



ARTICLE

The Shareholder Value of Empowered Boards

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Abstract. In the last decade, the balance of power between shareholders and boards has shifted dramatically. Changes in both the marketplace and the legal landscape governing it have turned the call for empowered shareholders into a new reality. Correspondingly, the authority that boards of directors have historically held in U.S. corporate law has been eroded. Empirical studies associating staggered boards with lower firm value have been interpreted to favor this shift of authority, supporting the view that protecting boards from shareholder pressure is detrimental to shareholder interests.

This Article presents new empirical evidence on staggered boards that not only exposes the limitations of prior empirical studies, but also, and more importantly, suggests the opposite conclusion. Employing a unique and comprehensive dataset covering thirty-four years of board staggering and destaggering decisions—from 1978 to 2011—we show that staggered boards are associated with a statistically and economically significant increase in firm value. In light of these novel empirical results, we then show theoretically that a corporate model with staggered boards emerges as a rational institutional response to market imperfections that are more complex and more significant than shareholder advocates have realized. Boards that retain their historical authority—empowered boards—benefit, rather than hurt, shareholders. This Article concludes with a normative proposal to revitalize the authority of U.S. boards.

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Introduction

At the turn of the nineteenth century, America invented the most successful business model of all time: corporate capitalism.¹ At the center of that economic success was the “management corporation.”² As the name suggests, management corporations revolved around managers—salaried, professional executives—brought in to “hire capital from the investor.”³ Underlying this arrangement was a “tacit societal consensus” that corporate growth took priority over corporate profits,⁴ as long as managers could compensate their shareholders with stable dividends—a goal they successfully accomplished.⁵ Corporate law accommodated the development of this business model, privileging a board-centric system under which firm insiders—directors and managers—retained virtually exclusive authority over the corporation. Unlike in capitalistic models elsewhere, such as in the United Kingdom, American shareholders have historically been relegated to the role of spectators, with only a limited capacity to intervene in corporate affairs.⁶

However, starting in the late 1970s through the early 1980s, and with increasing intensity in the 2000s, a competing corporate model has gained popularity.⁷ This model is conceptually built on the idea of “shareholder empowerment,” with enhanced shareholder governance rights, and correspondingly weakened board authority.⁸ Economically, the case for

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1. See ALFRED D. CHANDLER, JR., *THE VISIBLE HAND: THE MANAGERIAL REVOLUTION IN AMERICAN BUSINESS* 8 (1977) (“[O]nce a managerial hierarchy had been formed and had successfully carried out its function of administrative coordination, the hierarchy itself became a source of permanence, power, and continued growth.”).
 2. See generally William W. Bratton, Jr., *The New Economic Theory of the Firm: Critical Perspectives from History*, 41 STAN. L. REV. 1471 (1989) (describing the appearance, success, and endurance of the management corporation).
 3. Bayless Manning, Book Review, 67 YALE L.J. 1477, 1489 (1958).
 4. See Jack B. Jacobs, *“Patient Capital”: Can Delaware Corporate Law Help Revive It?*, 68 WASH. & LEE L. REV. 1645, 1646 (2011); see also Bratton, *supra* note 2, at 1492-93.
 5. See Leo E. Strine, Jr., *One Fundamental Corporate Governance Question We Face: Can Corporations Be Managed for the Long Term Unless Their Powerful Electorates Also Act and Think Long Term?*, 66 BUS. LAW. 1, 3 (2010) (“The deployment of diverse investors’ capital by expert centralized management has been a major contributor to America’s wealth.”).
 6. CHRISTOPHER M. BRUNER, *CORPORATE GOVERNANCE IN THE COMMON-LAW WORLD: THE POLITICAL FOUNDATIONS OF SHAREHOLDER POWER* 36-37 (2013) (comparing the historical role of shareholders in the U.K. and U.S. corporate law models).
 7. See Jacobs, *supra* note 4, at 1649 (describing the replacement of “patient capital” with “impatient capital”).
 8. See, e.g., William W. Bratton & Michael L. Wachter, *The Case Against Shareholder Empowerment*, 158 U. PA. L. REV. 653, 662 (2010) (“[T]he board’s decisionmaking power [under the shareholder empowerment model] stems from the shareholders’ delegation of that power. It follows that what the shareholders delegate they should also be able to withdraw.”).

shareholder empowerment rests on the assumption that shareholders, as the corporation's residual claimants, are better placed than boards, which may be captured by opportunistic management, to provide value-enhancing governance input. Recent changes in both the legal landscape and the marketplace have rewarded the efforts of shareholder advocates, with the result that empowered shareholders are no longer merely an aspiration but a reality in today's corporate environment.⁹

The rise of shareholder power has revitalized the debate on staggered boards, a longstanding and central issue in the confrontation between shareholder advocates and traditionalists who defend the board-centric model. With a staggered board, directors are grouped into different classes (usually three) such that each class of directors stands for reelection in successive years. Because this board structure requires challengers to win at least two election cycles to gain a board majority, a staggered board helps to protect directors from the threat of early removal by shareholders.

Board advocates defend staggered boards as a means of protecting board authority against short-term shareholder and market pressures, thereby promoting long-term value creation.¹⁰ In the view of shareholder advocates, however, the staggered board is undesirable because it diminishes the accountability of directors and the managers they oversee, and thus encourages managerial moral hazard.¹¹ In the past decade, this belief has garnered sufficient support such that shareholder advocates now hold the upper hand, emboldened by empirical evidence suggesting that the adoption of a staggered board is detrimental to firm value.¹² In light of this evidence, they have concluded that "insulation advocates"—as they have dubbed defenders of board authority¹³—should surrender to the view that enhancing shareholder power moves corporate governance in an efficient direction,¹⁴ unless they can expose flaws in current empirical research and "counter[] it with research that avoids such flaws."¹⁵

This Article meets that challenge by presenting new empirical evidence on staggered boards that not only exposes the limitations of prior empirical

9. See *infra* notes 90-99 and accompanying text.

10. See *infra* notes 64-68 and accompanying text.

11. See *infra* notes 76-79 and accompanying text.

12. See *infra* Part I.C.1.

13. See Lucian A. Bebchuk, *The Myth That Insulating Boards Serves Long-Term Value*, 113 COLUM. L. REV. 1637, 1638 (2013). As observed by the Delaware Supreme Court Chief Justice Leo E. Strine, Jr., the term "insulation advocate," which has an inherently negative connotation, "create[s] an intellectual straw man . . . to burn down easily." Leo E. Strine, Jr., *Can We Do Better by Ordinary Investors?: A Pragmatic Reaction to the Dueling Ideological Mythologists of Corporate Law*, 114 COLUM. L. REV. 449, 450-51 (2014).

