STAGGERED BOARDS AND THE FIRM VALUE, REVISITED

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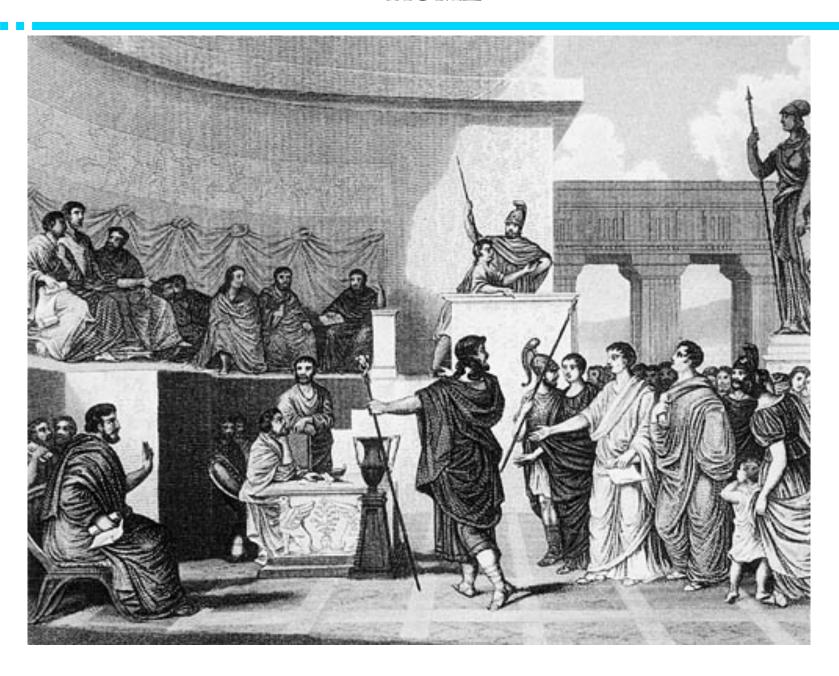
Paris, July 2, 2015

THEORETICAL BACKGROUND

I. THE TRADITIONAL VIEW

• Governance of corporations similar to Representative Democracy models (VC Strine, 2006).

ROME



THEORETICAL BACKGROUND

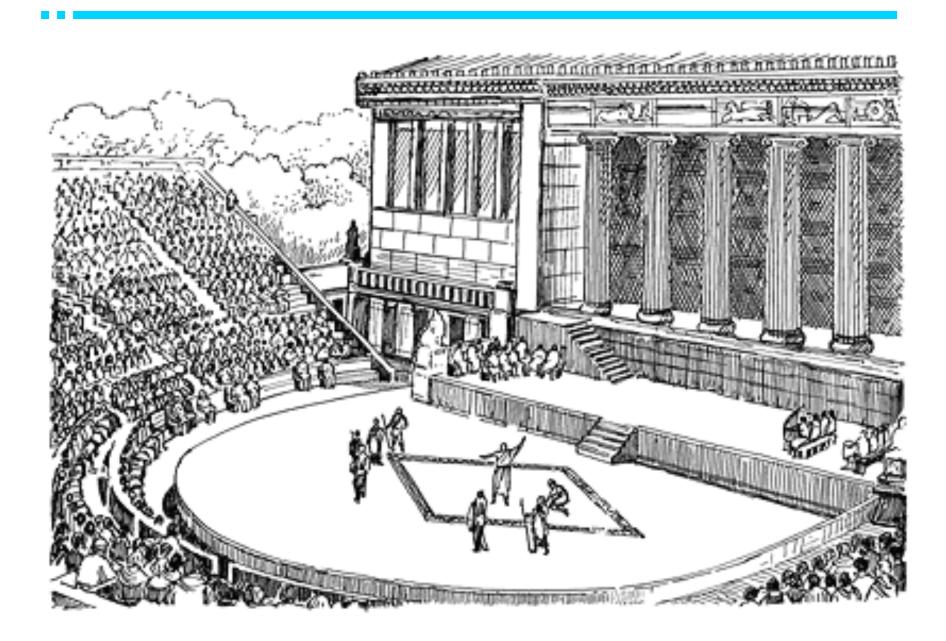
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- Governance of corporations similar to <u>Representative</u> <u>Democracy</u> models (VC Strine, 2006).
- ➤ Board authority to run the corporation with accountability mechanisms.
 - > Shareholders lack expertise / incentives / information

II. THE SHAREHOLDER EMPOWERMENT VIEW

• <u>Direct Democracy</u> better suited to address (agency) costs arising from delegation of control (Bebchuk, HLR 2005).

ATHENS



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II. THE SHAREHOLDER EMPOWERMENT VIEW

- <u>Direct Democracy</u> better suited to address (agency) costs arising from delegation of control (Bebchuk, HLR 2005).
 - > Corporate law should empower shareholders

THE STAGGERED BOARD CONTROVERSY

- Staggered Boards (SBs): boards with (typically) three classes of directors, with only one class standing for shareholder re-election each year.
- Quintessential corporate governance failure **or** instrument to strengthen commitment to long-term value creation?
- The empirical literature to date has documented that SBs reduce firm value (e.g., Bebchuk & Cohen, 2005; Faleye, 2007; ISS, 2013).
- We challenge this result examining 30 years of SBs (i.e., 1978-2011) and finding that SBs increase firm value over time.

HLS OFFENSIVE

Shareholder Rights Project

 About
 News
 2013 Proposals
 2012 Proposals

 Negotiated Agreements
 Successful Proposals
 Declassifications
 Represented Institutions

The Shareholder Rights Project (SRP) is a clinical program operating at Harvard Law School and directed by Professor Lucian Bebchuk. The SRP works on behalf of public pension funds and charitable organizations seeking to improve corporate governance at publicly traded companies, as well as on research and policy projects related to corporate governance. Any views expressed and positions taken by the SRP and its representatives should be attributed solely to the SRP and not to Harvard Law School or Harvard University.

