optimal. Antitakeover laws do not seem to cause overinvestment or free-cash flow abuses. Protected managers display some inertia.
Bertrand and Mullainathan (1999)	BCL	9305 firm-years (1976-1995) for 877 firms	Average wage	Wages increase more in firms that are incorporated in the states passing BCL	Antitakeover laws <i>increased managerial discretion</i> in wage setting. <i>Entrenched managers</i> prefer to pay employees high wages.

Table A.1, continued

Panel B, continued

Study	Provisions/ State laws	Sample Size (dates) and Characteristics	Attribute Studied	Result	Interpretation
Bertrand and Mullainathan (2003)	BCL	224,188 plant-year observations (1976-1995)	Average worker wages Plant deaths Plant births Efficiency	After passing BCL, firms incorporated in states passing BCL: increase worker wages more destruct old plants less often create new plants less often experience decrease in productivity and profitability	Antitakeover laws <i>increased managerial discretion</i> in wage setting. <i>Entrenched managers</i> prefer to pay workers higher wages. Higher wages did not translate into greater operating efficiency. Entrenched managers seem to prefer “quiet life” rather than empire building.
Cheng, Nagar, and Rajan (2004)	Second generation state antitakeover laws	4654 firm-years (1984-1991) for 587 firms	Managerial ownership % of director blockholders	After passing the laws, in firms incorporated in passing states: -managers decrease their ownership. -proportion of directors who are blockholders decreases.	Managerial ownership and takeover protection appear substitutes in <i>entrenching managerial positions</i> .
Danielson and Karpoff (2006)	Pill	302 adopting firms and 509 control firms (1984-1997)	ROA and Operating Margin	Operating performance generally improves in five years after pill adoption.	Cannot infer whether profitability improves due to the adoption of the Pill. But can reject the hypothesis that adopting Pills negatively impacts subsequent operating performance.
Caton and Goh (2008) (also in Panel A.1)	Pill	449 (1990-2004) Pill adopters sorted based on E index <i>prior</i> to adoption	Earnings forecast revisions	Abnormal earnings forecast revisions are positive and significant for E index = 0 firms. Other result: significantly positive CAR +2.12% around pill adoption only for firms with E index = 0. Insignificant for other E index levels.	Analysts expect Pill adoption to produce significant increases in long-term earnings but only for firms that prior to Pill adoption have E index=0. This is presumably because <i>managers otherwise not entrenched but protected by Pills can focus on long-term value creation</i> .

Table A.1, continued

Panel B, continued

Study	Provisions/ State laws	Sample Size (dates) and Characteristics	Attribute Studied	Result	Interpretation
Giroud and Mueller (2010) (also in Panels A.3 and C)	BCL	10,960 firms (1976-1995), excluding utilities	ROA Empire building “Quiet life”	After passing BCL: - ROA significantly decreases for firms in non-competitive industries but does not significantly change for firms in highly competitive industries. - capital expenditures, asset growth, or acquisition activity do not significantly change. - SGA, COGS, and wages increase but only for firms in non-competitive industries. Other result: Negative reaction to BCL announcements but only for firms in non-competitive industries.	Passing of BCL had <i>negative effect</i> on firm performance for firms <i>in non-competitive industries</i> likely because of <i>increased managerial slack</i> . It seems that managers insulated from takeover threats and competitive pressures enjoy “quiet life” as they “seek to avoid cognitively difficult activities, such as haggling with input suppliers, labor unions, and organizational units within the company”. Passing of BCL had <i>no effect</i> on firm performance <i>in highly competitive industries</i> likely because industry competitiveness reduces the slack available to managers.
Cunat, Gine, Guadalupe (2012) (also in Panel A.2)	Repeal of CB, Pill, CV, GP, SM, LSM, CP, AG, other G-index provisions	1558 (1997-2007) shareholder proposals to repeal anti-takeover provisions and 2426 other shareholder proposals.	Number of acquisitions Growth in capital expenditures Book-to-market ratio	In one to four years after passing proposals to repeal antitakeover provisions: - firms make fewer acquisitions - growth in capital expenditures decreases - book-to-market decreases Other result: significantly positive value effect of passing shareholder proposals to repeal provisions.	If one believes that the marginal acquisitions and capital expenditures are value destroying and a way in which managers extract private benefits, then these results suggest that <i>proposals to remove antitakeover provisions increase shareholder value</i> through disciplining management and a reduction in agency costs.
Atanassov (2013)	BCL	101,100 firm years (1976-2000) for 13,339 firms	Patents Patent citations Log(Q)	After passing BCL, firms incorporated in states passing BCL: - produce fewer patents - receive fewer patent citations - have reduced value (Q). These relations are mitigated by outside blockholder, pension fund, leverage, and product market competition.	<i>Entrenched managers</i> protected from hostile takeovers by BCL <i>innovate less and create less valuable innovations</i> than unprotected managers. Entrenched managers seem to prefer to invest in more routine projects with lower value. Select alternative governance mechanisms mitigate the negative impact of BCL on innovation.

