



# Thirty Years of Shareholder Rights & Firm Valuation

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# How is Corporate Governance Quality Measured?

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- **Investor Responsibility Research Center (IRRC)**
  - G-Index based on 24 provisions of shareholder rights (charter, bylaw, state law)
- **Institutional Shareholder Services (ISS)**
  - Index based on board composition, compensation, takeover defenses, and audit
- **Standard and Poor's (S&P)**
  - Index based on board structure, compensation, shareholder rights
- **FTSE ISS Corporate Governance Rating (24 countries)**
  - Index based on board structure, compensation, audit and shareholder rights
- **Governance Metric Index (International)**
  - Index based on more than 600 data points across seven broad categories of analysis, including board accountability, disclosure, executive compensation, shareholder rights, ownership base, takeover provisions and corporate behavior and social responsibility.

# Shareholder Rights: G-Index (24 provisions)

## *Gompers, Ishii and Metrick (2003)*



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- Simple index based on 24 provisions, 5 groups

- Provisions to delay hostile bidders

- Staggered boards: directors are placed into different classes and serve overlapping terms

- Director/Officer protection

- Golden parachute: payment to executives after dismissal due to change of control

- Voting rights

- Supermajority for merger approval: Requires high fraction of yes-votes for takeover to go through (typically 66-85%)

- Other takeover defenses

- Poison Pill: Gives target shareholders the right to buy shares at deep discount in case of an unfriendly takeover

- State laws

- Anti-greenmail: Repurchase of shares at premium from raider prohibited



# Entrenchment Index (E Index)

*Bebchuk, Cohen and Ferrell (2009)*

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- Based on six corporate governance provisions
  - Supermajority requirement on changing by-laws
  - Supermajority requirement on changing charter
  - Supermajority requirement for merger approval
  - Poison Pill
  - Golden Parachute
  - Staggered (or classified) Board



# Poison Pills

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- Gives target shareholders the right to buy shares at deep discount in case of an unfriendly takeover (typically, 5% - 15% trigger)
  - Rights of acquirer are void
- Hostile takeovers effectively impossible if pill is outstanding
- First judicial validation in 1985 in *Moran v. Household* (Delaware Supreme Court)
  - ... more on this later



# Staggered Boards

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- Board is like the U.S. Senate
- (Typically) only 1/3 of directorships up for election in any year
  - Takes two years to gain control of the board
  - More important in the poison pill era (after 1985)



# State Antitakeover Laws

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- State laws:
  - business combination, director liability, anti-greenmail, director duties, mandatory cumulative voting, fair price, cash-out, control share
- If charter / bylaw silent on some issues, then state default applies
  - Limits on written consent, limits on special meeting

# Gompers, Ishii, Metrick (2003)

“Corporate governance and equity prices,” QJE

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## Governance associated with value / performance

- Good governance firms
  - Higher stock returns
  - Higher Tobin's Q (M/B ratio of the firm)
    - Adding one provision associated with lower firm value of about 1-2%, more so in later years
  - Higher operating profits and higher sales growth
- Bad governance firms
  - Overinvest more
  - Make more value-reducing acquisitions





# Our paper

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- Introduce New Database for 1978 – 1989
  - 1978, 1983, 1988 panels, about 1,000 firms
    - All provisions in G- and E-Index (and more)
    - Separate for charter and by-law, updated annually
  - Significant time-variation only in the 1980s
- Shareholder Rights and Firm Value
  - Firm fixed effects
  - 1985 judicial validation of the pill
  - Industry-specific M&A activity as instrument/channel
  - Which shareholder rights provisions are most important?



# Data sources

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- Corporate governance 1978-1989
  - 10-K; 10-Q for each firm for each year, plus contracts
  - Delaware Division of Corporations (charters)
  - Existing literature on 1980s corporate governance
  - *Corporate Control Alert*
  - Corporate law of each state for defaults
  - State statutes
- SDC Platinum (LBO, friendly, hostile)
- Compustat
- CRSP
- IRRC 1990 onwards