The Shareholder Rights Project (SRP) is representing and advising eight institutional investors, seven public pension funds and one foundation. These investors serve more than 3 million people, and the aggregate value of assets that they manage exceeds \$400 billion. Additional information about each of the SRP-represented investors is provided here.

The SRP provides SRP-represented investors with a range of services, including assistance in connection with selecting companies for proposal submission, designing proposals, submitting proposals on behalf of represented investors, engaging with companies, negotiating and executing agreements by companies to bring management declassification proposals, and presenting proposals at annual meetings.

The SRP's work during 2012 focused on board declassification proposals that were submitted for the 2012 annual meetings of 89 S&P 500 companies that had a classified board. A detailed review of all the outcomes of this work is provided in the SRP's 2012 annual report, available here. The SRP's work during 2013 has focused on shareholder declassification proposals that the SRP has submitted on behalf of SRP-represented investors for a vote at the 2013 annual meetings of 76 S&P 500 and Fortune 500 companies (a list of the 76 companies that received proposals is available here).

Main results of the SRP's work during 2012 and 2013 thus far include the following:

- 99 Successful engagements: 99 of the companies receiving proposals in 2012, 2013 or both – about three-quarters of such companies – have agreed to move toward annual elections following the submission of board declassification proposals for 2012 and 2013 meetings. Further details on these successful engagements are available on the Negotiated Agreements page.
- 80 Board declassifications: A total of 80 S&P 500 and Fortune 500 companies have already declassified during 2012 and 2013 as a result of the work by the SRP and SRP-represented investors (listed on the <u>Declassifications</u> page). These declassified companies had an aggregate market capitalization exceeding one trillion dollars as of July 15, 2013. A significant number of additional declassifications are expected to result as agreed-upon management declassification proposals go to a vote at other companies that have entered into agreements to bring such management proposals to a vote.
- 58 Successful proposals: 58 precatory declassification proposals have already passed (listed on the <u>Successful Proposals</u> page) – 39 proposals passed at 2012 meetings, with average support exceeding 82% of votes cast, and 19 proposals passed at 2013 meetings, with average support exceeding 79% of votes cast. Additional precatory declassification proposals are expected to pass by the end of 2013 as additional proposals submitted by the SRP on behalf of SRP-represented investors go to a vote at 2013 annual meetings.

Annual elections are widely viewed as corporate governance best practice. Board declassification and the resulting annual elections could make directors more accountable and thereby contribute to improving performance and increasing firm value. The substantial shareholder support for board declassification, and the value of the work done on the subject by the SRP and SRP-represented investors, are described in a two pieces by the SRP's director – a New York Times DealBook column entitled "Giving Shareholders a Voice," and a response to critics entitled "Wachtell Lipton was Wrong about the Shareholder Rights Project." Recent shareholder proposals submitted by the SRP on behalf of its clients, which note evidence of the benefits of declassification and shareholder support, are available here.

The SRP's director is <u>Lucian Bebchuk</u>. Its 2012-2013 advisory board includes <u>Richard Breeden</u>, <u>Jesse Fried</u>. <u>Jeffrey Gordon</u>. <u>Reinier Kraakman</u>, and <u>Peter Mixon</u>. <u>Scott Hirst</u> serves as the SRP's Associate Director, and <u>June Rhee</u> serves as Coursel.

Shareholder Rights Project

About News 2013 Proposals 2012 Proposals

Negotiated Agreements Successful Proposals Declassifications Represented Institutions

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SRP-Represented Investors

This webpage provides information about the institutional investors with which the SRP is working. For the 2013 proxy season, the Shareholder Rights Project (SRP) is representing and advising eight institutional investors in connection with the submission of shareholder proposals: The Illinois State Board of Investment (ISBI), the Los Angeles County Employees Retirement Association (LACERA), the Nathan Cummings Foundation (NCF), the North Capolina Department of State Treasurer (NCDST), the Ohio Public Employees Retirement System (OPERS), the Massachusetts Pension Reserves Investment Management Board (PRIM), the Florida State Board of Administration (SBA) and the School Employees Retirement System of Ohio (SERS).

Overall, the eight SRP-represented investors hold assets with an aggregate value exceeding \$400 billion and serve over 3 million members. Additional information about these institutional investors is provided below.

<u>ISBI</u> is a non-appropriated state agency that is responsible for managing and investing the pension assets of the Illinois General Assembly Retirement System, the Judges' Retirement System of Illinois and the State Employees' Retirement System of Illinois. ISBI managed assets with a value exceeding \$11 billion as of December 31, 2011.

LACERA, the largest county retirement system in the United States, administers and manages the retirement fund for employees of Los Angeles County and its outside districts, and their beneficiaries. LACERA managed assets with a value exceeding \$38 billion and provided retirement benefits and savings for more than 148,000 members as of June 30, 2012.

The <u>NCF</u> is a charitable foundation and an institutional shareholder, and submits shareholder resolutions on issues that lie at the intersection of its programmatic interests and long-term shareholder value.

The NCDST is the fiduciary for the North Carolina Retirement Systems (NCRS). The NCRS managed assets with a value exceeding \$74 billion, and provided retirement benefits and savings for more than 850,000 North Carolinians, including teachers, state employees, firefighters, police officers, and other public workers, as of June 30, 2012.

<u>OPERS</u>, the largest public pension fund in Ohio, manages assets with a value exceeding \$74 billion, and provides retirement benefits and savings for more than 986,000 members, as of December 31. 2011.

<u>PRIM</u> is charged with the general supervision of the Pension Reserves Investment Trust (PRIT) Fund, with pension assets exceeding \$51 billion, and more than 280,000 members. The PRIT Fund is a pooled investment fund that invests the assets of the Massachusetts Teachers' and State Employees' Systems, and the assets of county, authority, district, and municipal retirement systems that choose to invest in the PRIT Fund.