14. See Strine, *supra* note 13, at 460.

15. Bebchuk, *supra* note 13, at 1667-68.

studies, but also, and more importantly, suggests the opposite conclusion.¹⁶ Employing a unique and comprehensive dataset covering thirty-four years of staggering and destaggering decisions—from 1978 to 2011—we document that staggered boards are associated with a statistically and economically significant increase in firm value.¹⁷ In light of these novel empirical results, we then take up the additional challenge of providing a theoretical account of the merits of “empowered boards” that can resist short-term shareholder and market pressures. These empowered boards may be staggered, but the term more broadly refers to any board that retains the authority U.S. boards historically had in the received legal model. Combining insights from general equilibrium theory¹⁸ and contract theory,¹⁹ we show that a corporate model with empowered boards—the same model that was key to the enduring success of American corporate capitalism—emerges as a rational institutional response to market imperfections that are more complex and more significant than shareholder advocates generally realize.

Following the recommendations of staggered board critics, this Article begins its analysis by revisiting prior cross-sectional studies on staggered boards and “tak[ing] the empirical evidence seriously.”²⁰ These studies associate board staggering with lower firm value and take that association as evidence for the claim that board staggering is a causal antecedent to managerial moral hazard. Sound empirical methods, however, must reduce the possibility of correlation being mistaken for causation. Despite their enormous influence, cross-sectional studies on staggered boards are limited in their ability to address this concern. Because of the limited amount of data available, these studies are constrained to a comparison of the association between the *level* of firm value and the *level* of staggering provisions *across* different firms.²¹ As a result, these studies cannot affirmatively exclude the possibility that differences in firm value might be attributable to differences in firm characteristics other than

16. The empirical evidence presented in this Article is partly based on a companion finance article that we recently coauthored, along with Lubomir Litov, K.J. Martijn Cremers, Lubomir P. Litov & Simone M. Sepe, *Staggered Boards and Firm Value, Revisited* (July 2014) (unpublished manuscript), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2364165.

17. As standard in the empirical literature, both prior cross-sectional studies and our own use Tobin’s Q to measure firm value. See Lucian A. Bebchuk & Alma Cohen, *The Costs of Entrenched Boards*, 78 J. FIN. ECON. 409, 419 (2005) (observing that Tobin’s Q has become a commonly recognized proxy for market valuation). Tobin’s Q is, roughly, the ratio of the market value of assets to the book value of assets. See Eugene F. Fama & Kenneth R. French, *Testing Trade-Off and Pecking Order Predictions About Dividends and Debt*, 15 REV. FIN. STUD. 1, 8 (2002).

18. See *infra* Part III.A.

19. See *infra* Part III.C.

20. Bebchuk, *supra* note 13, at 1668.

21. See JEFFREY M. WOOLDRIDGE, *INTRODUCTORY ECONOMETRICS: A MODERN APPROACH* 444-45 (4th ed. 2009) (describing cross-sectional analysis).

having a staggered board (a “specification” problem), or that low firm value might motivate, rather than result from, the adoption of a staggered board (a “simultaneity,” or “reverse causality,” problem).²²

Whereas the 1995-2002 time period that has been the focus of many prior studies exhibits comparatively little variation in staggering or destaggering activity, our 1978-2011 sample considers a significantly larger number of changes in board structures. This expanded dataset allows us to more accurately interpret the relationship between staggered boards and firm value by applying a time-series analysis²³ that employs firm fixed effects. Including firm fixed effects is equivalent to controlling for any and all firm-level variables in a dataset that do not change over time, thereby determining what *change* in firm value *within the same firms* occurred before or after a change in board structure.²⁴

Our analysis delivers striking results. First, in replicating prior cross-sectional analyses for the period 1995-2002, our results indicate that the identified negative association between staggered boards and firm value is not as robust as previously suggested. More importantly, the time-series analysis documents a strong positive association between staggered boards and firm value over both the subperiod of 1995-2002 and the overall sample period of 1978-2011. Adopting a staggered board (“staggering up”) is associated with a statistically and economically significant increase in firm value, while decisions to destagger a board (“staggering down”) are associated with a corresponding reduction in firm value. This result calls into question the interpretation of prior cross-sectional studies. As this Article later illustrates, reverse causality explains those previous results. That is, less valuable firms seek board protection through staggering provisions (and firm value would go up, not down, with the adoption of a staggered board), rather than board protection causing firms to become less valuable.

Having shown that staggered boards add value, the question becomes by what mechanism. In addressing this question, it is useful to reconceptualize the relationship between the shareholders and the directors and managers as a long-term contract under which the shareholders have a right of unilateral renegotiation. Indeed, shareholders enjoy the right to both remove incumbents

22. See JEFFREY M. WOOLDRIDGE, *ECONOMETRIC ANALYSIS OF CROSS SECTION AND PANEL DATA* 50-51 (2002) (providing a general discussion of the specificity and simultaneity problems).

23. See *id.* at 668 (“The time series dimension . . . allows us to control for unobserved heterogeneity in the cross section units, and to estimate certain dynamic relationships.”); see also *infra* text accompanying notes 124-25.

24. See, e.g., Jerry A. Hausman & William E. Taylor, *Panel Data and Unobservable Individual Effects*, 49 *ECONOMETRICA* 1377, 1377 (1981) (stating that using fixed effects represents a common method of controlling for omitted variables); see also WOOLDRIDGE, *supra* note 21, at 485-86 (explaining how to perform a fixed effect analysis by including a dummy for each cross-sectional observation (in our case, for each firm) in a panel).

and rapidly exit through the financial markets, which may trigger a change in control. Assuming that market prices aggregate information effectively, shareholder advocates view these institutional features as providing both an efficient ex post response to mismanagement, as signaled by a drop in stock performance, and beneficial ex ante disciplinary effects.²⁵ However, this account of market mechanisms ignores the possibility that current market prices may fail to reflect the long-term fundamental value of a firm, notwithstanding this possibility being increasingly likely today due to the transformative changes that have occurred in both corporate production and capital markets in the recent past.²⁶ Long-term investment in nonstandardized, innovative technology—for which more severe information asymmetry increases the risk of mispricing—has become a defining feature of the twenty-first-century corporation.²⁷ Moreover, greater ownership concentration in intermediary institutions and the rise of activist hedge funds have increased the likelihood of noninformative market-making trades.²⁸ As a result, the possibility of speculative pricing cannot be ignored.²⁹

The combination of asset pricing inefficiency and shareholder renegotiation rights produces what we call a “limited-commitment problem.”³⁰

25. See, e.g., Henry G. Manne, *Mergers and the Market for Corporate Control*, 73 J. POL. ECON. 110, 113 (1965) (pioneering theoretical assertions that the takeover phenomenon constituted efficient market control of the corporation).