Figure 1. G-Index percentiles, 1978-2006

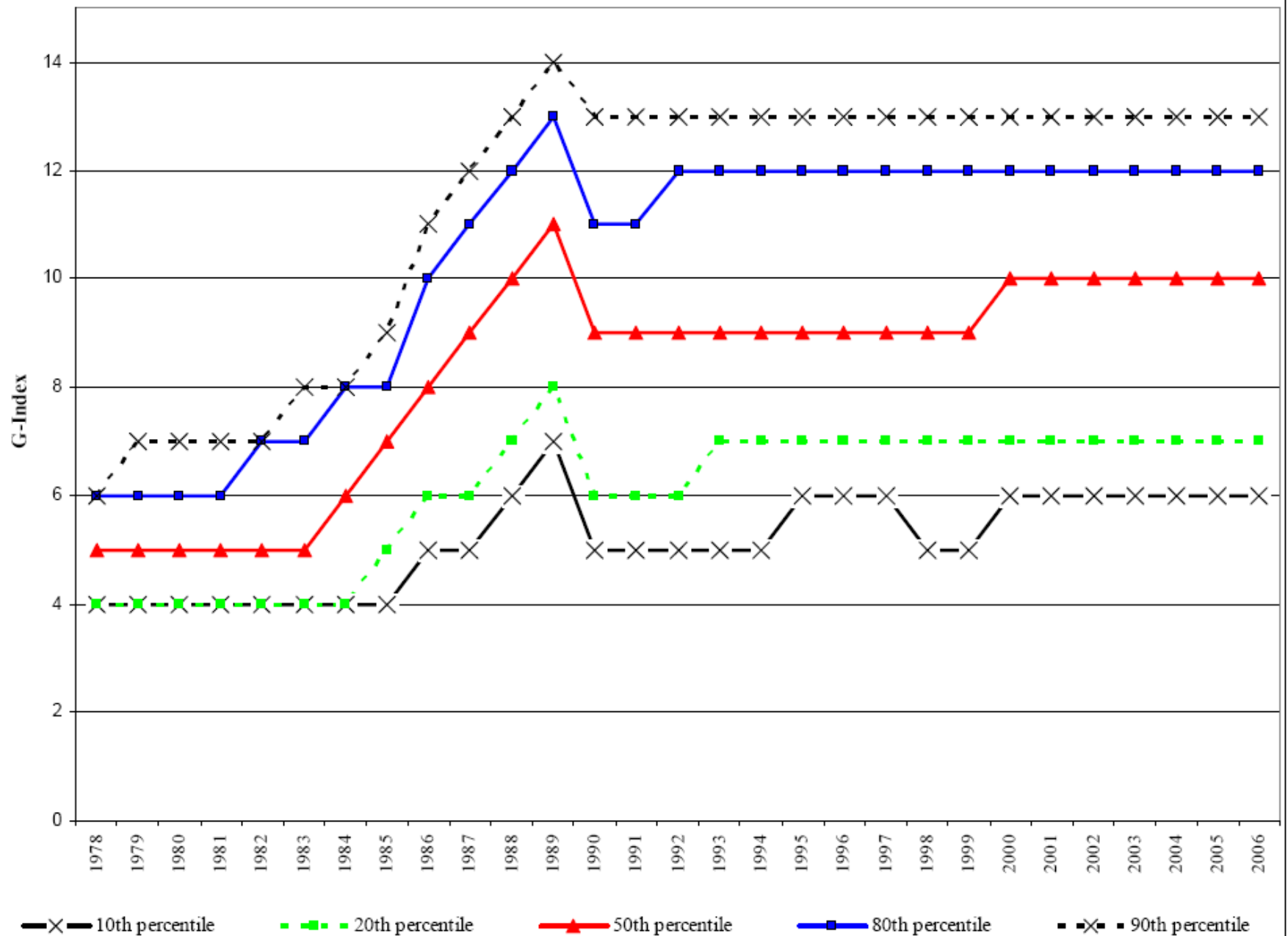


Figure 3A. Incidence of the 6 Provisions in the E-Index

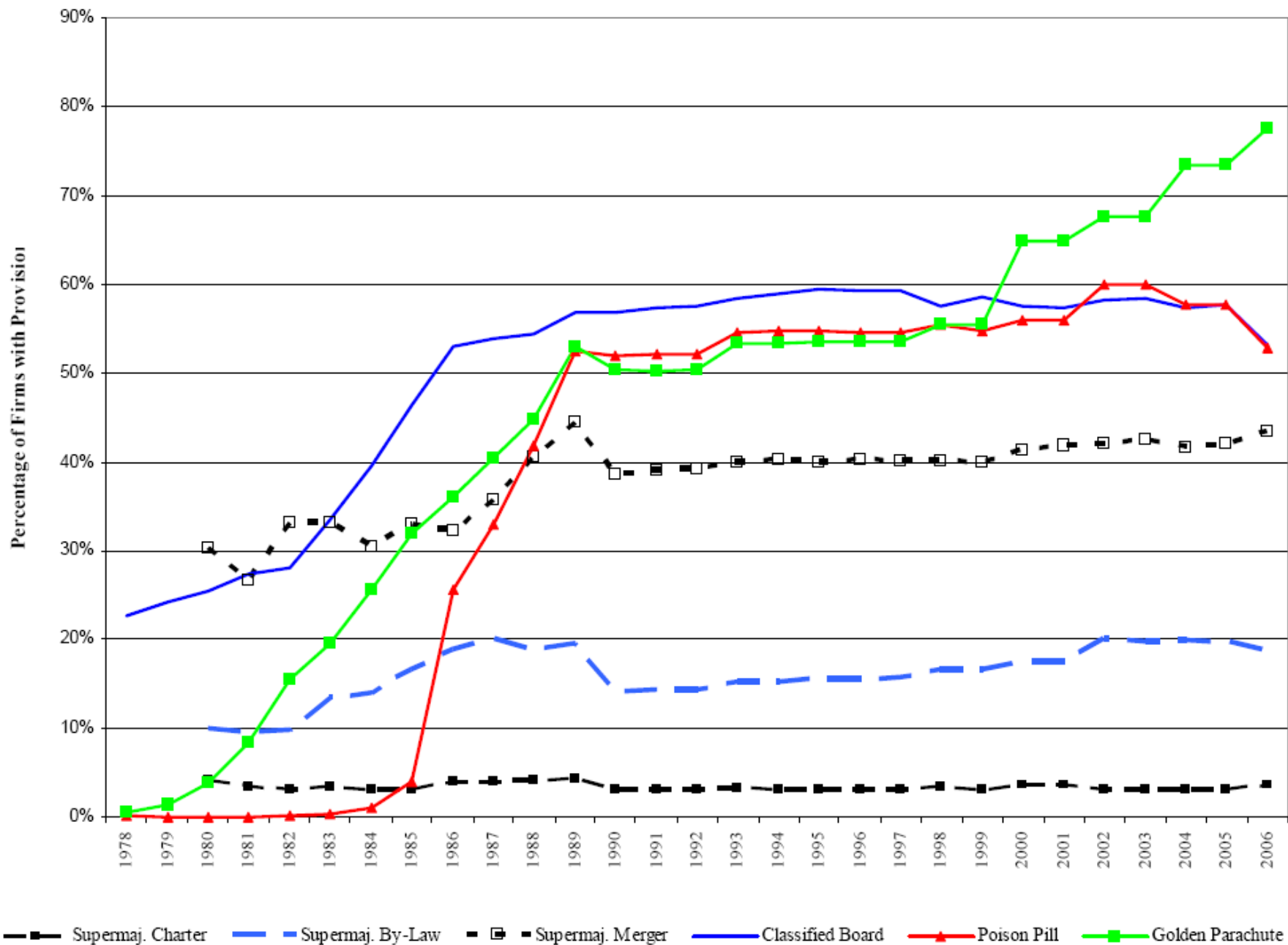


Figure 3B. Incidence of G-Index Components with Significant Time-Variation

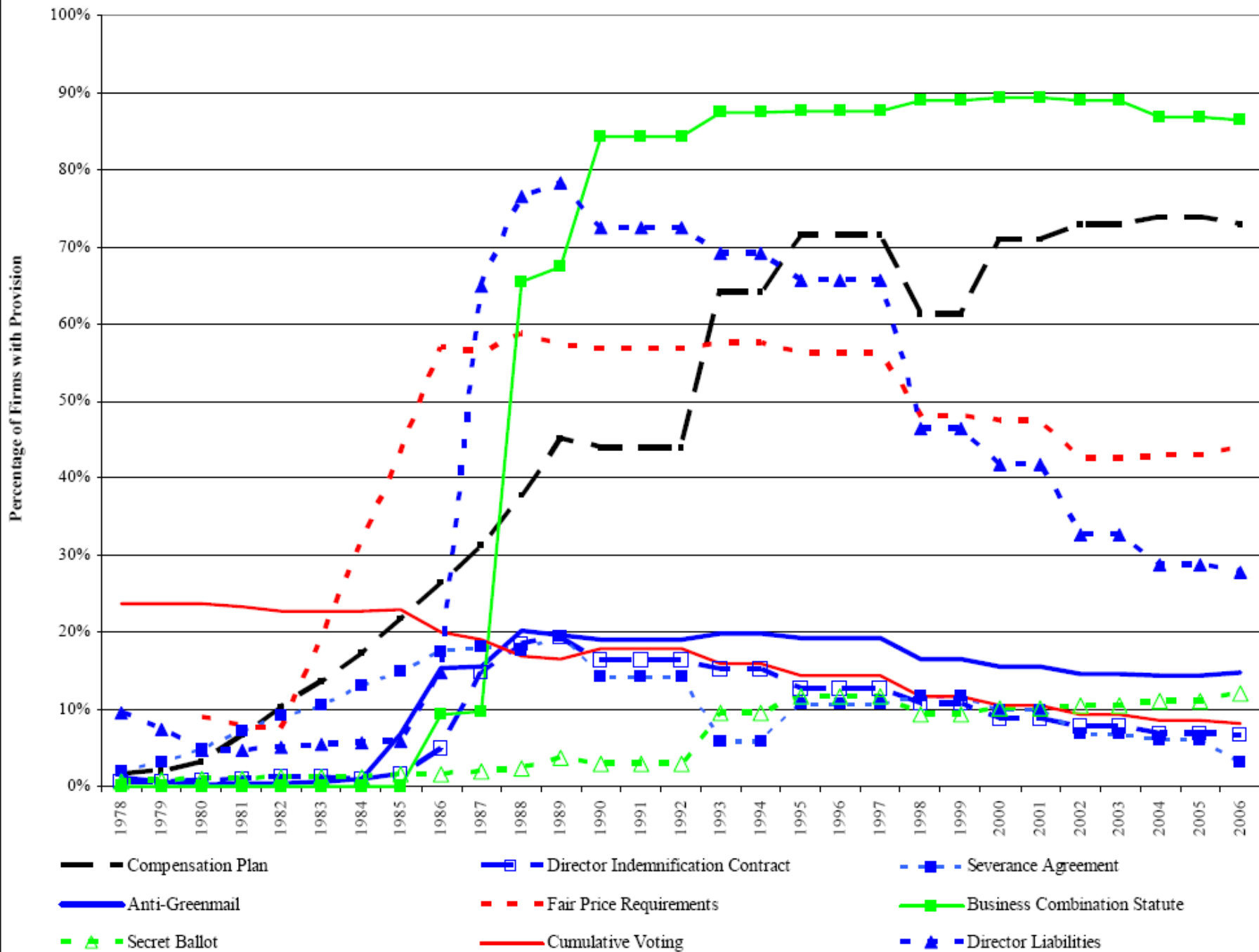