The <u>SBA</u> is an agency of Florida state government that provides a variety of investment services to various governmental entities. These include managing the assets of the Florida Retirement System Trust Fund (FRS), the Lawton Chiles Endowment Fund, the Local Government Surplus Funds Trust Fund (Florida PRIME), the Hurricane Catastrophe Fund, and a variety of other mandates. The SBA manages assets with a total value exceeding \$155 billion and the FRS provides pension benefits to almost 1 million beneficiaries and retirees.

SERS is a statewide public pension fund that provides pension benefits and access to postretirement health care for non-teaching public school employees. SERS provides retirement security for administrative assistants, bus drivers, food service workers, librarians, maintenance personnel, teacher aides, and treasurers. SERS' mission is to provide its 190,000+ members, retirees, and beneficiaries with pension benefit programs and services that are soundly financed, prudently administered, and delivered with understanding and responsiveness. On June 30, 2012, SERS managed assets of \$10.3 billion.

AN ONGOING DEBATE

Lipton, Wachtell, Rosen & Katzs, February 2013 Memo, "The Shareholder Rights Project Is Wrong" (The New York Times):

'It is surprising that a major legal institution would countenance the formation of a clinical program to advance a narrow agenda that would exacerbate the short-term pressures under which American companies are forced to operate."

➤ Bebchuk, CLR 2013:

"None of the organizations that press for board insulation in the name of long-term value ..., such as ... Wachtell, Lipton, Rosen & Katz, have thus far attempted to conduct or commission research that would use the substantial data available on the financial performance of firms and shareholders to validate their myopic activists hypothesis."

MICRO-FOUNDATION OF DIRECT DEMOCRACY VIEW

- Jensen and Meckling (1976): separation of ownership and control creates **agency costs**.
- Shareholders' objective is value maximization and this objective is uniquely defined.
- The only source of market incompleteness (i.e., imperfection) is managerial moral hazard.
- Strong belief in the proper functioning of the pricesystem.

INCARNATION INTO CORPORATE LAW

- **Assumption**: Fiduciary law (stick) and contractual incentives (carrot) are inadequate in controlling managerial moral hazard.
- Consequence 1: Shareholders' threat of removing directors at will is the most effective disciplining device for managers.
- Consequence 2: Giving shareholders effective power to dismiss directors means giving shareholders authority on corporate decision.

MISSING ACCOUNTS

- In a shareholder economy (when shareholders decide projects) with incomplete markets, the firm profit function is not defined → Shareholder Disagreement.
- Prices are (often) not uniquely defined → Multiplicity of equilibria.
- Competitive equilibrium under asymmetric information is likely to be inefficient \rightarrow **Adverse selection**.
- With incomplete markets and contracts, the hold-up risk for corporate stakeholders is pervasive \rightarrow Limited Commitment **Problem** \rightarrow Anonymous markets are incapable of making long-term commitments.
- The commitment problem is extended on the **stakeholders** (their relationships are governed by **implicit contracts**) \rightarrow Stakeholders rationally anticipate the effect and increase the cost of their contributions.

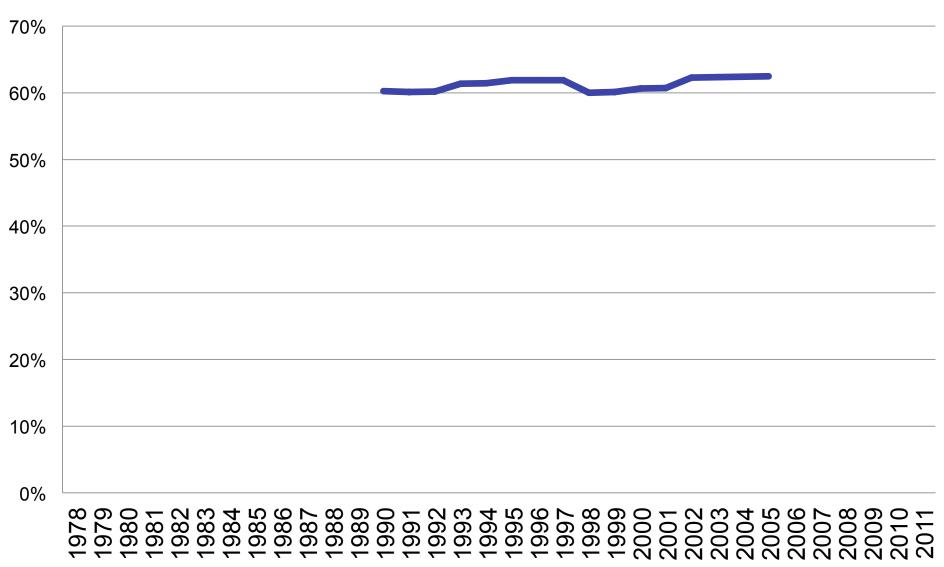
DATA

Staggered Boards

- 1978–1989 from Cremers & Ferrell (2013) database,
 hand-collected information
- 1990–2011 from Risk Metrics, previously Investor Responsibility Research Center (IRRC)
 - » Hand-checked missing years in the 1994–2006 using proxy statements (SEC's EDGAR)
 - » Example: Procter & Gamble
- Firm Value
- $Q \rightarrow Compustat;$
- Stock Return (CRSP).