26. One could argue that while this Article claims that a firm’s market value is not necessarily reflective of its fundamentals under the possibility of mispricing, the Article’s empirical analysis still uses a measure of market value to estimate the wealth impact of staggered boards. However, acknowledging that market value might not be an accurate proxy for fundamental value in the short term does not challenge the use of market-value metrics for efficiency analysis altogether, as suggested by some scholars. See, e.g., Jill E. Fisch, *Measuring Efficiency in Corporate Law: The Role of Shareholder Primacy*, 31 J. CORP. L. 637, 674 (2006). Rather, as we explain elsewhere, it suggests that efficiency claims should rely less on event studies, which focus on short-term variations in market-value measures, and more on studies that examine changes in such measures over the long-term. See K.J. Martijn Cremers, Saura Masconale & Simone M. Sepe, *Commitment and Entrenchment in Corporate Governance*, 110 NW. U. L. REV. (forthcoming 2016) (manuscript at 21-23) (on file with authors). This Article’s ability to rely on long-term changes in market value fulfills that requirement.

27. See *infra* notes 208-09, 231-35 and accompanying text.

28. See *infra* Part III.B.2.

29. After the financial crisis, asset pricing models that allow for the possibility of mispricing have been the subject of a large body of literature. See generally Darrell Duffie, *Asset Price Dynamics with Slow-Moving Capital*, 65 J. FIN. 1237 (2010) (providing a summary of these studies).

30. Economically, a limited-commitment problem (typically called a “time inconsistency” problem in prior literature) arises each time decisionmakers have incentives to renege on prior engagements and the anticipation of this circumstance reduces ex ante welfare. See Finn E. Kydland & Edward C. Prescott, *Rules Rather than Discretion: The Inconsistency of Optimal Plans*, 85 J. POL. ECON. 473, 473-74 (1977) (modeling circumstances in which “discretionary policy for which policymakers select the best action, given the current situation” may turn out to be ex ante inefficient). The

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Shareholders, attempting to maximize the value of their holdings, cannot credibly commit to *not* remove the board or dump their shares upon an early drop in performance, as they are unable to distinguish whether that drop is due to mismanagement or investment in a project whose value will not be immediately realized. This introduces *ex ante* distortions into corporate relationships. For one thing, in order to reduce the likelihood of an early drop in performance, directors and managers tend to develop short-termist incentives—and much more pervasively than shareholder advocates have previously acknowledged.³¹ Further, a related problem may arise with the firm’s other stakeholders, because the value of firm-specific investments might be reduced by the shareholders’ ability to seek a change in investment policy or rapidly sell shares. Consider, for example, long-term suppliers or large customers who are vulnerable to changes in the firm’s operating strategy. When shareholders can more easily replace a board or pull out without warning, stakeholders may be induced to increase the cost of their corporate performance and/or reduce the level of their firm-specific investments, with the ultimate result being reduced firm value.

A governance model with empowered boards that can resist the threat of short-term shareholder and market pressures helps to mitigate these distortions. It does so by enabling the board to credibly commit the shareholders, as a collective, to longer-term engagements vis-à-vis directors, managers, and stakeholders, thereby increasing shareholder wealth. This theoretical account explains the constructive role of staggered boards informed by our time-series analysis.³² Further, it suggests that long-term projects and

enforcement of anti-bailout policies provides a classic example: before a crisis, “policymakers understand that expectations of future government support will engender moral hazard and other inefficiencies. Ex post, however, the need to avoid systemic collapse will induce policymakers to renege on prior promises, especially in the case of large (i.e., too big to fail) financial institutions.” Simone M. Sepe, *Regulating Risk and Governance in Banks: A Contractarian Perspective*, 62 EMORY L.J. 327, 383 (2012) (footnote omitted). Economist Colin Mayer has recently explored the link between long-term commitment and the risk of shareholder opportunism, arguing that shareholders are unable to commit to the provision of locked-in capital in an active market for corporate control. See COLIN MAYER, FIRM COMMITMENT: WHY THE CORPORATION IS FAILING US AND HOW TO RESTORE TRUST IN IT 145-46 (2013). Lynn Stout has also recently investigated the distortions that imperfectly efficient markets may engender in shareholder incentives to support long-term corporate projects. Lynn A. Stout, *The Corporation as Time Machine: Intergenerational Equity, Intergenerational Efficiency, and the Corporate Form*, 38 SEATTLE U.L. REV. 685, 714-18 (2015).

31. For an example of a shareholder advocate underestimating short-termism, see Bebchuk, *supra* note 13, at 1643, arguing that “it is far from clear how often” short-termism concerns arise.

32. Consistent with our empirical and theoretical analysis of staggered boards, William Johnson, Jonathan Karpoff, and Sangho Yi have recently documented that in IPO firms, takeover defenses reduce the possibility that a change in control will harm the firm’s stakeholders (such as large customers, suppliers, and strategic partners), thereby

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optimal stakeholder investments are the main channels through which a staggered board increases firm value—a novel prediction that this Article subjects to empirical testing and for which the data yield strong support.

As to the oft-repeated claim that the benefits of empowered boards come at the expense of increased directorial or managerial moral hazard,³³ the empirical evidence suggests that if such a tradeoff occurs, it does not take place at par. On the contrary, the positive time-series association of staggered boards with firm value suggests that the value added when shareholders are bound to the long-term horizon more than compensates for any potential increase in moral hazard costs. Additionally, several instruments remain available to constrain the alleged increase in moral hazard triggered by board insulation, including well-designed compensation schemes, nominally friendly acquisitions, and liability rules.³⁴ No comparable remedies are available to mitigate the shareholder limited-commitment problem.

While this analysis is consistent with the established board-centric model of U.S. corporate law, the rise of newly empowered shareholders has begun to erode that model. The recent increase in shareholder empowerment jeopardizes the board-centric model's continuing ability to deliver efficient outcomes—thus necessitating the reempowerment of corporate boards. Consistent with this Article's theoretical and empirical analyses, we recommend legal reform that would transform staggered boards into a quasi-mandatory rule.³⁵ By reversing the growing trend toward destaggering,³⁶ this reform would restore a board's ability to credibly commit shareholders to long-term value creation, which is in their own and society's best interests.

promoting more favorable contracting terms and increasing firm value. William C. Johnson et al., *The Bonding Hypothesis of Takeover Defenses: Evidence from IPO Firms*, 117 J. FIN. ECON. 307, 329 (2015). Elsewhere, we have also documented that firm value increases following reincorporation in a state with more (or more severe) antitakeover statutes, especially for firms that are more likely to be affected by the limited-commitment problem (i.e., firms with more investments in long-term projects and stronger stakeholder relationships). K.J. Martijn Cremers & Simone M. Sepe, *Whither Delaware?: Limited Commitment and the Financial Value of Corporate Law* 40-41 (Nov. 2015) (unpublished manuscript), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2519238.

33. See, e.g., Bebchuk, *supra* note 13, at 1643 (“[T]o the extent that [short-termism situations] do arise often, the question remains whether their expected costs exceed the expected benefits from activists’ clear interest in seeking actions that are positive in both the short term and the long term.”).