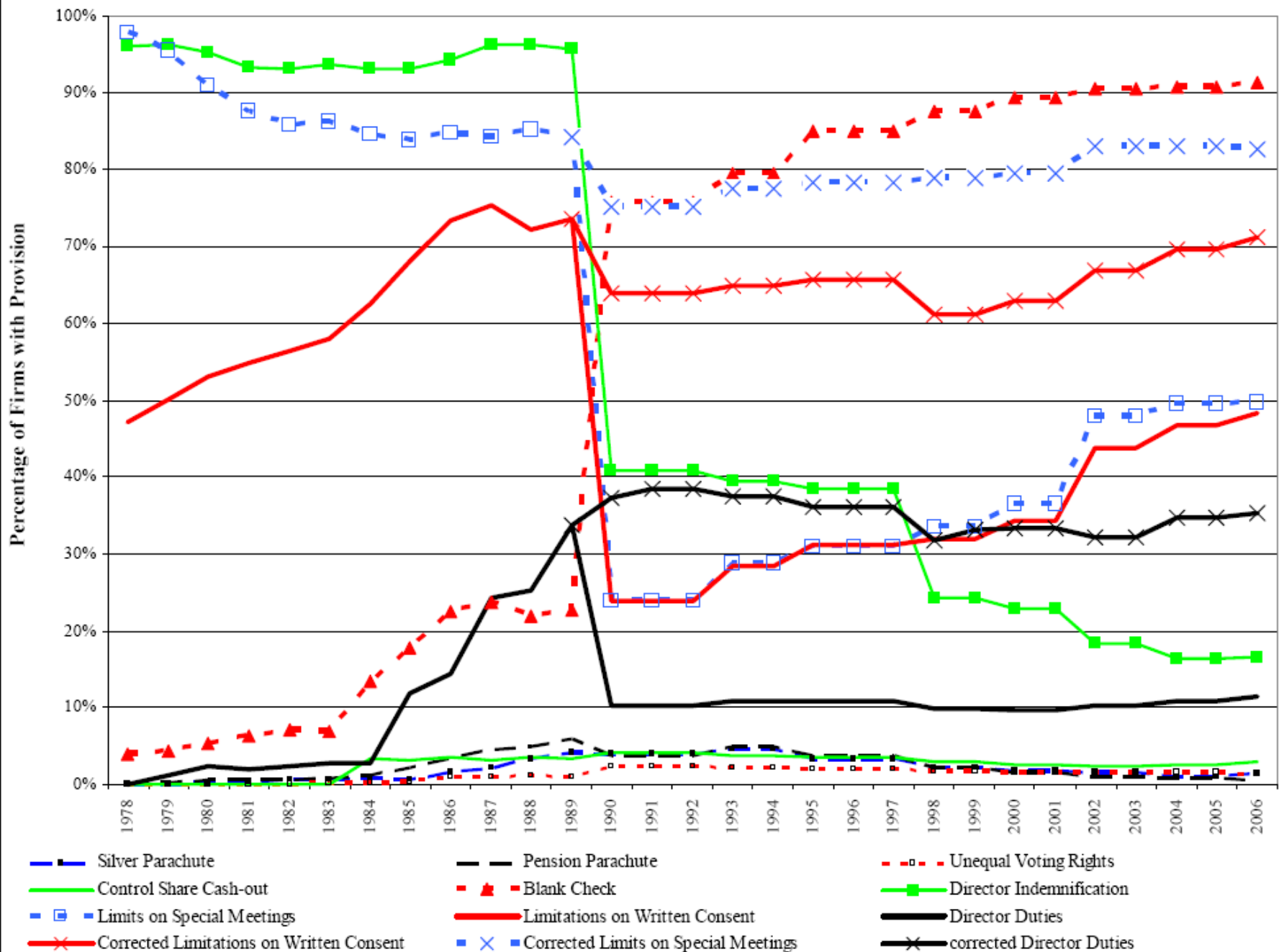


Figure 3C. G-Index Components with Connection Problems or no Time Variation



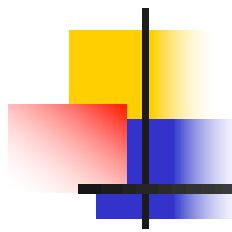


# Firm Value (Q) and G-Index

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- Pooled panel Q regressions with year fixed effects, with and without firm fixed effects
- Coefficient of G-Index
  - No firm fixed effects
    - -2.0% Coefficient for 1978-2007
    - -0.7% (marginal) for 1978-1989, -2.1% for 1990-2007
  - With firm fixed effects
    - -1.1% Coefficient for 1978-2007, statistically significant
    - 0% for 1978-1989, -1.6% (marginal) for 1990-2007