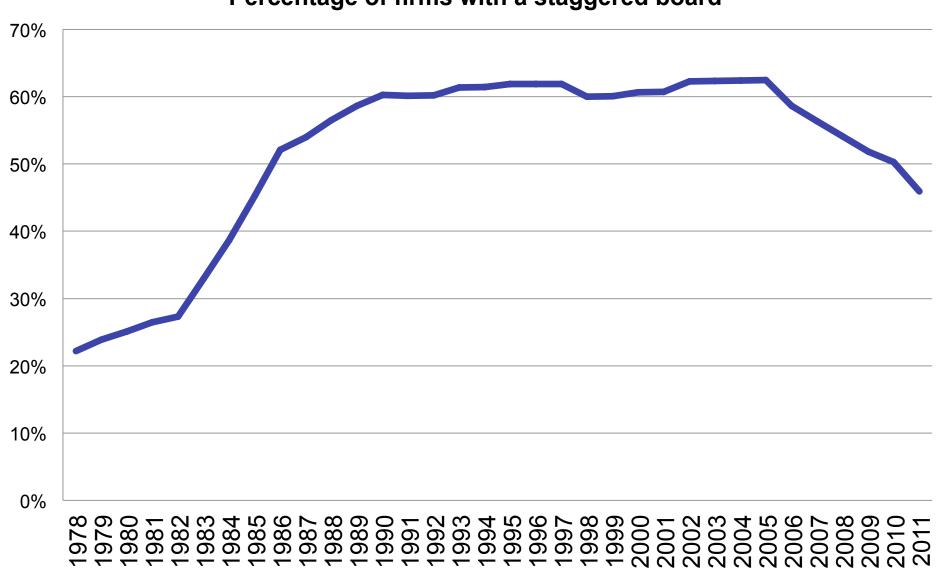
ALMOST NO TIME-SERIES VARIATION IN 1990-2005



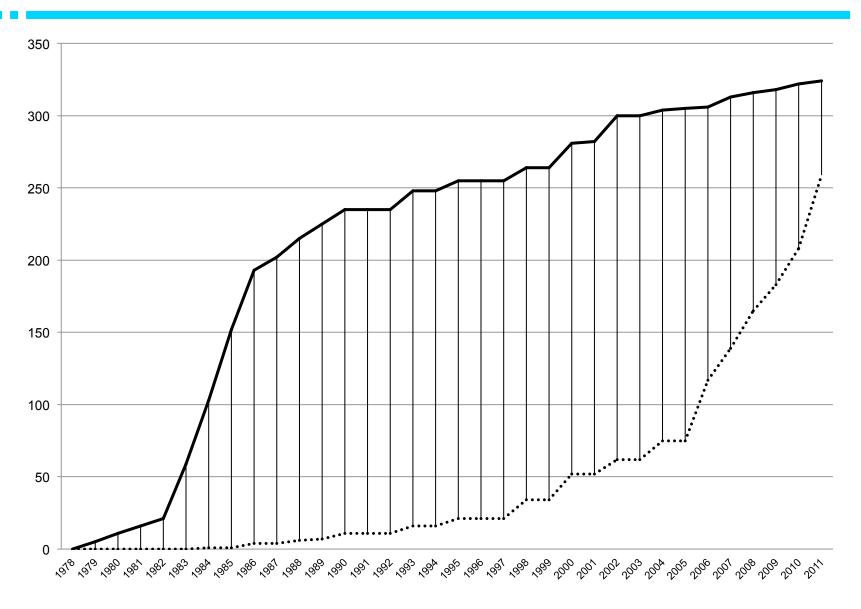


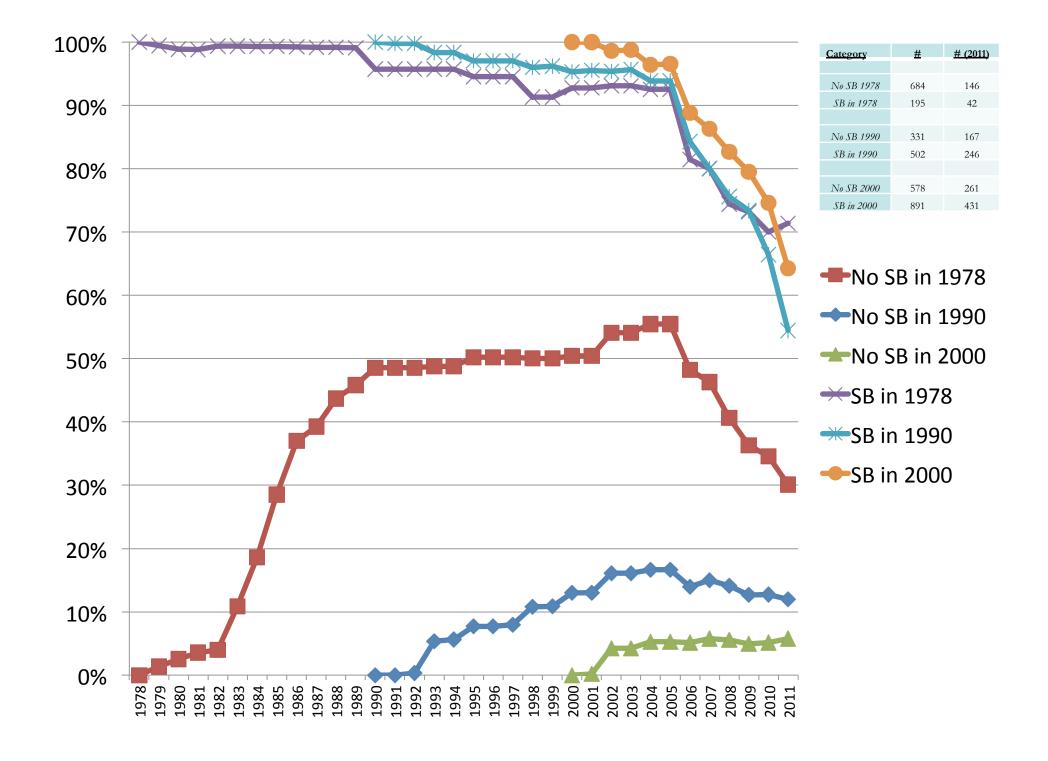
VARIATION OF SB IN 1978-2011





STAGGERING UP V. STAGGERING DOWN





SBS AND FIRM VALUE

- Confirm previous cross-sectional results:
- > Negative association between SBs and firm value.