34. See *infra* notes 246-52 and accompanying text.

35. See Ian Ayres, *Regulating Opt-Out: An Economic Theory of Altering Rules*, 121 YALE L.J. 2032, 2087 (2012) (introducing the concept of “sticky defaults,” a type of quasi-mandatory rule that “attempt[s] to produce a constrained separating equilibrium, allowing a reduced number of contractors to opt for legal consequences that lawmakers disfavor”).

36. See *infra* Part II.B.

The remainder of this Article proceeds as follows. Part I provides background information on the law of staggered boards, the current status of the theoretical and empirical debates, and these debates' impact on corporate practices. Part II presents our new time-series analysis of the association between staggered boards and firm value. Part III offers our theory of board empowerment, which conceptualizes the relationship between shareholders and directors as an agency relationship with a salient limited-commitment problem. Part IV provides empirical support for our theory's specific predictions that firms with more long-term investments, as well as firms for which stakeholder participation is more relevant, would benefit the most from having a staggered board. Finally, Part V discusses the policy implications of our analysis and makes recommendations to revitalize board authority.

I. The Staggered Board Debate

Whether staggered boards are beneficial or inimical to shareholder interests is the subject of a longstanding debate, which has generated a large body of theoretical and empirical literature and shows no signs of waning. This debate has captured the attention of directors, managers, investors, and proxy advisory firms who share obvious incentives to care about the "value" of staggered boards. This Part provides the background necessary for understanding the context and importance of this debate: an account of the law of staggered boards, an overview of existing theoretical and empirical literature, and a discussion of relevant corporate practices.

A. Institutional Background

Virtually all U.S. states allow companies to choose between a unitary and a staggered (or classified) board structure.³⁷ Under the former, all directors stand for reelection at each annual shareholder meeting.³⁸ In contrast, when a company opts for a staggered board, directors are grouped into different

37. See Richard H. Koppes et al., *Corporate Governance Out of Focus: The Debate over Classified Boards*, 54 BUS. LAW. 1023, 1029 n.19 (1999) (providing a list of relevant state law provisions allowing staggered boards).

38. A unitary board structure is the default in all states, except for Massachusetts, Indiana, and Iowa, where the default is reversed. Massachusetts was the first state to adopt a staggered board default for public companies back in 1990. See Guhan Subramanian, *The Influence of Antitakeover Statutes on Incorporation Choice: Evidence on the "Race" Debate and Antitakeover Overreaching*, 150 U. PA. L. REV. 1795, 1859 (2002) (offering a historical account of Massachusetts' decision to move to a staggered board default); see also MASS. GEN. LAWS ch. 156D, § 8.06(b)-(g) (2015). Indiana followed in 2009 and Iowa in 2011. IND. CODE § 23-1-33-6(c) (2015); IOWA CODE § 490.806A (2015). While Oklahoma had followed suit in 2010, see OKLA. STAT. tit. 18, § 1027(D) (2012), it reversed course in March 2013 and changed the default back to the annual election of directors, see 2013 Okla. Sess. Laws 2.

classes, with each class of directors standing for reelection in successive years. Typically, staggered boards have three classes of directors³⁹—the maximum number of classes most states permit⁴⁰—with directors in each class being elected to three-year terms.

A company can provide for the adoption of a staggered board, subject to shareholder approval, in either its corporate charter or its bylaws.⁴¹ The location of the staggering provision is nontrivial because it determines how effective a staggered board is in protecting incumbent directors from rapid removal by the shareholders. Dismantling a staggered board established in the charter involves the coordinated action of the board and the shareholders, as charter amendments can be initiated only by the board and require shareholder approval.⁴² Conversely, shareholders can unilaterally dismiss a staggered board established in the bylaws, as board initiative is not required for bylaw amendments.⁴³ In such a situation, shareholders determined to remove a majority of the board may be able to do so in a single vote at the next annual shareholder meeting.⁴⁴ By contrast, with a staggering provision in the charter, shareholders will commonly need to wait two election cycles—each likely separated by at least a year—before they are able to replace a majority of the board.⁴⁵ This dichotomy explains why only charter-based staggering provisions are generally accepted as “effective” insulation mechanisms.⁴⁶

Legislative histories attest that corporations have employed staggered boards for decades, at least since the time of some of the first state corporation

39. See Lucian Arye Bebchuk et al., *The Powerful Antitakeover Force of Staggered Boards: Theory, Evidence, and Policy*, 54 STAN. L. REV. 887, 893 (2002).

40. See Koppes et al., *supra* note 37, at 1029 & n.21 (providing a detailed summary of the number of staggered board classes allowed by state laws).

41. In Delaware, and most other states, shareholder approval is required to adopt a staggered board after the initial charter or bylaws are in place. JASON D. MONTGOMERY, INV’R RESPONSIBILITY RESEARCH CTR., CLASSIFIED BOARDS 4 (1998); see, e.g., DEL. CODE ANN. tit. 8, § 141(d) (2015). The notable exception is Maryland, where the board has unilateral power to adopt a staggered board. See MD. CODE ANN., CORPS. & ASS’NS § 3-803 (2015).

42. See, e.g., DEL. CODE ANN. tit. 8, § 242(b); MODEL BUS. CORP. ACT § 10.03 (AM. BAR ASS’N 2010) (requiring shareholder approval for all but minor changes to the charter).

43. See, e.g., DEL. CODE ANN. tit. 8, § 109(a); MODEL BUS. CORP. ACT § 10.20(a)-(b).

44. See John C. Coates IV, *Explaining Variation in Takeover Defenses: Blame the Lawyers*, 89 CALIF. L. REV. 1301, 1392-93 (2001) (explaining that as long as provisions that interfere with the shareholders’ ability to take control of a board are not established in the charter, shareholders can “work around” them by amending the bylaws).

45. See Bebchuk et al., *supra* note 39, at 890.

46. See *id.* at 894 (specifying that a staggered board is “effective” if (i) it is installed in the charter, (ii) directors may be removed only for cause, and (iii) shareholders may not “pack the board” by increasing the number of board seats and filling the vacant seats).

laws, mostly to ensure continuity of leadership.⁴⁷ The governance implications of having a staggered board, however, radically changed with the development of the hostile tender offer in the late 1960s.⁴⁸ A staggered board could now function as an antitakeover defense by forcing a prospective acquirer to go through a costly waiting period before being able to appoint a new majority of directors.