Table A.1, continued

Panel C: Evidence on the impact of antitakeover provisions or state antitakeover laws on takeovers

Study	Provisions/ Indexes/ State Laws	Sample Size (dates) and Characteristics	Attribute Studied	Result	Interpretation
Pound (1987)	SM+CB package	100 firms that adopted the provisions in 1973- 1979 and 100 firms in control sample, all firms followed until 1984	Probability of becoming a takeover target Takeover Premium	Firms with provisions receive a takeover offer less frequently than the firms without provisions. Average takeover premium is not different between samples.	SM and CB <i>entrench managers</i> .
Malatesta and Walkling (1988) (also in Panels A.1, D)	Pill	132 adopting firms (1982-1986) and random control sample of 250 firms	Probability of being and becoming a takeover target	Firms adopting Pills are more likely to have been and become a takeover target. Other results: - managerial ownership and profitability in firms adopting Pills is lower prior to Pill adoption - stock market reacts negatively to Pill announcement	Pills <i>entrench managers</i> . The benefit of Pills to managers— reduction in takeover probability— outweighs the cost of Pill adoption— stock price decline—if managers own less of their company stock.
Ryngaert (1988) (also in Panel A.1)	Pill	29 (1982-1986) firms with and 76 (1981-1984) firms without Pills that received unsolicited takeover offer.	Bid deterrence	Firms with Pills remain independent more often than firms without Pills. Other result: stock market reacts negatively to Pill announcement.	Pills <i>entrench managers</i> .
Ambrose and Megginson (1992)	Pill, SM, CB, FP, BCPS, UVR	Random sample of 475 firms from 1981 followed by 1986.	Probability of becoming a takeover target	Likelihood of becoming a takeover target increases with UVR, decreases with BCPS and is unrelated to having other provisions.	No effect except BCPS and UVR that have opposite effects.
Machlin, Choe, Miles (1993)	GP	119 adopting firms (1976-1984) followed for 4 years and 119 matching firms without GP in those 4 years	Probability of a takeover Multiple Offers Takeover Premium	Compared to firms without GP, firms with GP - are more likely taken over - are more likely to receive multiple offers - receive higher takeover premium. Premium increases in the size of GP	GPs <i>benefit shareholders</i> .

Table A.1, continued

Panel C, continued

Study	Provisions/ Indexes/ State Laws	Sample Size (dates) and Characteristics	Attribute Studied	Result	Interpretation
Comment and Schwert (1995) (also in Panel A.1)	Pill, BCL, CSAL	21,877 firm-years (1977-1991) from Compustat - Full sample with premium=zero in non-takeover years - Subsample of 669 successful takeovers	Takeover probability Takeover premium	Takeover probability decreases with predicted Pills, increases with surprise Pills, but is unrelated to BCL or CSAL. In the full sample, premium increases with surprise Pills, BCL and CSAL, and is unrelated to predicted Pills. For successful takeovers, premium increases with surprise and predicted Pills and CSAL, and is unrelated to BCL.	Pills <i>increase the bargaining power</i> of the target. Even after accounting for the deterrent effect of Pills, the net effect is <i>shareholder benefit</i> .
Borokhowich, Brunarski, and Parrino (1997) (also in Panel B)	SM, FP	129 (1979-1987) firms adopting provisions and 129 matching firms	Probability of becoming a takeover target	Firms with provisions receive fewer bids in 3 years after adoption. Other result: CEO compensation is higher in the firms adopting provisions and further increases after adoption.	Provisions are adopted in an effort to <i>deter takeovers</i> and to enable managers extract above-market compensation. Provisions <i>entrench managers</i> .
Cotter, Shivdasani, and Zenner (1997)	Pill, GP	229 tender offers (1989-1992)	Offer resistance probability Takeover premium Takeover premium increase	Targets with Pills are more likely to resist an offer. Premium increases with Pills if the target board has more than 50% of independent directors; else is unrelated to Pills or GP. Post-bid premium revision increases with Pills and is unrelated to GP.	Targets with Pills resist offers more often but that resistance may be responsible for larger premium revisions and higher overall premiums. The Pills are thus likely used to <i>increase the bargaining position</i> of the target firm to the <i>benefit of shareholders</i> . GPs have no effect on premiums.
Field and Karpoff (2002) (also in Panel D)	Firm level provisions, State Laws	885 IPOs (1988-1992) followed for 5 years after IPO	Takeover probability Takeover premium	Takeover likelihood decreases with provisions adopted at IPO and after IPO, and is unrelated to state laws. Takeover premium is unrelated to provisions or state laws.	Provisions adopted at IPO stage <i>entrench managers</i> .