STAGGERED BOARDS AND FIRM VALUE

Dep. Variable: Q				
Dep. variable. g	(1)	(2)	(3)	(4)
Period:		- 2002		- 2011
Indep. Variables	1330	2002	13,70	
Staggered Board	-0.042	0.119*	-0.041**	0.059**
(firm cluster)	(1.17)	(1.82)	(2.38)	(2.11)
[no cluster]	[1.83]	[2.15]	[4.98]	[4.65]
G-Index	-0.005	-0.005		
	(0.57)	(0.33)		
Assets	0.052***	-0.396***	-0.027***	-0.215***
	(3.24)	(8.10)	(3.74)	(12.01)
Firm Age	-0.050	0.327		
	(1.34)	(1.59)		
Delaware	-0.010		0.014	
	(0.28)		(0.76)	
Insider Ownership	0.318	0.562		
	(0.95)	(1.27)		
Insider Ownership²	-0.179	-0.742		
	(0.37)	(1.06)		
ROA	5.939***	2.071***	5.073***	2.939^{***}
	(19.11)	(7.74)	(32.74)	(20.27)
CAPX	-1.048**	-0.907**	-0.263	0.102
	(2.17)	(2.19)	(1.14)	(0.60)
R&D	5.499***	0.423	4.231***	1.445***
	(7.17)	(0.35)	(12.01)	(2.72)
Industry M&A	0.129	0.129	-0.235***	-0.248***
	(0.85)	(0.93)	(3.04)	(3.59)
Fixed Effects:	Industry	Firm	Industry	Firm
N	5,253	5,253	30,797	30,797
R-Squared	0.63	0.84	0.51	0.74

SBS AND FIRM VALUE

- Confirm previous **cross-sectional** results:
- > Negative association between SBs and firm value.

- Reversed in **time-series**:
- > Controlling for firm *fixed effects*, association is positive (levels analysis).
 - > Average firm value after staggering up (down) is higher (lower).

STAGGERED BOARDS AND FIRM VALUE

Dep. Variable: Q						
	(1)	(2)	(3)	(4)		
Period:	1995 -	- 2002	1978 - 2011			
Indep. Variables						
Staggered Board	-0.042	0.119^{*}	-0.041**	0.059**		
(firm cluster)	(1.17)	(1.82)	(2.38)	(2.11)		
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STAGGERING UP AND STAGGERING DOWN

Dep. Variable: Q							
Variables	(1)	(2)	(3)	(4)	(5)	(6)	
Period:	1978	- 2011	1978	- 1994	1995	- 2011	
Staggering Up	0.0381		0.0232		0.130**		
	(1.14)		(0.76)		(2.21)		
Staggering Down		-0.129***		-0.0598		-0.138***	
		(3.09)		(1.06)		(2.80)	
Assets	-0.214***	-0.216***	-0.104***	-0.104***	-0.360***	-0.362***	
	(-11.95)	(-12.03)	(-4.18)	(-4.17)	(-15.13)	(-15.13)	
ROA	2.967***	2.964***	1.916***	1.919***	2.512***	2.511***	
	(20.28)	(20.39)	(11.78)	(11.77)	(14.39)	(14.39)	
CAPX	0.115	0.115	0.139	0.137	0.270	0.260	
	(0.67)	(0.67)	(0.78)	(0.77)	(1.09)	(1.06)	
R&D	1.465***	1.445***	2.659**	2.652**	-0.137	-0.139	
	(2.76)	(2.74)	(2.09)	(2.07)	(-0.24)	(-0.24)	
Industry M&A Volume	-0.155***	-0.155***	-0.0789	-0.0791	-0.131**	-0.128**	
	(-2.86)	(-2.86)	(-0.87)	(-0.87)	(-2.15)	(-2.12)	
Fixed Effects	Firm	Firm	Firm	Firm	Firm	Firm	
N	30,797	30,797	11,384	11,384	19,413	19,413	
Adjusted R-Squared	0.739	0.740	0.783	0.783	0.764	0.764	

OTHER SPECIFICATIONS

- First difference analysis.
- Matching.
- Portfolio analysis:
 - Equally weighted;
 - Value weighted.

FIRST DIFFERENCE ANALYSIS

Dep. Variables:	$\Delta \mathbf{Q}_{[t, t+1]}$	$\Delta \mathbf{Q}_{[t, t+2]}$	$\Delta \mathbf{Q}_{t, t+3}$	$\Delta \mathbf{Q}_{/t,\;t+4/}$	$\Delta \mathbf{Q}_{/t, t+5/}$
Variables	<u>(1)</u>	<u>(2)</u>	(3)	<u>(4)</u>	<u>(5)</u>
Δ Staggered Board _[t-1, t]	0.030**	0.041**	0.061**	0.096***	0.075**
[: 7:]	(2.16)	(2.11)	(2.37)	(3.22)	(2.22)
Δ Ln(Assets) _[t-1, t]	-0.292***	-0.554***	-0.719***	-0.768***	-0.784***
	(15.35)	(21.56)	(23.55)	(22.50)	(20.69)
$\Delta \ \mathbf{ROA}_{[t-1,\ t]}$	2.013***	1.779***	1.42***	1.228***	1.203***
. ,	(22.70)	(16.48)	(12.69)	(10.54)	(9.71)
Δ CAPX/Assets _[t-1, t]	-0.221**	-0.970***	-1.006***	-1.326***	-1.163***
L . J	(1.99)	(6.96)	(6.94)	(8.40)	(6.64)
Δ R&D/ Sales $_{[t-1, t]}$	-0.683**	-0.480	-0.775	-0.833	-1.158*
L / J	(1.97)	(1.29)	(1.63)	(1.56)	(1.93)
Δ Industry M&A Volume _[t-1, t]	0.269***	0.157***	0.138***	0.084	0.179***
2 . 3	(6.07)	(3.29)	(2.67)	(1.52)	(2.94)
	1979-	1979-	1979-	1979-	1979-
Sample Period (years)	2011	2010	2009	2008	2007
# of firms in regression	2,886	2,766	2,597	2,456	2,311
N	29,166	28,004	25,875	23,860	21,954
Adjusted R-Squared	0.08	0.07	0.07	0.07	0.07

WHICH DIRECTION OF CAUSALITY?