However, this defense had a limited deterrent effect.⁴⁹ Staggered elections could not prevent a bidder from acquiring a large block of shares; they could only delay a bidder's ability to exercise voting control⁵⁰—which, in practice, frequently incentivized incumbents to resign before the expiration of the two-year delay.⁵¹

The invention of the “poison pill” defense in the 1980s⁵²—combined with later developments in Delaware case law that sustained a board's ability to use the pill⁵³—removed this tactical weakness.⁵⁴ Because the adoption of a pill significantly dilutes a bidder's economic rights, it prevents hostile takeovers unless the bidder can have the pill redeemed by a majority of directors. With an effective staggered board in place, however, a bidder is required to wait through two annual elections before being able to do so—a requirement that

47. See Michael E. Murphy, *Attacking the Classified Board of Directors: Shaky Foundations for Shareholder Zeal*, 65 BUS. LAW. 441, 442 & n.9 (2010).

48. See Bratton, *supra* note 2, at 1518 (explaining that before the 1950s, tender offers were used only internally for stock-repurchasing purposes).

49. See ROBERT CHARLES CLARK, CORPORATE LAW 576 (1986) (recognizing that incumbent directors “would often find it in their interest to come to terms with” new shareholders); Ronald J. Gilson, *The Case Against Shark Repellent Amendments: Structural Limitations on the Enabling Concept*, 34 STAN. L. REV. 775, 781 (1982) (“[C]lassification alone will not prevent a majority shareholder from removing and replacing incumbent directors . . .”).

50. Bebchuk et al., *supra* note 39, at 903-04. *But see* Marcel Kahan & Edward B. Rock, *How I Learned to Stop Worrying and Love the Pill: Adaptive Responses to Takeover Law*, 69 U. CHI. L. REV. 871, 913-14 (2002) (arguing that staggered boards functioned as antitakeover devices before the promulgation of poison pill provisions, and noting additionally that staggered boards could deter prospective bids or the completion of an acquisition).

51. See, e.g., Gilson, *supra* note 49, at 793-94; see also CLARK, *supra* note 49, at 576.

52. A poison pill consists of stock purchase rights that are granted to existing shareholders in the event a corporate raider accumulates more than a certain threshold of outstanding stock, and that entitle the existing shareholders (but not the raider) to acquire newly issued stock at a substantial discount from the market price. See Memorandum from Wachtell, Lipton, Rosen & Katz: *The Share Purchase Rights Plans*, in RONALD J. GILSON & BERNARD S. BLACK, *THE LAW AND FINANCE OF CORPORATE ACQUISITIONS* 3, 4-12 (2d ed. Supp. 1998) (setting forth terms of a standard poison pill). Unlike staggered boards, poison pills do not require shareholder approval and can be adopted at any time. See *id.*

53. See *infra* notes 86-89 and accompanying text.

54. See John C. Coates IV, *Takeover Defenses in the Shadow of the Pill: A Critique of the Scientific Evidence*, 79 TEX. L. REV. 271, 326 (2000) (“[I]t was largely for this reason that the pill was invented.”).

substantially reduces her ability to redeem a pill through the ballot box. By delaying both the acquisition of a control block and the exercise of voting control by a prospective acquirer, the complementary use of a staggering provision and a poison pill vests the board with de facto veto power over hostile bids.

Yet the takeover market did not come to an end after the development of this potent defense combination. Instead, takeover activity reached unprecedented levels during the late 1990s and early 2000s—boosted by favorable macroeconomic conditions and the increase in (oftentimes nominally) friendly acquisitions.⁵⁵ However, the transformation of the staggered board into a strong antitakeover device did mark the beginning of a profound conceptual divide between those praising the virtues of strong boards protected from shareholder removal and those decrying their vices. As discussed below, this divide continues to this day and is arguably the most prominent manifestation of the persistent corporate governance debate over the optimal division of power between boards and shareholders.

B. The Theoretical Divide

1. Board and shareholder power

The debate over the balance of power between shareholders and boards reflects competing understandings of the optimal allocation of authority within the corporation. In every organization, there are two types of authority: *real* and *formal*.⁵⁶ Real authority comprises the right to initiate and implement actions that affect an organization.⁵⁷ Formal authority, in contrast, comprises ultimate decisionmaking power—namely, the right to ratify or reverse decisions about actions affecting the organization.⁵⁸ Under the separation of ownership and control that characterizes U.S. public corporations, real authority is undisputedly granted to managers, who run the business enterprise. Disagreement, however, arises as to the attribution of formal authority. Board advocates defend a model in which formal authority over the corporation is entrusted to the board.⁵⁹ Shareholder advocates, on the other

55. See, e.g., Kahan & Rock, *supra* note 50, at 879-81, 879 tbl.2, 880 tbl.3 (detailing trends in M&A activity from 1988 to 2000); William W. Bratton & Michael L. Wachter, *The Eclipse of the Shareholder Paradigm* 17-20, 17 fig.1, 18 fig.2 (Jan. 15, 2015) (unpublished manuscript) (on file with authors) (detailing trends in M&A activity and tender offers from 1981 to 2013).

56. See Philippe Aghion & Jean Tirole, *Formal and Real Authority in Organizations*, 105 J. POL. ECON. 1, 1-2 (1997).

57. See *id.*

58. See *id.*

59. Although board advocates come to this point from different perspectives, they all share the view that the board should retain ultimate decisionmaking power over the
footnote continued on next page

hand, defend a model in which formal authority is entrusted to the shareholders.⁶⁰ Since the adoption of a staggering provision strengthens a board's authority vis-à-vis shareholders, it is thus unsurprising that board advocates and shareholder advocates, as we explain below, hold diametrically opposed views of staggered boards.

Under the corporate model defended by board advocates, the board retains control over corporate decisionmaking, while shareholders can reverse the actions of directors only under limited and enumerated circumstances, or by removing directors after a time frame that allows for adequate ex post evaluation of directorial actions. The board's informational advantage provides the key economic argument for this allocation of corporate powers. In the modern corporation with dispersed ownership, collective action problems disincentivize shareholders from acquiring the information necessary to actively participate in corporate decisionmaking.⁶¹ Entrusting formal authority to the board addresses this concern. It also allows directors, who have better access to firm-specific information, to exercise ultimate decisionmaking power and mitigate managerial moral hazard by preventing managers from exploiting real authority over the corporation to promote their own interests

corporation. See, e.g., Stephen M. Bainbridge, *Director Primacy: The Means and Ends of Corporate Governance*, 97 NW. U. L. REV. 547, 550, 559-74 (2003) (exposing a theory of the corporation that combines board primacy and share value maximization); Margaret M. Blair & Lynn A. Stout, *A Team Production Theory of Corporate Law*, 85 VA. L. REV. 247, 250-55 (1999) (developing a theory of the corporation that embraces "virtually absolute" board authority, while rejecting shareholder wealth maximization); Bratton & Wachter, *supra* note 8, at 658-61 (defending the received board-centric model of the corporation). Members of the Delaware judiciary also feature prominently among board advocates. See, e.g., Jacobs, *supra* note 4, at 1657-61 (attributing national economic decline to, among other causes, the erosion of board primacy); Leo E. Strine, Jr., *Toward a True Corporate Republic: A Traditionalist Response to Bebchuk's Solution for Improving Corporate America*, 119 HARV. L. REV. 1759, 1777-82 (2006) (illustrating how a traditionalist would defend the "republican" board-centric model of the corporation against proposals to move to a "direct democracy" model). Martin Lipton, the noted corporate lawyer, has also long been a leading defendant of board power. See, e.g., Martin Lipton, *Takeover Bids in the Target's Boardroom*, 35 BUS. LAW. 101, 130-31 (1979) (defending board primacy in the takeover context).