Table A.1, continued

Panel C, continued

Study	Provisions/ Indexes/ State Laws	Sample Size (dates) and Characteristics	Attribute Studied	Result	Interpretation
Heron and Lie (2006) (also in Panel D)	Pill - existing – adopted prior to a bid - morning after – adopted after a bid	526 firms targeted with unsolicited takeover attempts (1985- 1998)	Takeover probability Takeover Premium Premium increase	Takeover probability is unrelated to both existing and morning after Pills. Takeover premium increases with both existing and morning after Pills. Takeover premium revision increases with both existing and morning after Pills.	Pills <i>enhance the bargaining power</i> of the target firm. As a result, Pills positively affect shareholder returns during the takeover process and thus <i>benefit shareholders.</i>
Bates, Becher, and Lemmon (2008)	CB	IRRC sample (1990-2002) 860 takeover bids for IRRC sample firms (1990-2002)	Takeover probability Takeover completion Target and bidder CAR (-1, +1) for single bids and (-42, completion or withdrawal) for bidding auctions Post-acquisition managerial employment	CB lowers likelihood that firm will be a takeover target but conditional on takeover bid, CB is unrelated to deal completion. Target announcement CARs unrelated to target having CB and bidder announcement CARs negatively related to CB No difference in percentage of target firm managers employed by acquiring firm for target firms with and without CB	CBs provide some protection from being a takeover target but <i>do not unequivocally entrench managers.</i> CBs do not negatively affect target shareholder wealth but <i>benefit target shareholders</i> by allowing them to capture more of the surplus gains than those captured by bidders. <i>CBs do not facilitate managerial self- dealing.</i>
Giroud and Mueller (2010) (also in Panels A.3 and B)	BCL	77,142 firm- years (1978- 1995)	Takeover probability	Passing of BCL does not affect takeover likelihood in the whole sample or in non- competitive industries (Herfindahl index in the top tercile). In competitive industries, BCL significantly reduces takeover likelihood. Other results: Passing of BCL has negative impact on ROA for firms in non- competitive industries but no impact on ROA for firms in competitive industries.	BCL likely had two opposing effects. (1) It increased the cost of mounting a hostile takeover and reduced takeover threats. (2) It increased managerial slack which increased the gains from mounting a hostile takeover. Since there is likely little increase in slack in competitive industries, the decrease in takeover likelihood observed for that subsample suggests that <i>BCL reduced takeover threats.</i>

Table A.1, continued

Panel C, continued

Study	Provisions/ Indexes/ State Laws	Sample Size (dates) and Characteristics	Attribute Studied	Result	Interpretation
Sokolyk (2011)	G index, CB, Pill, CB & Pill combination, LSM, LWC, DD, LAB, CV, GP, CP, FP, SM, AG, BCPS, BCL, CSAL	IRRC sample (1990-2004) 574 takeover attempts of IRRC sample firms (1190-2004)	Takeover Likelihood Takeover Premium	Takeover likelihood decreases in CB and CB and Pill combination. Some evidence that it also decreases in LSM, LWC, and LAB for firms in low M/B industries. Takeover likelihood increases in GP and CP. G index or other provisions are unrelated to takeover likelihood. Takeover premium increases in Pill and CP. CB, G-index, or other provisions are unrelated to takeover premium.	G index has no effect on takeover probability or takeover premium. Some components of the index have opposing effect on takeover probability. The strongest takeover deterrent seems to be CB & Pill combination. Pill by itself does not decrease takeover likelihood but increases takeover premium. GP and CP seem to increase takeover probability, and CP also seems to enhance takeover premium.
Kadyrzhanova and Rhodes-Kropf (2011) (also in Panel E)	CB, G index net of CB, Delay index = CB+BCPS+LSM+LWC, G index net of Delay index	872 takeover attempts of IRRC sample firms (1990-2006) IRRC sample (1990-2006)	Takeover Premium Method of payment Takeover Likelihood	Takeover premium increases in CB and Delay Index for firms in concentrated industries (high Herfindahl Index), and is unrelated to G index net of CB or net of Delay index. The likelihood of receiving an all-cash offer increases in CB and Delay Index for firms in concentrated industries, and is unrelated to G index net of CB or net of Delay index. Takeover likelihood decreases in CB and Delay Index regardless of industry concentration, and is unrelated to G index net of CB or net of Delay index. Other result: CB and Delay Index are positively related to firm value (Q) for firms in concentrated industries.	CB and provisions in the Delay index increase bargaining power but only for firms in more concentrated industries. The same provisions, however, also deter takeovers . This indicates trade-offs for shareholder value that depend on industry concentration. Since the valuation effect of CB and delay provisions is positive for firms in concentrated industries, the likely net effect of CB and delay provisions for firms in concentrated industries is to increase bargaining power .

Table A.1, continued

Panel D: Evidence on the relation between the likelihood of having or adopting antitakeover provisions and firm characteristics