- How to reconcile time-series with cross-sectional evidence?
- > Possible explanation is "reverse causality"
 - ➤ Having relatively low firm value could induces some firms to adopt a SB (rather than a SB causing low firm value).
 - ➤ Could explain cross-sectional result that firms with SBs tend to have low firm values.

PREDICTING MODELS: STAGGERING

Dep. Variable is: Pr (Stagger in period t)	Random Effects	Cox Proportional
	Probit Model	Hazard Model
Variables	<u>(1)</u>	<u>(2)</u>
$\mathbf{Q}_{[t-1]}$	-0.007***	0.422***
	(3.84)	(7.63)
Ln (Assets) _[t-1]	-0.0003	1.11*
<i>L</i> J	(0.47)	(1.69)
Delaware Incorporation _[t-1]	-0.001	0.790**
	(0.54)	(2.14)
$\mathbf{ROA}_{[t-1]}$	0.033^{*}	1.471***
LJ	(1.79)	(5.05)
Capital Expense/Assets _[t-1]	0.057**	1.124**
L J	(2.29)	(2.45)
R&D/ Sales _[t-1]	-0.071**	0.898
L J	(2.44)	(1.54)
Industry M&A Volume _[t-1]	0.065***	1.016
L J	(3.21)	(0.23)
Percentage Effect (i.e., Economic Significance)	-35.1%	-57.8%
N	15,359	14,535
# of firms in regression	1,784	1,651

PREDICTING MODELS: DE-STAGGERING

Dep. Variable is: Pr (De-Stagger in period t)	Random Effects	Cox Proportional
	Probit Model	Hazard Model
Variables	<u>(1)</u>	<u>(2)</u>
$Q_{[t-1]}$	0.001	0.856
. ,	(0.68)	(1.48)
Ln (Assets) [t-1]	0.007***	1.830***
. ,	(12.70)	(6.22)
Delaware Incorporation _[t-1]	0.003	1.021
. ,	(1.73)	(0.14)
ROA _[t-1]	-0.019	1.049
. ,	(1.35)	(0.46)
Capital Expense/Assets _[t-1]	-0.031	1.029
. ,	(1.45)	(0.48)
R&D/ Sales _[t-1]	0.003	0.993
` <i>'</i>	(0.15)	(0.09)
Industry M&A Volume _[t-1]	-0.028	0.956
<i>L</i> J	(1.55)	(0.42)
Percentage Effect (i.e., Economic Significance)	-6.2%	-14.4%
N	17,368	13,462
# of firms in regression	1,813	1,494

FIRST DIFFERENCE ANALYSIS - MATCHED SAMPLE

Dep. Variable:	$\Delta \mathbf{Q}_{[t-1, t]}$	$\Delta \mathbf{Q}_{[t-1, t+1]}$	$\Delta \mathbf{Q}_{[t-1, t+2]}$	$\Delta \mathbf{Q}_{[t-1, t+3]}$	$\Delta \mathbf{Q}_{[t-1, t+4]}$
Variables	(1)	(2)	(3)	(4)	(5)
Δ Staggered Board _[t-1, t]	0.035**	0.045**	0.068**	0.102***	0.085**
, J	(2.39)	(2.26)	(2.55)	(3.11)	(2.23)
Δ Assets _[t-1, t]	-0.379***	-0.451***	-0.48***	-0.604***	-0.688***
. , ,	(5.21)	(4.16)	(3.36)	(4.52)	(4.85)
$\Delta \; \mathbf{ROA}_{[t-1,\;t]}$	1.881***	1.737***	1.206**	1.534***	0.687
J	(6.6)	(4.09)	(2.18)	(3.13)	(1.35)
Δ CAPX/Assets _[t-1, t]	-0.225	-0.392	-0.822	-1.636**	-0.839
	(0.43)	(0.69)	(1.08)	(2.09)	(0.93)
Δ R&D/ Sales _[t-1, t]	1.08	5.162	6.37^{*}	2.893	-0.86
	(0.57)	(1.68)	(1.77)	(0.84)	(0.2)
Δ Industry M&A Volume _[t-1,t]	-0.354	-0.231	-0.192	0.187	0.198
[* **]	(1.17)	(0.55)	(0.47)	(0.5)	(0.45)
Sample Period (Years)	1979-	1979-	1979-	1979-	1979-
	2012	2011	2010	2009	2008
N	1,159	1,104	951	872	803
Adjusted R-Squared	0.09	0.07	0.069	0.072	0.043

STAGGERING & DE-STAGGERING PORTFOLIO EW RETURNS

Portfolio "6m12"	Four Factors Model			Thre	ee Factors Mo	odel	Market Factor Model				
	<u>Long</u>	<u>Short</u>	<u>Long -</u> Short	<u>Long</u>	<u>Short</u>	<u>Long -</u> Short	<u>Long</u>	<u>Short</u>	<u>Long -</u> <u>Short</u>		
Alpha (Monthly)	0.516**	0.062	0.416	0.442*	-0.016	0.447	0.738**	0.141	0.479		
	(2.04)	(0.19)	(0.95)	(1.72)	(0.05)	(1.05)	(2.57)	(0.43)	(1.13)		
Alpha (Annual)	6.37%	0.75%	5.11%	5.43%	-0.19%	5.50%	9.22%	1.71%	5.90%		