60. Notably, the leading voice among shareholder advocates is Harvard Law School's Lucian Bebchuk. See, e.g., LUCIAN BEBCHUK & JESSE FRIED, *PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION* 198 (2004) (arguing that shareholders should play a greater role in setting executive compensation); Lucian Arye Bebchuk, *The Case Against Board Veto in Corporate Takeovers*, 69 U. CHI. L. REV. 973 (2002) (challenging board primacy in the takeover context); Lucian Arye Bebchuk, *The Case for Increasing Shareholder Power*, 118 HARV. L. REV. 833, 851-75 (2005) [hereinafter Bebchuk, *Shareholder Power*] (advocating for the expansion of shareholder governance rights); Lucian A. Bebchuk, *The Myth of the Shareholder Franchise*, 93 VA. L. REV. 675, 694-711 (2007) [hereinafter Bebchuk, *Shareholder Franchise*] (advocating for a reform of corporate elections so as to make directors more accountable to shareholders).

61. See, e.g., Bainbridge, *supra* note 59, at 569-72.

rather than those of shareholders.⁶² The board's incentive to acquire private information—and to act on that information so as to maximize firm value—would be lost if less-informed shareholders had the power to constantly disrupt board policy or displace directors in the short term.⁶³

Proponents of this view regard the institutional guarantee of the three-year board term provided by staggered boards as helpful to protect the board's informational advantage vis-à-vis imperfectly informed shareholders and capital markets. The increased protection afforded by the three-year term, board advocates argue, has several important implications. First, board staggering promotes beneficial organizational stability and institutional memory,⁶⁴ a benefit that also informs the staggering provisions used in the U.S. Senate and other government bodies.⁶⁵ Second, in takeover situations, staggering increases a target board's bargaining power vis-à-vis prospective acquirers.⁶⁶ Third, outside the takeover context, protecting directors from shareholder and market pressures is essential to mitigate short-termism. In the standard rendering, short-termism results from the risk that "impatient" shareholders with short-term liquidity needs and an innate tendency to heavily

62. See *id.* at 557-59 (suggesting that the board of directors incarnates economist Kenneth Arrow's description of a "central agency to which all relevant information is transmitted and which is empowered to make decisions binding on the whole firm"); Bratton & Wachter, *supra* note 8, at 664-65 (citing Eugene F. Fama & Michael C. Jensen, *Separation of Ownership and Control*, 26 J.L. & ECON. 301, 309 (1983)).

63. See Stephen M. Bainbridge, *Preserving Director Primacy by Managing Shareholder Interventions*, in RESEARCH HANDBOOK ON SHAREHOLDER POWER 231, 234-36 (Jennifer G. Hill & Randall S. Thomas eds., 2015); Strine, *supra* note 13, at 476 & n.80 (drawing a parallel between the need for a centralized, insulated authority in corporations and governments); Strine, *supra* note 5, at 4 (arguing that frequent shareholder intervention would distract managers from profit-producing activities).

64. See, e.g., Koppes et al., *supra* note 37, at 1051-52.

65. See THE FEDERALIST NO. 62, at 378-80 (probably James Madison) (Clinton Rossiter ed., 1961) (describing the permanent and stable nature of the U.S. Senate as essential to its purposes). See generally U.S. CONST. art. I, § 3, cl. 2 (providing that the U.S. Senate be classified into three classes serving staggered six-year terms).

66. Under the "bargaining power hypothesis," staggered boards would help directors both to extract higher acquisition premiums and to reject offers that their private information suggests are inadequate. Cf. Martin Lipton, *Pills, Polls, and Professors Redux*, 69 U. CHI. L. REV. 1037, 1057-59 (2002) (describing how the use of the combined defense provided by a staggered board and a poison pill enabled Willamette to resist a takeover attempt by Weyerhaeuser and then bargain for a much higher takeover premium). See generally Guhan Subramanian, *Bargaining in the Shadow of Takeover Defenses*, 113 YALE L.J. 621 (2003) (reviewing the theory, empirics, and anecdotal evidence on the bargaining power hypothesis of antitakeover defenses).

discount future gains⁶⁷ might prefer investments with lucrative short-term results at the expense of long-term firm value.⁶⁸

In stark contrast, under the governance model defended by shareholder advocates, shareholders retain the right to subject directors to specific controls on virtually any important aspect of corporate decisionmaking, as well as the right to promptly displace the board.⁶⁹ Economically, the case for empowering shareholders draws on Jensen and Meckling's classical agency framing of corporate relationships.⁷⁰ Under this paradigm, shareholder advocates essentially assume away the role of the board of directors and cast the interactions among shareholders and managers as a bilateral agency relationship.⁷¹ They do so on the argument that top managers and "imperial CEOs"—who control the flow of information from lower corporate layers to the board and, more importantly, the board-appointment process—can capture directors.⁷² Thus, shareholder advocates argue, shareholders, rather than

67. See, e.g., Bratton & Wachter, *supra* note 55, at 35-36 (describing short-termism as a problem arising from short-term investors "who need to sell to meet liquidity needs . . . while the stock is under-priced").

68. It appears that the first commentator to raise short-termism concerns was Martin Lipton. See Lipton, *supra* note 59, at 104-05; see also William T. Allen & Leo E. Strine, Jr., *When the Existing Economic Order Deserves a Champion: The Enduring Relevance of Martin Lipton's Vision of the Corporate Law*, 60 BUS. LAW. 1383, 1383-84 (2005) (attributing to Lipton the view that traded securities are frequently mispriced). In more recent times, short-termism concerns have been raised by academics, organizational leaders, business columnists, corporate lawyers, and business organizations. See Bebchuk, *supra* note 13, at 1639-40, 1639 nn.2-6, 1640 nn.7-11 (collecting the most important contributions expressing short-termism concerns).

69. See, e.g., Bebchuk, *Shareholder Power*, *supra* note 60, at 865-70 (advocating for a regime in which "shareholders would be able to initiate and adopt any rules-of-the-game decisions," including changes to corporate charters and the state of incorporation); Bebchuk, *Shareholder Franchise*, *supra* note 60, at 696-98 (proposing a corporate electoral system in which shareholders would be able to directly place candidates on the ballot and be entitled to expense reimbursement).