Study	Provisions/ Indexes/ State laws	Sample Characteristics Size (dates)	Firm Characteristic	Result	Interpretation of the relation
Malatesta and Walkling (1988) (also in Panels A.1 and C)	Pill	122 adopting firms (1982-1986) compared to industry medians 99 adopting firms (1982-1986) compared to industry medians	Managerial ownership Net profit margin, return on capital, return on equity	Managerial ownership is lower in firms adopting Pills. Profitability in one and three years prior to Pill adoption is lower in firms adopting Pills. Other results: - CAR around Pill announcement is negative. - Probability of having been or becoming a takeover target is higher for firms adopting Pills.	Pills <i>entrench managers</i>. Pills tend to be adopted by poorly performing managers who own relatively little of their firms' stock and who face higher probability of takeover. The benefit of Pills to managers—reduction in takeover probability—outweighs the cost of Pill adoption—stock price decline—if managers own less of their company stock.
Bhagat and Jefferis (1991) (also in Panel A.1)	SM, LWC, LSM, CB, FP, BCPS, AG	197 firms (1984-1985) proposing provision adoption and 148 firms (1984-1985) not proposing provision adoption.	Ownership by CEO, officers and directors, outside directors, 5% blockholders, affiliated investment plans, and institutions	The likelihood of provision adoption: - decreases in CEO ownership. - decreases in managerial ownership. - decreases in outside director ownership - increases in the ownership by affiliated investment plans (e.g., ESOPs) - is unrelated to institutional ownership Other result: after controlling for selection bias, CARs around proposals to adopt provisions are negative.	Provisions <i>entrench managers</i>. Why shareholders do not block wealth-decreasing provisions seems puzzling. The likely explanations include elevated transaction costs and coordination problems of dispersed shareholders.
Davis (1991)	Pill	5859 firm-quarters for 440 firms from Fortune 500 (1984-1989) Around 60% of firms adopted Pills during the period	Managerial Ownership Ownership Concentration Institutional Ownership Other provisions	The propensity to adopt a Pill: - decreases in managerial ownership - decreases in % ownership of all 5% blockholders. - increases with institutional ownership. - increases with having other provisions.	<i>Ambiguous</i> : (1) Entrenched managers adopt Pills when incentive alignment and monitoring capacity are weak. (2) Insiders with large stakes have less need for a Pill and firms with concentrated ownership are less likely to receive the sort of unanticipated takeover that Pills are meant to prevent. Other provisions and Pill appear complementary.

Table A.1, continued

Panel D, continued

Study	Provisions/ Indexes/ State laws	Sample Characteristics Size (dates)	Firm Characteristic	Result	Interpretation of the relation
Agrawal and Knoeber (1998)	GP, CP	446 firms (1987)	CEO compensation	CEO compensation -decreases with takeover threat and GP or CP -increases with takeover threat and no GP or CP	Takeover threats impact compensation contracts. CEOs unprotected from takeover threats by GP or CP face higher risk of loss of firm-specific human capital or deferred compensation and demand higher salaries.
Danielson and Karpoff (1998)	Most provisions and state antitakeover laws	513 firms (1984-1989)	Use of provisions over time Use of provisions together Managerial Ownership Outside Blockholders Institutional Ownership	Mean number of provisions in a firm was 2.07 in 1984 and 5.93 in 1989. Pills do not cluster with other provisions. CB, FP, SM, LSM, LWC cluster together. Firms with Pills have: - lower managerial ownership - lower outside blockholdings - higher institutional ownership	The provisions use increased in the late 1980s. The valuation effect of one provision will likely depend on the presence or absence of other provisions. <i>Ambiguous</i> : Blockholders either prevent managers from adopting Pills or the presence of a blockholder decreases a Pill's net benefit to managers. Pills tend to be used by firms vulnerable to outside takeover.
Daines and Klausner (2001)	BCPS, CB, FP, SM, LWC, LSM, DC, CSAL, BCL	310 IPOs (1994-1997)	Adoption at IPO Bidders / # of firms in the industry Industry R&D intensity	95% of IPO firms adopt BCPS, 44% adopt CB, 25% adopt LWC or LSM Strength of antitakeover protection: - increases with number of potential bidders - decreases with R&D intensity	Firms <i>do not adopt provisions to increase bargaining power</i> . Reasoning: the more potential bidders, the higher likelihood of receiving competing bids, the less need for bargaining on the side of the target. Firms <i>do not adopt provisions to promote long-term investment</i> .

Table A.1, continued

Panel D, continued

Study	Provisions/ Indexes/ State laws	Sample Characteristics Size (dates)	Firm Characteristic	Result	Interpretation of the relation
Field and Karpoff (2002) (also in Panel C)	BCPS, AG, CB, FP, Pill, SM, LWC, LSM, DC	1019 IPOs (1988-1992)	Adoption at IPO Managerial Ownership Executives' Compensation Board Independence State Laws	85% of IPO firms adopt BCPS, 53% adopt at least one other provision Likelihood of adopting a provision (except for BCPS): -decreases in managerial ownership -increases in cash compensation -is unrelated or weakly decreases in board independence -increases if covered by state laws Other result: In 5 years after IPO, IPO firms with a provision are less likely to be acquired but do not receive higher takeover premium.	Firms adopt defenses at IPO to <i>entrench managers</i> . IPO charters may not be optimal. “... defenses are more likely when managers benefit personally from their positions, bear little of the effects on share value, and can act independently of nonmanagerial oversight.”
Heron and Lie (2006) (also in Panel C)	Pill - existing – adopted prior to bid - morning after – adopted after a bid	526 unsolicited takeover offers (1985-1998)	Managerial ownership Excess Cash	Likelihood of having a Pill or adopting morning after Pill - decreases with managerial ownership. - decreases with excess cash Other result: Pills do not decrease takeover likelihood but increase takeover premium.	Firms adopt Pills to <i>strengthen their bargaining position</i> in the event of takeover and during takeover process.
Straska and Waller (2010) (also in Panel E)	G, E	IRRC sample (1990-2002)	Bargaining power (increases in managerial ownership, shareholder concentration, firm equity valuation)	G and E decrease in bargaining power. Other result: Q increases in G or E for firms with low bargaining power and decreases in G or E for firms with high bargaining power.	Antitakeover provisions are more frequent in firms with low power to bargain for favorable terms in a takeover. Since for these firms value increases in G or E, antitakeover provisions likely <i>benefit</i> these firms because they <i>increase bargaining power</i> .