Portfolio "12m12"	Four Factors Model			Thr	ree Factors M	odel	Market Factor Model				
	Long	<u>Short</u>	<u>Long -</u> <u>Short</u>	Long	<u>Short</u>	<u>Long -</u> <u>Short</u>	<u>Long</u>	<u>Short</u>	<u>Long -</u> Short		
Alpha (Monthly)	0.529	-0.293	1.235**	0.388	-0.425	1.296**	0.581*	-0.256	1.266***		
	(1.54)	(1.08)	(2.24)	(1.13)	(1.59)	(2.47)	(1.85)	(0.93)	(2.65)		
Alpha (Annual)	6.54%	-3.46%	15.87%	4.76%	-4.98%	16.71%	7.20%	-3.03%	16.30%		

Portfolio "12m24"	Four Factors Model			Three	Factors Mo	odel	Market Factor Model				
	Long	<u>Short</u>	<u>Long -</u> Short	<u>Long</u>	<u>Short</u>	<u>Long -</u> Short	<u>Long</u>	<u>Short</u>	<u>Long -</u> Short		
Alpha (Monthly)	0.401**	0.039	0.419	0.292*	-0.067	0.407	0.525***	0.039	0.461*		
	(2.30)	(0.17)	(1.44)	(1.65)	(0.31)	(1.45)	(2.7)	(0.18)	(1.68)		
Alpha (Annual)	4.92%	0.47%	5.15%	3.56%	-0.80%	4.99%	6.49%	0.47%	5.67%		

STAGGERING AND DE-STAGGERING PORTFOLIO VW RETURNS

Portfolio "6m12"	Four Factors Model			Thre	e Factors M	odel	Market Factor Model			
	Long	<u>Short</u>	<u>Long -</u> <u>Short</u>	<u>Long</u>	<u>Short</u>	<u>Long -</u> <u>Short</u>	<u>Long</u>	<u>Short</u>	<u>Long -</u> <u>Short</u>	
Alpha (Monthly)	-0.004	-0.132	0.253	-0.047	-0.171	0.278	-0.006	-0.123	0.251	
	(0.01)	(0.43)	(0.53)	(0.13)	(0.56)	(0.58)	(0.02)	(0.4)	(0.51)	
Alpha (Annual)	-0.05%	-1.57%	3.08%	-0.56%	-2.03%	3.39%	-0.07%	-1.47%	3.05%	

Portfolio "12m12"	Four Factors Model			Thre	ee Factors M	odel	Market Factor Model			
	Long	<u>Short</u>	<u>Long -</u> Short	Long	<u>Short</u>	Long - Short	Long	<u>Short</u>	<u>Long -</u> Short	
Alpha (Monthly)	0.231	-0.349	1.363**	0.125	-0.398	1.263**	0.232	-0.416	1.34**	
	(0.58)	(1.28)	(2.35)	(0.34)	(1.54)	(2.34)	(0.68)	(1.58)	(2.57)	
Alpha (Annual)	2.81%	-4.11%	17.64%	1.51%	-4.67%	16.25%	2.82%	-4.88%	17.32%	

Portfolio "12m24"	Four Factors Model			Th	Three Factors Model			Market Factor Model		
	<u>Long</u>	<u>Short</u>	<u>Long -</u> Short	<u>Long</u>	<u>Short</u>	<u>Long -</u> Short		<u>Long</u>	<u>Short</u>	<u>Long -</u> Short
Alpha (Monthly)	-0.008	-0.167	0.154	-0.06	-0.129	0.054		0.024	-0.165	0.149
	(0.04)	(0.69)	(0.50)	(0.28)	(0.53)	(0.17)		(0.12)	(0.67)	(0.47)
Alpha (Annual)	-0.10%	-1.99%	1.86%	-0.72%	-1.54%	0.65%		0.29%	-1.96%	1.80%

THE LIMITED COMMITMENT PROBLEM

- We capture the need for commitment using several proxies of relation-specific investments:
 - R&D and Intangible Assets → How much a firm invest in research and development and innovation → Managerial specific investment;
 - Large Customer → Firm has at least one customer accounting for 10% or more of its sales → Customer specific investment;
 - Labor Productivity → Firm employs more specific labor (higher marginal product), which requires more specific investments → Labor specific investment;
 - Contract Specificity → Higher fraction of inputs are not sold on an organized exchange → Supplier specific investment.

STAGGERED BOARDS AND INNOVATION

Dep	o. Variable: Q		
		(1)	(2)
Indep. Variables			
Staggered Board		0.071**	-0.024
		(2.44)	(0.96)
R&D		0.39	
		(0.56)	
Intangible Assets			-0.143
			(1.64)
R&D * Staggered Board		1.956**	
		(2.54)	
Intangible Assets * Staggered Board			0.164***
			(3.51)
Fixed Effects:		Year	+ Firm
N		30,979	27,519
R-Squared		0.72	0.74

STAGGERED BOARDS AND STAKEHOLDER RELATIONSHIP

Dep. Variable: Q_{f}	<i>t</i> 1		
	(1)	(2)	(3)
Indep. Variables			
Staggered Board	0.043	-0.0493	-0.249
	(1.45)	(-0.91)	(-1.45)
Large Customer	-0.085***		
	(-3.26)		
Large Customer * Staggered Board	0.073***		
	(2.38)		
Labor Productivity		-0.227***	
		(-8.31)	
Labor Productivity * Staggered Board		0.0994***	
		(3.74)	
Contract Specificity			-0.726**
			(-2.01)
Contract Specificity * Staggered Board			0.362
			(1.62)
Fixed Effects:		Year + Firm	
N	30,797	24,880	9,628
R-Squared	0.715	0.748	0.695

LARGE CUSTOMERS (CONTINUED)