70. See generally Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 305 (1976). Frank Easterbrook and Daniel Fischel are credited with having restated Jensen and Meckling's theory in the context of corporate legal theory. See generally FRANK H. EASTERBROOK & DANIEL R. FISCHEL, *THE ECONOMIC STRUCTURE OF CORPORATE LAW* (1991).

71. See, e.g., Bebchuk, *Shareholder Power*, *supra* note 60, at 842 (casting directors and managers collectively—as "management"—against shareholders).

72. See, e.g., BEBCHUK & FRIED, *supra* note 60, at 8, 61-79, 80-82 (arguing that managers' high compensation results from their capture of directors); 1 JAMES D. COX ET AL., *CORPORATIONS* § 9.3 (Supp. 1999-1); Lucian Arye Bebchuk et al., *Managerial Power and Rent Extraction in the Design of Executive Compensation*, 69 U. CHI. L. REV. 751, 754, 842 (2002). The empirical evidence, however, does not seem to be fully consistent with the "board capture view." See, e.g., Marcel Kahan & Edward Rock, *Embattled CEOs*, 88 TEX. L. REV. 987, 989 (2010) (finding a movement away from the "imperial CEO" model due to changes in the underlying economic and regulatory landscape); Randall S. Thomas, *Explaining the International CEO Pay Gap: Board Capture or Market Driven?*, 57 VAND. L. REV. 1001, 1001-02 (2004) (finding that board capture is a significant factor in explaining the international CEO pay gap).

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potentially captured boards, should exercise formal authority over the corporation in order to decrease the risk that managers engage in moral hazard.⁷³

Underpinning the argument that enhanced shareholder power avoids board capture and reduces managerial moral hazard are two crucial assumptions, borrowed from financial economic theory. First, shareholders have socially optimal incentives to maximize firm value because of their position as residual firm claimants,⁷⁴ unlike directors and managers, whose incentives may deviate according to their private interests in compensation and job retention. Second, under the Efficient Capital Market Hypothesis (ECMH), market prices effectively aggregate information and thus accurately reflect expectations of the underlying fundamental values.⁷⁵ These combined assumptions minimize the potency of the information asymmetry problem that rests at the core of the board-centric view. If market prices can serve as an informational focal point, and if shareholders have the best incentives to provide value-enhancing governance inputs, vesting shareholders with formal authority over the corporation naturally emerges as the optimal allocation of corporate powers.

Under this alternative view of corporate relationships, the adoption of a staggered board is seen as nothing more than a way to entrench directors and managers and increase the risk of moral hazard.⁷⁶ Furthermore, a staggered board would negate the disciplinary mechanism provided by the market for corporate control: by forcing a prospective bidder to endure a significant delay before acquiring corporate control, staggered boards enable insiders to block value-increasing acquisitions⁷⁷ and preemptively deter bidders from making valuable offers.⁷⁸ Once these costs are taken into account, they outweigh any

REV. 1171, 1175-76 (2004) (arguing that “board capture theory” does not explain several observations about CEO compensation).

73. See, e.g., Bebchuk, *Shareholder Power*, *supra* note 60, at 913-14 (suggesting that increasing shareholder power would “reduce agency costs”); Bebchuk, *Shareholder Franchise*, *supra* note 60, at 732 (arguing that empowering shareholders will “improve the accountability and performance of corporate boards”).

74. See, e.g., Henry Hansmann & Reinier Kraakman, *The End of History for Corporate Law*, 89 GEO. L.J. 439, 449 (2001) (“[I]f the control rights granted to the firm’s equity-holders are exclusive and strong, they will have powerful incentives to maximize the value of the firm.”).

75. See Eugene F. Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, 25 J. FIN. 383, 383 (1970).

76. See, e.g., Bebchuk et al., *supra* note 39, at 891.

77. See Frank H. Easterbrook & Daniel R. Fischel, *The Proper Role of a Target’s Management in Responding to a Tender Offer*, 94 HARV. L. REV. 1161, 1180-81 (1981).

78. See Sanford J. Grossman & Oliver D. Hart, *Takeover Bids, the Free-Rider Problem, and the Theory of the Corporation*, 11 BELL J. ECON. 42, 42-43 (1980) (discussing how shareholder freeriding—that is, shareholders refusing to tender their shares to a takeover entity
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expected benefits a staggered board might otherwise promote, both within and outside the takeover context. In particular, while shareholder advocates acknowledge that empowered shareholders may occasionally raise short-termism concerns, these concerns, they argue, should not be placed on equal footing with the much larger problem of managerial moral hazard, which remains a first-order governance problem.⁷⁹

2. The “end of history” for staggered boards?

Despite the intensity of the corporate power debate, the longstanding legal model for U.S. corporations (as embedded, essentially, in Delaware corporate law) has been consistently board-centric. Indeed, aside from the exercise of veto rights over some fundamental corporate transactions,⁸⁰ shareholders are unable to direct or oversee the management of the corporation—a power exclusively vested in the board of directors.⁸¹ As aptly remarked by Melvin Eisenberg in a highly influential article, “[u]nder the received legal model . . . no one acts as agent of the shareholders The officers are agents of the board. The board, in turn, is conceived to be an independent institution, not directly responsible to shareholders in the manner of an agent.”⁸²

Under this model, the only way for shareholders to influence corporate policy is to replace the incumbent board with new directors that are expected to implement the desired changes.⁸³ Yet the combined adoption of a staggered board and a poison pill may make even this route impractical—unless a prospective acquirer can convince a court that the target’s directors breached their fiduciary duties by rejecting the bidder’s proposal,⁸⁴ which is not an easy case to make.⁸⁵ Since the seminal 1985 decision in *Moran v. Household*

because they think the firm value will increase when the entity takes over—deters bidders).

79. See, e.g., Bebchuk, *supra* note 13, at 1651 (rejecting the view that depicts “the long-term costs of shareholder power and activism as large and the threats posed by them as grave”); cf. Mark J. Roe, *Corporate Short-Termism: In the Boardroom and in the Courtroom*, 68 BUS. LAW. 977, 1004 (2013) (arguing that short-termism “is insufficiently strong, empirically and theoretically, to affect corporate rulemaking”).

80. See generally Edward Rock et al., *Fundamental Changes*, in THE ANATOMY OF CORPORATE LAW: A COMPARATIVE AND FUNCTIONAL APPROACH 183 (2d ed. 2009) (describing the characteristics of what makes a transaction “fundamental”).

81. See DEL. CODE ANN. tit. 8, § 141(a) (2015); MODEL BUS. CORP. ACT § 8.01(b) (AM. BAR ASS’N 2010).

82. Melvin Aron Eisenberg, *The Legal Roles of Shareholders and Management in Modern Corporate Decisionmaking*, 57 CALIF. L. REV. 1, 5 (1969).

83. See CLARK, *supra* note 49, at 21-22.

84. See Koppes et al., *supra* note 37, at 1031-35.

85. See Lipton, *supra* note 59, at 101 (“[N]o director has ever been held liable for the rejection of a takeover bid . . .”).