Table A.1, continued

Panel E: Evidence on the long-term relation between antitakeover provisions and stock returns, firm value, other performance measures, and firm policies

Study	Provisions/ Indexes	Sample Characteristics Size (dates)	Firm Attribute	Result	Interpretation
Gompers, Ishii, and Metrick (2003)	G	IRRC sample (1990-1999)	Stock returns Industry adjusted Q Industry adjusted profit margin, ROE, sales growth Industry adjusted CAPEX/assets Acquisition count	Strategy of buying firms with $G \leq 5$ and short- selling firms with $G \geq 14$ earns +0.71% monthly alpha (from 4-factor model) G is negatively related to Q. G is negatively related to profit margin, unrelated to ROE, and negatively related to sales growth. G is positively related to CAPEX/assets. G is positively related to Acquisition count.	No strong causality conclusions. Some evidence that high G causes poor abnormal stock performance and lower firm values through <i>increased agency costs</i> that were not expected by investors in 1990. Evidence on increased agency costs: Firms with low G do more CAPEX and acquisitions. This suggests that low G firms invest inefficiently, given their poor performance.
Bebchuk and Cohen (2005)	CB	IRRC sample (1995-2002)	Industry adjusted Q	CB is negatively related to Q. CB as in 1990 is negatively related to Q during 1996-2002.	Evidence is suggestive of the fact that CBs <i>reduce firm value</i> .
Cremers and Nair (2005)	G, ATI	IRRC sample (1990-2001)	Stock returns by G or ATI and Institutional block ownership or Public pension fund ownership Q	Portfolios long firms with high takeover vulnerability (low G or ATI) and short firms with low takeover vulnerability earn positive annualized abnormal returns of 10.8% (9.5%) only when institutional block ownership (public pension fund ownership) is high as well. Q in firms with both high takeover vulnerability and high block or public pension fund ownership is lower than Q in firms with either of the two mechanisms present.	Outside ownership as internal governance mechanism and takeover market as external governance mechanism are complements in being associated with long-run abnormal returns. The importance of external governance crucially depends on the extent of internal governance (and vice versa). Additional evidence suggests that the abnormal returns might be a result of greater risk (higher discount rate) not captured in the asset pricing model.
Chi (2005)	G	IRRC sample (1990-2002)	Q	Changes in G index are negatively correlated with future changes in Q. Controlling for unobserved heterogeneity with fixed effects, G is negatively related to Q	Negative relation between G and Q runs from G to Q and not vice versa. Having more G provisions <i>destroys shareholder wealth</i> .

Table A.1, continued

Panel E, continued

Study	Provisions/ Indexes	Sample Characteristics Size (dates)	Firm Attribute	Result	Interpretation
Klock, Mansi, and Maxwell (2005)	G	IRRC sample (1990, 1993, 1995, 1998, 2000)	Yield spread over Treasuries	Yield spread decreases in G index. This relation is robust to estimations by fixed effects and 2SLS. Changes in G index negatively correlate with changes in yield spread.	Antitakeover provisions <i>reduce cost of debt</i> likely because they reduce agency costs between shareholders and bondholders.
Core, Guay, and Rusticus (2006)	G	IRRC sample (1990-1999)	Industry adjusted ROA Analysts' forecast errors CAR (-1,1) around earnings announcement Takeover probability	G is negatively related to ROA. G is unrelated to forecast errors. G is unrelated to earnings surprise. G is unrelated to takeover probability.	Although ROA decreases with G, the poor performance of high G firms is correctly expected by analysts. <i>Unexpectedly high agency costs thus likely do not cause the abnormal negative stock returns</i> of high G firms found in Gompers, Ishii, Metrick (2003). High G index also does not appear to cause unexpected drop in takeover probability.
Lehn, Patro, and Zhao (2007)	G, E	IRRC sample (1990-2003)	M/B equity in 1980- 1985 M/B equity 3 and 5 years lag- M/B equity and 3 and 5 years lead- M/B equity	G and E in 1990-2003 are negatively related to M/B in 1980-1985. G and E are unrelated to M/B after controlling for M/B in 1980-1985. G is negatively related to lagged M/B and is unrelated to lead M/B. E is negatively related to both lagged and lead M/B. The relation with lagged M/B is stronger.	Low past M/B leads to higher indexes and not vice-versa. <i>Higher indexes do not cause low valuations.</i> Further interpretation for higher G or E in low M/B firms is ambiguous: Firms with low M/B (1) may be poorly run and, hence, more likely targets of control contests; (2) may have fewer growth opportunities and, perhaps because of that, likely to be a takeover target.
Dittmar and Mahrt-Smith (2007)	G, E	IRRC sample (1990-2003)	Excess annual return relative to 25 size and B/M portfolios Q Change in excess cash and its effect on ROA	Cash is more positively related to excess return for firms with low G or E. Excess cash is more positively related to Q for firms with low G or E. Low G firms dissipate less excess cash. Lag excess cash is negatively related to ROA for high G but not low G firms.	Cash is valued lower in firms with high G or E. Authors estimate that \$1.00 of cash in high G or E firms is valued at only \$0.42 to \$0.88. In low G or E firms, the value is approximately double. <i>Entrenched managers</i> in firms with high G or E <i>waste excess cash resources and thus destroy firm value.</i>