# Q and G-Index plus other controls (panel B, Table III)



Dependent: Q	1978-2006			1978-1989		1990-2006		1990-1999	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
G-Index	-0.020 (3.76)	-0.018 (3.74)	-0.011 (1.92)	-0.007 (1.56)	0.001 (0.23)	-0.021 (3.59)	-0.016 (1.61)	-0.022 (3.61)	-0.022 (1.46)
Log Book	-0.079 (7.03)	-0.087 (6.51)	-0.167 (7.12)	-0.068 (5.59)	-0.168 (6.06)	-0.097 (5.79)	-0.224 (7.86)	-0.085 (5.01)	-0.185 (4.82)
Capex/Assets	1.994 (8.04)	2.533 (9.12)	1.758 (8.84)	1.159 (5.13)	0.688 (3.21)	3.160 (8.37)	2.045 (8.03)	2.665 (6.55)	1.485 (5.34)
Capex Missing	-0.005 (0.11)	-0.196 (3.41)	-0.068 (1.53)	-0.120 (2.03)	-0.078 (2.29)	-0.193 (2.92)	-0.070 (1.09)	-0.209 (3.28)	-0.068 (0.85)
Leverage	-0.686 (7.30)	-0.728 (7.29)	-0.400 (5.12)	-0.439 (3.29)	0.257 (2.39)	-0.803 (6.76)	-0.541 (5.75)	-0.785 (6.01)	-0.425 (3.70)
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm F.E.	No	No	Yes	No	Yes	No	Yes	No	Yes
Industry F.E.	No	Yes	No	Yes	No	Yes	No	Yes	No
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	23,296	23,296	23,296	6,381	6,381	16,915	16,915	11,054	11,054
R2	10.10%	15.46%	65.94%	21.14%	74.23%	15.94%	70.14%	14.54%	73.97%







# Reverse Causality

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- Do lower-value firms increase their G-Index more?
- Pooled panel regressions of the G-Index on Q with firm fixed effects (plus controls)
  - Q coefficient
    - No year fixed effects: *positive* coefficient
    - With year fixed effects: negative but very small coefficient, and exclusively due to 1990-2006 panel
  - Other firm characteristics
    - Positive coefficient: firm size, leverage, institutional ownership
- Governance Ordered Logits
  - Q coefficient
    - No year fixed effects: positive coefficient for increasing G-Index
    - With year fixed effects: small negative coefficient (Eindex 1985-1989)



# Percentage of Firms Changing Shareholder Rights

	1978-2006	1979-1989	1985-1989	1990-2006
% firms decreasing G-Index	9.08	1.53	1.79	15.21
% firms no change in G-Index	55.39	50.58	38.14	59.31
% firms increasing G-Index	35.53	47.89	60.08	25.48
% firms decreasing E-Index	4.73	1.26	1.35	7.45
% firms no change in E-Index	78.17	77.85	73.4	78.42
% firms increasing E-Index	17.10	20.89	25.25	14.13
% firms discarding Poison Pill	1.33	0.08	0.13	2.32
% firms no change in Poison Pill	93.26	93.18	88.57	93.33
% firms adding Poison Pill	5.4	6.75	11.3	4.35

# Explaining G-Index changes: Q

(Table IV, Panel A)

	1978-2006		1979-1989		1990-2006	
Panel A. G-Index Regressions	(1)	(2)	(3)	(4)	(5)	(6)
Q	0.29 (2.71)	-0.07 (6.05)	1.23 (5.87)	0.05 (0.67)	0.00 (0.20)	-0.05 (4.51)
Log Book	0.86 (6.25)	0.13 (4.18)	2.67 (9.76)	0.14 (2.98)	0.37 (6.12)	0.08 (2.24)
Leverage	1.09 (4.38)	0.4 (4.25)	1.76 (5.11)	0.64 (3.18)	0.21 (1.79)	0.21 (2.11)
Total IO	2.9 (5.23)	0.43 (4.18)	5.89 (7.64)	-0.07 (0.31)	0.98 (10.57)	0.53 (5.30)
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm F.E.	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	No	Yes	No	Yes	No	Yes
N	20,906	20,906	6,015	6,015	14,891	14,891
R2	76.02%	86.36%	68.21%	85.01%	90.84%	91.40%

# Ordered Logits

## Marginal effects of increasing G-Index (V-A)

	1978-2006	1979-1989	1985-1989	1990-2006				
<b>Panel A. Ordered Logits G-Index: marginal effects of increasing the G-Index</b>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Q	-0.010 (1.63)	-0.005 (0.74)	0.048 (2.77)	-0.032 (1.72)	0.016 (0.79)	-0.021 (0.97)	0.009 (1.72)	0.003 (0.52)
G-Index	-0.037 (26.80)	-0.040 (22.41)	-0.004 (1.68)	-0.041 (10.97)	-0.024 (7.80)	-0.029 (7.47)	-0.035 (20.24)	-0.032 (18.65)
Log Book	-0.014 (3.99)	-0.012 (3.40)	0.023 (3.65)	0.014 (1.93)	0.023 (2.99)	0.023 (2.65)	-0.024 (7.05)	-0.019 (5.70)
Leverage	0.063 (2.10)	0.091 (2.92)	0.099 (1.78)	0.014 (0.23)	0.025 (0.38)	-0.026 (0.38)	0.123 (4.03)	0.104 (3.68)
Total IO	0.053 (2.23)	0.109 (4.08)	0.332 (7.31)	0.195 (3.87)	0.334 (5.80)	0.306 (4.87)	0.050 (1.89)	0.051 (1.92)
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	No	Yes	No	Yes	No	Yes	No	Yes
N	12,229	12,229	5,444	5,444	3,186	3,186	6,785	6,785
Pseudo R2	4.32%	13.52%	2.41%	12.36%	3.28%	10.96%	5.04%	8.49%