	(1)	(2)	(3)	(4)
Staggered Board _[t-1]	0.043	0.044	0.044	0.047*
tì	(1.45)	(1.50)	(1.54)	(1.66)
Staggered Board _[t-1] *Large Customer 10% _[t-1]	0.073**			
L J	(2.38)			
Large Customer 10% _[t-1]	-0.085***			
L J	(3.26)			
Staggered Board _[t-1] *Large Customer 20% _[t-1]		0.090***		
L J		(2.69)		
Large Customer 20% _[t-1]		-0.093***		
- J		(3.62)		
Staggered Board _[t-1] *Large Customer 30% _[t-1]			0.125***	
			(3.34)	
Large Customer 30% _[t-1]			-0.131***	
			(4.81)	a to a skylyty
Staggered Board _[t-1] *Large Customer 40% _[t-1]				0.149***
T 0 . 400/				(3.53)
Large Customer 40% [1-1]				-0.131***
				(4.33)
N	31,574	31,574	31,574	31,574
Adjusted R-Squared	0.715	0.715	0.715	0.715

TO SUM UP

- We investigate 30 years of SBs and find that, over time, staggering up (down) is associated with increases (decreases) in firm value.
- First, we calls into question the managerial entrenchment view of SBs and the superiority of shareholder driven governance models.
- > Second, we find that staggered boards increase firm value:
- (i) SBs valuable to protect commitments to long-term value creation;
- (ii) Traditional board-centric model (i.e., the managerial model) efficiently serves the interests of shareholders.

POLICY AND FUTURE RESEARCH

- Staggered boards should be the default.
- To opt-out we propose **supermajority** vote:
 - Higher shareholder agreement
 - Limit externality such as SRP
- Understand governance dynamics (complement, substitute).
- To the extent that moral hazard is a problem, how efficiently constraining managerial moral hazard?
 - ➤ Contract Theory → Better incentives?
 - ➤ Judicial Review → Fiduciary duties?

Thank You

Addenda

GOVERNANCE PROVISIONS

Dep. Variable is $\mathbf{Q}_{[t]}$	(1)	(2)	(3)	(4)
Variables:				
Staggered Board _[t-1]	0.091^{*}	0.133***	0.077**	0.077**
L J	(1.94)	(2.97)	(2.57)	(2.58)
CEO-Board Chairman Duality _[t-1]	-0.017	0.036**		
L J	(0.58)	(1.96)		
Governance Index _[t-1]			-0.015**	-0.013**
L J			(2.40)	(2.44)
CEO-Board Chairman Duality _[t-1] *				
Staggered Board _[t-1]	0.089***	-		
	(2.81)	-		
Governance Index _[t-1] *Staggered				
Board _[t-1]			0.004	-
<i>L</i> 3			(0.64)	-
Economic Significance (Staggered B.)	6.26%	-	4.86%	-
Economic Significance (Int. Variable)	5.10%	-	1.28%	-
Sample Period (Years)	1996 -2011	-	1978 -2011	-
N	18,552	18,552	23,525	23,525
Adjusted R-2	0.73	0.73	0.71	0.71

EXECUTIVE COMPENSATION

Dep. Variable is $\mathbf{Q}_{[t]}$	(1)	(2)	(3)	(4)	(5)	(6)
Variables:	()	()	()	()	()	()
Staggered Board _[t-1]	0.116**	0.120^{***}	0.127**	0.152***	0.105**	0.126***
<u>L</u> . J	(2.58)	(2.63)	(2.54)	(3.05)	(2.53)	(2.85)
CEO Delta _[t-1]	0.053^{***}	0.058^{***}				
	(4.66)	(7.60)				
CEO Vega _[t-1]			-0.070	0.026		
			(1.28)	(0.58)		
CEO Total Compensation _[t-1]					0.086***	0.121***
					(4.29)	(8.87)
CEO Delta _[t-1] * Staggered Board _[t-1]	0.008					
	(0.57)					
CEO Vega _[t-1] * Staggered Board _[t-1]			0.199***			
			(2.82)			
CEO Total Comp _[t-1] * Stagg.						
Board _[t-1]					0.061**	
					(2.44)	
Economic Significance (Staggered B.)	6.62%	-	7.26%	-	5.97%	-
Economic Significance (Int. Variable)	1.79%	-	5.53%	-	5.43%	-
Sample Period (Years)	1992 -	-	1992 -	-	1992 -	-
	2010		2010	4 - 0 0 0	2011	4 - 0
N	17,573	17,573	15,983	15,983	17,965	17,965
Adjusted R-2	0.74	0.74	0.73	0.73	0.74	0.74

CEO TURNOVER

Dependent Variable:	Prob (Forced CEO Turnover _[t])	Prob (Forced CEO Turnover _[t])	Prob (CEO Turnover _[t])	Prob (CEO Turnover _[t])
1	(1)	(2)	(3)	(4)
Staggered Board _[t]	0.002	0.001	0.001	0.0004
[F]	(0.77)	(0.45)	(0.12)	(0.06)
Excess Returns [t]	-0.021***	-0.02***	-0.044***	-0.042***
ניין	(7.23)	(3.62)	(5.91)	(3.74)
Staggered Board _[i] * Excess				
Returns _[t]	-	-0.002	-	-0.004
LJ	-	(0.22)	-	(0.25)
Poison Pill _[t]	0.004^{*}	0.004*	0.01^{*}	0.01*
LJ	(1.88)	(1.9)	(1.74)	(1.75)
Delaware Incorporation _[t]	0.002	0.002	0.002	0.002
LJ	(0.97)	(0.97)	(0.27)	(0.27)
N	9,519	9,519	9,519	9,519
Pseudo R-2	0.04	0.04	0.008	0.008
Number of events	164	164	894	894
	1993-	1993-	1993-	1993-
Sample Period	2001	2001	2001	2001