Table A.1, continued

Panel E, continued

Study	Provisions/ Indexes	Sample Characteristics Size (dates)	Firm Attribute	Result	Interpretation
Masulis, Wang, and Xie (2007)	G, E, CB	3333 acquisitions (1990-2003) made by IRRC sample firms	CAR (-2,+2) around acquisition announcement	Increases in G, E, and CB decrease acquirer abnormal return	<i>Entrenched managers</i> in firms with high G or E or with CB <i>make poor acquisition choices</i> .
Faleye (2007) (also in Panels A.1 and A.2)	CB	2021 firms (1995-2002) 813 (1995-2002) 102 (1995-2003) 1813 (2000-2004)	Q Forced CEO turnover Proxy contests Shareholder proposals	CB reduces Q, even for complex (high R&D) firms. CB reduces the sensitivity of forced CEO turnover to performance. CB reduces the sensitivity of proxy contest likelihood to performance. Firms with CB implement lower proportion of approved shareholder proposals. Other results: Negative CARs around proposals to adopt CB, positive CARs around proposals to repeal CB.	CBs <i>entrench managers and reduce firm value</i> . The results do not support the argument that CBs promote stability and encourage long-term investments.
Ferreira and Laux (2007)	G, ATI	IRRC sample (1990-2000)	Idiosyncratic Volatility Other measures of information flow Institutional trading interaction	G and ATI are negatively related to idiosyncratic volatility. Changes in G are negatively related to subsequent changes in idiosyncratic volatility. G is negatively related to other measures of private information flow into stock prices. The negative link between G and idiosyncratic volatility is stronger for companies with trading interest by institutions.	Antitakeover <i>provisions impede the flow of private information to stock prices reducing stock price efficiency</i> . The link between private information flow and antitakeover provisions is stronger for firms that are subject to intense trading by institutions.
Creemers, Nair, and Wei (2007)	G, ATI	IRRC sample (1990-1997)	Yield spread over Treasuries by G or ATI and Institutional block ownership	Having institutional blockholder is associated with higher yields if the firm is exposed to takeovers (low G or ATI) and lower yields if the firm is protected from takeovers (high G or ATI). The higher yields are reduced when the bonds are protected by covenants that protect bondholders from losses in the event of a takeover.	<i>Strong shareholder governance</i> in terms of having an outside blockholder and high takeover vulnerability (low G or ATI) <i>increases cost of debt</i> likely because it increases bondholders' concerns of takeover risk and possible wealth expropriation in a takeover.

Table A.1, continued

Panel E, continued

Study	Provisions/Indexes	Sample Characteristics Size (dates)	Firm Attribute	Result	Interpretation
Harford, Mansi, Maxwell (2008)	G, E, CB	IRRC sample (1993-2004)	Cash holdings Capital expenditures, R&D expenditures, acquisition spending Dividend payout, repurchases Profitability, Q	<ul style="list-style-type: none"> - Firms with high G index: have lower cash holdings. E index and CB are unrelated to cash holdings. - increase capital expenditures and more so as their excess cash increases. - decrease investment in R&D as their excess cash increases - increase acquisition spending as their excess cash increases - are more likely to increase dividends but less so as their excess cash increases - are more likely to repurchase their stock as their excess cash increases <ul style="list-style-type: none"> - have lower profitability - have lower Q and more so as their excess cash increases 	<i>Poorly governed firms</i> (high G index firms) make <i>suboptimal spending decisions</i> . Rather than hoarding cash, managers of poorly governed firms spend cash quickly on acquisitions and capital expenditures. When distributing cash to shareholders, poorly governed firms chose to increase repurchases rather than dividends, avoiding future payout commitments. Poorly governed firms with excess cash have lower valuations.
Bebchuk, Cohen, and Ferrell (2009)	E, O	IRRC sample (1990-2003)	Industry adjusted log(Q) Stock returns	<p>E is negatively related to Q. E as in 1990 is negatively related to Q during 1998-2002.</p> <p>O is positively related or unrelated to Q.</p> <p>Strategy of buying firms with $E=0$ and shorting firms with $E \geq 5$ earns +0.84% monthly alpha</p>	<p>Evidence is suggestive of the fact that provisions in E <i>reduce firm value</i>.</p> <p>The select group of provisions in E is responsible for the negative relation between G and Q documented in Gompers, Ishii, and Metrick (2003).</p>
Johnson, Moorman, and Sorescu (2009)	G, E	IRRC sample (1990-1999)	Stock returns	Strategy of buying firms with $G \leq 5$ ($E=0$) and short-selling firms with $G \geq 14$ ($E \geq 5$) earns insignificant alpha after controlling for industry clustering.	The significantly positive alphas documented in Gompers et al. (2003) and Bebchuk et al. (2009) are not robust to adjustments for industry clustering. The significant alphas are artifacts of either asset pricing model misspecification or unexpected industry performance.
Wang and Xie (2009)	G	396 takeovers (1990-2004) by and of IRRC sample firms	Value-weighted acquirer and target CAR (-5,+5) around acquisition announcement	<p>Value-weighted acquirer and target CAR increases in the difference between target and acquirer G indexes.</p> <p>Target CAR and acquirer CAR separately also increase in the difference between target and acquirer G indexes.</p>	The better the governance of the acquirer (lower G index) relative to the target, the greater the governance improvement for the target firm and the higher the synergy created by a takeover. The synergy effect is shared by target shareholders and acquiring shareholders.