# Ordered Logits

## Marginal effects of increasing E-Index (V-B)

	1978-2006	1979-1989	1985-1989	1990-2006				
<b>Panel B. Ordered Logits E-Index: marginal effects of increasing the E-Index</b>								
	(1)	(2)	(3)	(4)	(5)	(6)	(5)	(6)
Q	-0.015 (3.87)	-0.016 (4.04)	-0.021 (1.59)	-0.044 (3.25)	-0.033 (1.83)	-0.039 (2.17)	-0.007 (1.92)	-0.010 (2.80)
E-Index	-0.051 (24.07)	-0.051 (21.64)	-0.029 (7.46)	-0.045 (9.69)	-0.052 (8.63)	-0.053 (8.38)	-0.050 (20.49)	-0.049 (20.09)
Log Book	-0.013 (5.00)	-0.013 (5.02)	-0.003 (0.62)	-0.008 (1.42)	-0.004 (0.51)	-0.004 (0.50)	-0.014 (5.92)	-0.013 (5.75)
Leverage	0.019 (0.83)	0.005 (0.21)	-0.043 (0.92)	-0.076 (1.64)	-0.116 (1.86)	-0.127 (2.04)	0.048 (2.16)	0.038 (1.70)
Total IO	0.073 (4.35)	0.084 (4.71)	0.226 (6.36)	0.152 (4.16)	0.328 (6.23)	0.314 (5.90)	0.048 (2.70)	0.059 (3.13)
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	No	Yes	No	Yes	No	Yes	No	Yes
N	12,043	12,043	5,258	5,258	3,045	3,045	6,785	6,785
Pseudo R2	4.38%	6.83%	2.18%	4.75%	4.10%	5.28%	5.70%	6.88%