Table A.1, continued

Panel E, continued

Study	Provisions/ Indexes	Sample Characteristics Size (dates)	Firm Attribute	Result	Interpretation
Cremers, Nair, John (2009)	G	IRRC sample (1990-1999) IRRC sample (1990-2004)	Stock returns Stock returns	<p>Strategy of buying firms with $G \leq 5$ and shorting firms with $G \geq 14$ earns insignificant alpha after adding a “takeover factor” to the 4-factor model originally used by Gompers et al. (2003).</p> <p>Other results: The authors argue and present results consistent with the view that vulnerability to takeover is a source of systematic risk. They account for this risk by including a “takeover factor” in the asset pricing model.</p>	Because the positive alphas documented in Gompers et al. (2003) are reduced after including the “takeover factor” in the asset pricing model, the authors argue that “the abnormal returns accruing to stronger governance are consistent with those firms having higher systematic risk , which is not fully captured by Fama-French asset pricing model.”
Straska and Waller (2010) (also in Panel D)	G, E	IRRC sample (1990-2002)	Q	<p>Q increases in G or E for firms with low bargaining power and decreases in G or E for firms with high bargaining power. Results also hold over 1996-2002 while holding G or E at the 1990 level.</p> <p>Other result: Firms with low bargaining power have higher G or E.</p>	By increasing bargaining power, antitakeover provisions benefit firms that have low power to bargain for favorable terms in a takeover. It seems that the provisions are not universally harmful to shareholders .
Kadyrzhanova and Rhodes- Kropf (2011) (also in Panel C)	CB, G index net of CB, Delay index = CB+BCPS+ LSM+LWC, G index net of Delay index	IRRC sample (1990-2006)	Q	<p>Q decreases in CB and Delay index for firms in non-concentrated industries but increases in CB and Delay index for firms in concentrated industries (Herfindahl index top tercile).</p> <p>Q decreases in G index net of CB and G index net of Delay index for firms in non-concentrated industries and decreases even more in those indexes for firms in concentrated industries.</p> <p>Other results: Takeover premium increases in CB or Delay index for firms in concentrated industries. Takeover likelihood decreases with CB or Delay index in both concentrated and non-concentrated industries. G index net of CB and G index net of Delay index are unrelated to takeover premium or likelihood.</p>	<p>By increasing bargaining power, Delay index provisions (CB+BCPS+LSM+LWC) benefit firms in concentrated industries. This is likely because in concentrated industries, targets are relatively scarce. A potential acquirer is thus more concerned about losing synergy opportunities to industry rivals and may be willing to bid more in order to not lose the target. Delay provisions serve to extract higher bids.</p> <p>By increasing agency costs, non-delay index provisions (G index net of Delay index) harm firms particularly in concentrated industries, where the potential agency costs are higher.</p>

Table A.1, continued

Panel E, continued

Study	Provisions/ Indexes	Sample Characteristics Size (dates)	Firm Attribute	Result	Interpretation
Giroud and Mueller (2011)	G, E, ATI	IRRC sample (1990-2006)	<p>Stock returns by Herfindahl-Hirschman index, HHI</p> <p>Actual EPS, analyst forecast error</p> <p>Industry adjusted Q</p> <p>ROA, net profit margin, sales growth, ROE</p> <p>Capital expenditures and acquisition activity, CAR (-2,+2) around acquisition announcement</p> <p>Labor productivity and cost efficiency (COGS/sales)</p> <p>Hedge fund activism</p>	<p>Strategy of buying firms with $G \leq 5$ ($E=0$, $ATI=0$) and shorting firms with $G \geq 14$ ($E \geq 4$, $ATI \geq 2$) earns significantly positive alpha only in noncompetitive industries (highest HHI tercile).</p> <p>Dictatorship firms ($G \geq 14$) have lower EPS (scaled by assets per share) than democracy firms ($G \leq 5$) only in noncompetitive industries. Analyst errors for dictatorship firms are negative only in noncompetitive industries.</p> <p>Q decreases in G in noncompetitive industries and is unrelated to G in competitive industries.</p> <p>Operating performance decreases in G in noncompetitive industries and is unrelated to G in competitive industries.</p> <p>Capital expenditures and acquisition activity increase in G in noncompetitive industries and are unrelated to G in competitive industries. CAR significantly decreases in G in noncompetitive industries and is unrelated to G in competitive industries.</p> <p>Labor productivity (COGS/sales) significantly decreases (increases) in G in noncompetitive industries and is unrelated to G in competitive industries.</p> <p>High G firms ($G > \text{median}$) are more likely targeted by activist hedge funds in noncompetitive industries and not in competitive industries. After activism, G of high G firms in noncompetitive industries significantly decreases.</p>	<p>Provisions in <i>G index increase managerial slack but only in noncompetitive industries</i>. High G index firms have lower equity returns, worse operating performance and lower firm value, but only in noncompetitive industries. The worse performance is likely due to lower labor productivity, higher input costs, and inefficient investment. High G firms in noncompetitive industries invest more and make more acquisitions but the acquisitions they make are value destroying. High G firms in noncompetitive industries are targeted by activist hedge funds the most, suggesting that investors take actions to mitigate the inefficiency.</p> <p>Analysts underestimate the effect of G on earnings in noncompetitive industries, where G seems to matter for earnings. This indicates that investors were likely surprised by poor performance of high G firms in noncompetitive industries which can explain (at least partly) the significantly positive alpha from the strategy of buying low G firms and shorting high G firms in noncompetitive industries.</p>
Chen, Chen, Wei (2011)	G	IRRC sample (1990-2004)	Implied cost of equity	Implied cost of equity increases in G index. This relation is more pronounced in firms with high free cash flow and poor investment opportunities.	Weak shareholder rights (high G) <i>increase cost of equity</i> by exacerbating agency problems from free cash flows.
O'Connor, Rafferty (2012)	G, E	IRRC sample (1990-2005)	R&D/Assets	R&D declines in G or E index when the relation is estimated by OLS. The significantly negative relationship disappears after controlling for serial correlation, unobserved effects, or simultaneity.	G or E index are endogenous. After accounting for endogeneity, G or E index seem to have little effect on R&D (innovative) spending.