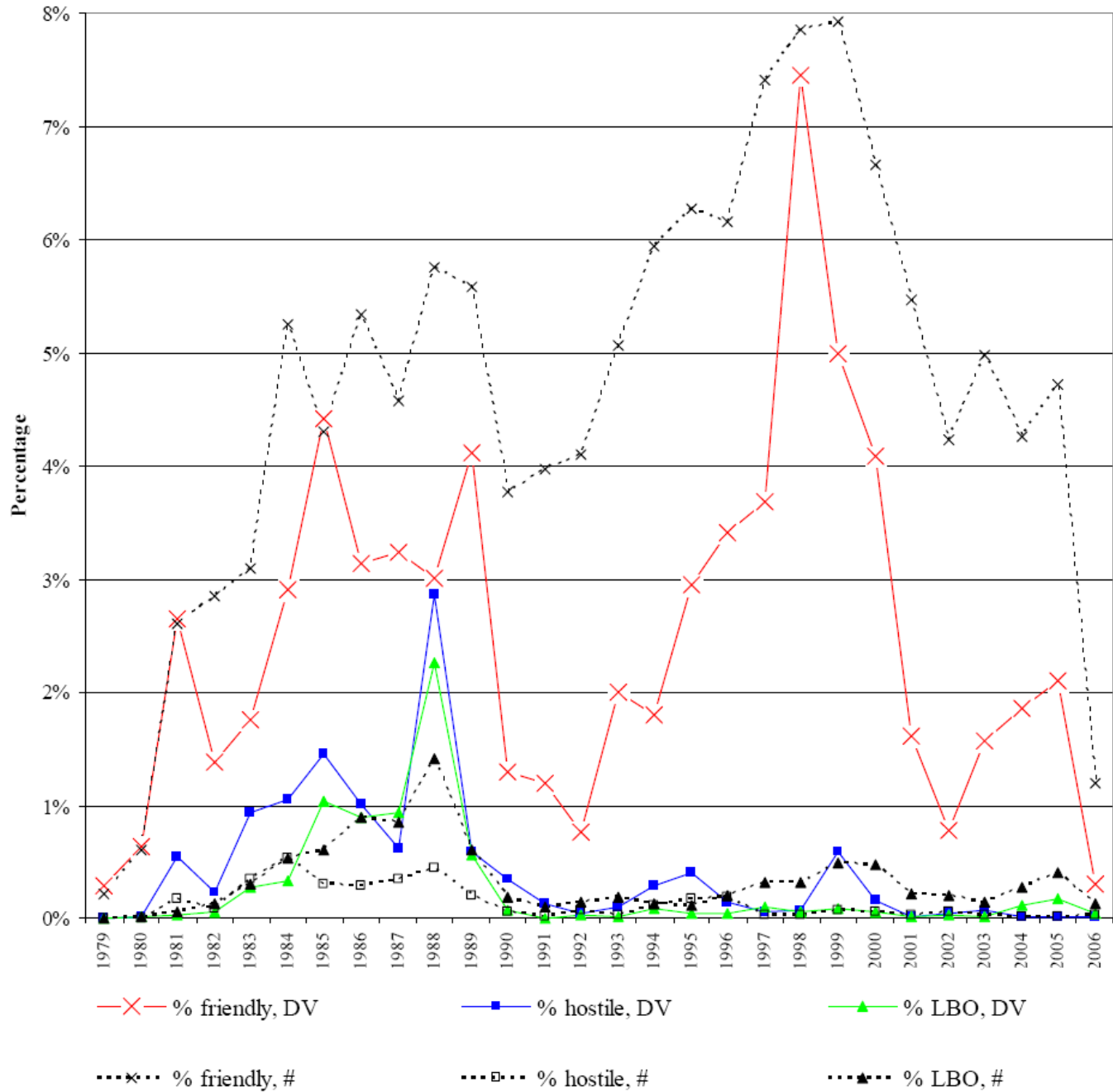


# Takeover Channel

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- Takeovers: explanation of the negative association between Q and G-Index
  - 1985 as watershed year in governance
    - Governance more important after 1985
    - 1985: first poison pill validation
  - Industry-specific merger activity
    - Governance more important if firm in industry-specific takeover wave
- Or: more general association through operating performance / general agency costs
  - Return on assets (ROA)
  - Net profit margin (NPM)
  - Sales growth

Figure 4. M&A activity: percentage of market cap and number of firms, 1979-2006







# First-time validation of Poison Pills

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- Delaware Supreme Court decision

- 1985 case of *Moran versus Household International*

- Adoption of pill subject to only the 'business judgment rule' – most relaxed judicial review

- Great importance

- Martin Lipton: "... the pill changed everything."

- Great ex-ante uncertainty

- Many had questioned validity of the poison pill
  - SEC filed amicus brief against pill validation, arguing that pill
    - ... violates basic rights of shareholders to decide on merger
    - ... fatally undermines shareholders' ability to conduct proxy contest

# Firm Value (Q) and G-Index after 1985

Interact G-Index with dummy for pre-1985 and the year 1985 (Delaware Court decision)

- Takeover Channel Hypothesis: governance more important after 1985
- G-Index
  - Only negative coefficient after 1985
    - 0.1% Coefficient for 1978-1985, insignificant
    - -1.2% for 1986-2007 with F.E. (significant), -2.1% without firm F.E.
- Staggered Board
  - Only negative coefficient after 1985
    - -8.1% for 1986-2007 without firm F.E., insignificant pre-1985
- Poison Pill
  - Only negative coefficient after 1985
    - -11.7% Coefficient for 1986-2007 without firm F.E., insig. pre-1985

# Q regressions: interact G-Index with (pre-)1985 dummy (Table VI)

Dependent: Q	(1)	(2)	(3)
Gindex x Pre-1985	0.022 (1.82)	0.020 (1.81)	0.011 (1.14)
Gindex x 1985	0.002 (0.20)	0.002 (0.18)	0.006 (0.72)
Gindex	-0.021 (3.70)	-0.020 (3.68)	-0.012 (1.98)
Controls Table III	Yes	Yes	Yes
Firm F.E.	No	No	Yes
Industry F.E.	No	Yes	No
Year F.E.	Yes	Yes	Yes
N	23,296	23,296	23,296
R2	10.12%	15.48%	65.94%

Q regressions:  
interact provisions  
with (pre-)1985  
dummy (Table VI)

Dependent: Q	(1)	(2)	(3)	(4)
CBoard x Pre-1985		0.117 (2.87)		
CBoard x 1985		0.047 (1.09)		
CBoard	-0.065 (2.31)	-0.081 (2.53)		
PPill x Pre-1985				0.161 (1.35)
PPill x 1985				0.053 (0.58)
PPill			-0.116 (4.02)	-0.117 (4.02)
Controls Table III	Yes	Yes	Yes	Yes
Firm F.E.	No	No	No	No
Industry F.E.	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes
N	23,247	23,247	23,296	23,296
R2	15.29%	15.35%	15.54%	15.54%

# Firm Value (Q) and G-Index, 2

## Interact G-Index with dummy for High/Low Industry-wide takeover activity

- Coefficient of G-Index x Low Industry M&A activity
  - 0.3% coefficient, insignificant
- Coefficient of G-Index
  - -1.1% (-1.9%) coefficient with(out) firm F.E., significant
    - 0.3% (-1.6%) for '82-'90, -1.7% (-2.0%) for '91-'06 with(out) F.E.
- Coefficient of G-Index x High Industry M&A activity
  - -0.2% (-0.4)% coefficient with(out) firm F.E., significant
    - -0.4% Coefficient for 1982-1990, with or without firm F.E.
- Total G-Index coefficient with firm F.E., 1982-2006
  - -1.3% (-0.8%) for High (Low) Industry M&A activity