Table A.1, continued

Panel E, continued

Study	Provisions/ Indexes	Sample Characteristics Size (dates)	Firm Attribute	Result	Interpretation
Harford, Humphery- Jenner, Powell (2012)	G	3935 takeovers (1990-2005) made by IRRC sample firms	Target public status and method of payment Acquirer CAR (-2, +2) and combined acquirer and target CAR (-2,+2) around announcement Industry-adjusted ROA	Dictator firms ($G \geq 10$) are less likely: - to acquire private targets - to pay by stock for a private target - to acquire public targets with blockholders while paying by stock Dictator firms experience lower CARs. The CARs for dictator firms increase in the relative size of private target when they pay for the target by stock. The CARs for dictator firms decrease in target premium. Combined CARs (merger synergies) are lower for dictator firms. Dictator firms perform worse prior to the takeover and performance further deteriorates after the takeover.	Dictator firms ($G \geq 10$) make value- destroying acquisitions . The value destruction comes from several sources. First, dictator acquirers avoid acquisitions that might reduce their level of entrenchment . They are less likely to pay by stock for private targets and for public target with a significant blockholder, thereby avoiding scrutiny and the creation of monitoring blockholder. Second, dictator acquirers tend to select low synergy targets and overpay .
Bebchuk, Cohen, Wang (2013)	G, E	IRRC sample (1990-2008)	Stock returns in 1990-2001 and 2002-2008 Attention index CAR around earnings announcements, analyst forecast errors Industry adjusted $\log(Q)$, ROA, sales growth, net profit margin	Strategy of buying firms with $E=0$ ($G \leq 5$) and short-selling firms with $E \geq 5$ ($G \geq 14$) earns significantly positive alpha only in 1990-2001 and not in 2002-2008. The alphas from the above strategy decrease in the “attention index”, a time-varying measure designed to capture the attention to corporate governance by media, institutional investors and academics. CAR decreases in G or E in 1990-2001 and is unrelated to G or E in 2002-2008. Analyst forecast errors decrease in E in 1990-2001 and are (in most estimations) unrelated to G or E in 2002-2008. Q decreases in G or E in 1990-2001 and in 2002- 2008. Operating performance generally decreases in G or E in 1990-2001 and in 2002-2008.	The negative association between G or E and long-run abnormal returns documented by Gompers et al. (2003) and Bebchuk et al. (2009) is only present in 1990-2001. In 2002-2008 the association disappears likely because by 2001 investors learned to appreciate the difference between firms with high G or E index and low G or E index. The negative association between G or E and firm value or operating performance continues to hold in 2002- 2008. This association can be either due to G or E index provisions causing worse performance or due to the tendency of poorly performing firms to adopt more G or E index provisions .

Table A.1, continued

Abbreviations

Firm Level Provisions

AG – antigreenmail
BCPS – blank check preferred stock
CB – classified (staggered) board
CP – compensation plans with change in control provisions
CV – cumulative voting (non-presence)
DD – directors' duties
LAB – limits to amend bylaws (lock-in provision)
LAC – limits to amend charter (lock-in provision)
SM – supermajority merger approval
FP – fair price
GP – golden parachute
PP – pension parachute
Pill – poison pill
SB – secret ballot (non-presence)
SP – silver parachutes
LSM – limits to call special meeting
UVR – unequal voting rights (not dual class stock)
LWC – limit to act by written consent
DC – dual class stock

Second Generation State Laws

BCL – business combination laws
CSAL – control share acquisition laws
FPL – fair price laws

Indexes

G – G index of Gompers, Ishii, and Metrick (2003) that adds a value of one for the presence (or in two cases absence) of each of 24 IRRC provisions reducing (enhancing) shareholder rights
E – E index of Bebchuk, Cohen, and Ferrell (2009) that adds a value of one for the presence of each of the following provisions: CB, SM, LAB, LAC, Pill, GP
O – O index that equals G index less E index
ATI – Alternative Takeover Index of Cremers and Nair (2005) that adds a value of one for the presence of each of the following provisions: CB, BCPS, and LSM or LWC

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