# Q regressions; Interact G-Index with dummy for High/Low Industry-wide takeover activity (Table VII)

Dependent: industry-adjusted Q	1982-2006		1982-1990		1991-2006	
	(1)	(2)	(3)	(4)	(5)	(6)
G-Index * Low Friendly Ind48	0.003 (1.72)	0.003 (2.80)	0.001 (0.35)	0.000 (0.07)	0.004 (1.96)	0.005 (3.54)
G-Index	-0.019 (3.73)	-0.011 (1.79)	-0.016 (3.56)	0.003 (0.63)	-0.020 (3.31)	-0.017 (1.80)
G-Index * High Friendly Ind48	-0.004 (2.15)	-0.002 (1.82)	-0.004 (1.77)	-0.004 (2.08)	-0.005 (2.00)	-0.002 (1.30)
48 Ind. % friendly, #	-0.24 (0.54)	-0.28 (1.12)	0.41 (1.08)	0.22 (0.65)	-0.45 (0.76)	-0.50 (1.68)
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm F.E.	No	Yes	No	Yes	No	Yes
Industry F.E.	Yes	No	Yes	No	Yes	No
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes
N	21,867	21,867	6,170	6,170	15,697	15,697
R2	15.32%	66.98%	16.70%	80.39%	16.39%	71.42%



# Individual Provisions (Table IX)

	Dependent: industry-adjusted Q		
	1978-2006	1978-2006	1985-2006
	(1)	(2)	(3)
Poison Pill	-0.099 (3.31)	-0.044 (1.73)	-0.050 (2.13)
Staggered Board	-0.028 (0.90)	0.066 (1.66)	
Golden Parachute	-0.073 (2.64)	-0.038 (1.41)	
Supermajority Approval Req. for Change of Charter	-0.045 (0.82)	-0.055 (1.14)	
Supermajority Approval Req. for Change of By-laws	-0.068 (2.20)	-0.052 (1.40)	
Supermajority Approval Req. for Mergers	0.0026 (0.09)	0.035 (1.18)	
Other Controls	Yes	Yes	Yes
Firm F.E.	No	Yes	Yes
Industry F.E.	Yes	No	No
Year F.E.	Yes	Yes	Yes
N	22,179	22,179	20,581
R2	15.83%	66.41%	6.70%



# Pill or

# no...

(Table IX)

Dependent: industry-adjusted Q

1985 - 2006

	(4)	(5)	(6)
Poison Pill		-0.046 (1.96)	-0.141 (1.92)
G-Index	-0.022 (3.67)		
G-Index without Poison Pill		-0.010 (1.54)	
G-Index without Poison Pill x Firm has Poison Pill			-0.004 (0.57)
G-Index without Poison Pill Firm has no Poison Pill			-0.015 (1.92)
Other Controls	Yes	Yes	Yes
Firm F.E.	Yes	Yes	Yes
Industry F.E.	No	No	No
Year F.E.	Yes	Yes	Yes
N	20,920	20,581	20,581
R2	80.39%	16.39%	71.42%



# Reverse Causality for Poison Pill (Table X)

	1978-2006		1979-1989		1985-1989		1990-2006	
<b>Ordered Logit Poison Pill: marginal effects of adding Poison Pill</b>								
	(1)	(2)	(3)	(4)	(5)	(6)	(5)	(6)
Q	-0.006 (2.73)	-0.004 (2.01)	-0.002 (0.31)	-0.007 (2.42)	-0.022 (2.20)	-0.023 (2.43)	0.000 (0.16)	-0.001 (0.54)
G-Index	0.000 (0.29)	-0.001 (1.85)	0.008 (10.29)	0.002 (3.93)	0.004 (2.22)	0.007 (4.10)	-0.003 (4.67)	-0.003 (4.91)
Log Book	-0.006 (5.31)	-0.005 (5.48)	0.005 (2.79)	0.002 (2.14)	0.006 (1.57)	0.006 (1.91)	-0.009 (7.64)	-0.008 (7.61)
Leverage	-0.013 (1.07)	-0.008 (0.79)	-0.043 (2.22)	-0.028 (2.65)	-0.098 (2.74)	-0.090 (2.76)	0.016 (1.35)	0.011 (1.04)
Total IO	0.031 (3.56)	0.040 (5.61)	0.125 (8.31)	0.046 (5.03)	0.198 (6.87)	0.163 (6.14)	-0.004 (0.48)	0.010 (1.21)
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	No	Yes	No	Yes	No	Yes	No	Yes
N	12,070	12,070	5,290	5,290	3,088	3,088	6,780	6,780
Pseudo R2	1.86%	9.81%	8.01%	21.61%	4.20%	11.62%	4.20%	5.98%



# Conclusion

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- Introduce New Database for 1978 - 1989
  - 1978, 1983, 1988 panels, about 1,000 firms
    - Will become publicly and freely available (hopefully soon...)
- Significant Time Variation in Shareholder Rights
  - Market-wide and industry-specific M&A
- Shareholder Rights and Firm Value
  - G-index negative coefficient of -1% even with firm F.E.
  - 1985 Delaware Supreme Court: Validating poison pills
  - Industry-specific M&A activity as instrument/channel
- Poison Pill
  - Only individual provision related to Q surviving firm F.E.
  - If included, other provisions don't seem to matter