*International, Inc.*⁸⁶—later sustained by *Paramount Communications, Inc. v. Time Inc.*⁸⁷—Delaware courts have tilted decidedly toward upholding the primacy of directorial power in deciding whether a takeover bid should move forward.⁸⁸ That power gives directors the right to maintain a poison pill indefinitely, essentially providing them with the ability to “just say no” to unsolicited acquisition bids.⁸⁹

In the last decade, however, the balance of power has shifted rather dramatically as a result of both regulatory reforms and shifts in capital markets and corporate practices that promote shareholder empowerment. Regulatory changes have occurred at both the state and federal levels, including, among others, amendments to proxy filing requirements that facilitate the use of shareholder proposals,⁹⁰ amendments to the Delaware General Corporation Law that grant shareholders greater access to the ballot box,⁹¹ and most recently, the introduction of say-on-pay shareholder votes⁹² and a further expansion of the scope of shareholder proposals to effect changes in corporate election procedures.⁹³ These regulatory reforms were accompanied by changes

86. 500 A.2d 1346 (Del. 1985). *Moran* upheld the adoption of the poison pill. *Id.* at 1357. Under *Moran*, Delaware directors have been subjected to the heightened form of judicial review established in *Unocal*, under which they need to prove the reasonableness and good faith of their actions. *Id.* at 1356; *see also* *Unocal Corp. v. Mesa Petroleum Co.*, 493 A.2d 946, 954-55 (Del. 1985). In several other jurisdictions, however, directors rejecting a takeover bid are subject to the more lenient business judgment rule. *See* Lipton, *supra* note 66, at 1049 & n.49.

87. 571 A.2d 1140, 1152-55 (Del. 1990).

88. *See* William T. Allen et al., *The Great Takeover Debate: A Meditation on Bridging the Conceptual Divide*, 69 U. CHI. L. REV. 1067, 1086 (2002).

89. *See* Bebchuk et al., *supra* note 39, at 905-06 (explaining that while under *Moran* the right to reject a bid was subject to constraints, it became virtually unconstrained after *Paramount*); *see also* *Paramount*, 571 A.2d at 1152-55 (upholding management’s use of a poison pill to reject a hostile offer because it was inconsistent with long-term business strategy).

90. *See* Kahan & Rock, *supra* note 72, at 1013-15, 1017-22 (providing a thorough discussion of the changes that have occurred in proxy rules in the past ten to twenty years).

91. *See* DEL. CODE ANN. tit. 8, § 112 (2015) (providing that a company’s bylaws may give shareholders the right to nominate dissident slates of directors); *id.* § 113(a) (allowing shareholders to adopt bylaws that reimburse “expenses incurred by a stockholder in soliciting proxies in connection with an election of directors”).

92. All publicly traded companies are now required by the legislation introduced by the Dodd-Frank Act to submit executive compensation arrangements for the nonbinding approval of the general shareholders at least once every three years. *See* Dodd-Frank Wall Street Reform and Consumer Protection Act, 15 U.S.C. § 78n-1(a)(1) (2014). Section 78n-1 also requires a separate vote every six years that allows shareholders to impose a say-on-pay vote more frequently (i.e., annually or biannually). *See id.* § 78n-1(a)(2). The SEC, however, has authority to exempt companies from say-on-pay requirements after taking into account, among other considerations, whether these requirements would disproportionately burden smaller companies. *See id.* § 78n-1(e).

93. *See* Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 971, 124 Stat. 1376, 1915 (2010), *reprinted in* 15 U.S.C. § 78n note (2014); *see also* *footnote continued on next page*

in shareholder concentration and activism, including an increase in institutional shareholdings,⁹⁴ the rise of activist hedge funds and private equity funds,⁹⁵ the emergence of proxy advisory firms,⁹⁶ new “universal” majority voting and accompanying withhold campaigns,⁹⁷ and the growing use and success of shareholder proposals⁹⁸—especially proposals to remove staggered boards.⁹⁹

Facilitating Shareholder Director Nominations, 75 Fed. Reg. 56,668, 56,687, 56,782 (Sept. 16, 2010) (codified at 17 C.F.R. pts. 200, 232, 240, 249) (promulgating regulations pursuant to the statute).

94. See, e.g., Ronald J. Gilson & Jeffrey N. Gordon, *The Agency Costs of Agency Capitalism: Activist Investors and the Revaluation of Governance Rights*, 113 COLUM. L. REV. 863, 865 (2013) (“In 2011, for example, institutional investors owned over 70% of the outstanding stock of the thousand largest U.S. public corporations.”). The phenomenon of ownership reconcentration has steadily grown since the 1990s, when scholars first began to take note of it. See, e.g., Bernard S. Black, *Shareholder Passivity Reexamined*, 89 MICH. L. REV. 520, 570 (1990) (documenting that the percentage of institutional ownership in New York Stock Exchange (NYSE) companies had increased from 45.2% in 1980 to 54.4% in 1988). Today’s institutional investors, however, seem much more willing to take an active governance stance than they have been in the past, especially in cooperation with hedge funds. See Gilson & Gordon, *supra*, at 867; Kahan & Rock, *supra* note 72, at 1003-04.
95. See, e.g., Bratton & Wachter, *supra* note 55, at 17-21 (suggesting that the rise of hedge fund activism has shown that “the shareholder collective action problem is not as preclusive as everybody assumed”).
96. See Kahan & Rock, *supra* note 72, at 1005-06.
97. See *id.* at 1010. In order to be elected to the board under a majority voting system, a director is required to win the votes of a majority of the shares voting. By contrast, in a plurality voting system, the director with the most votes—and thus, potentially, even a single vote—wins. See *id.* at 1010-11. Majority voting has emerged as the most potent weapon in the new arsenal of shareholders’ governance levers, with activist shareholders increasingly threatening to engage in withhold campaigns against incumbents so as to obtain desired governance changes—especially the removal of antitakeover defenses. See, e.g., Leo E. Strine, Jr., *Toward Common Sense and Common Ground? Reflections on the Shared Interests of Managers and Labor in a More Rational System of Corporate Governance*, 33 J. CORP. L. 1, 11-12 (2007). Withhold (or “just say no”) campaigns involve the withholding of votes on specific governance issues, such as the election of directors. Before the adoption of majority voting, withhold campaigns could at best cause embarrassment to director nominees. Under majority voting, they have become potent weapons to defeat incumbent directors.
98. Under Rule 14a-8 of the Securities Exchange Act of 1934, 15 U.S.C. §§ 78a-78pp (2014), a public company is required to include a shareholder proposal (and related supporting statements) in its proxy statement and allow shareholders to vote on the proposal unless either the shareholders have not complied with eligibility or procedural requirements or some other named exception applies. See 17 C.F.R. § 240.14a-8 (2015).
99. Tellingly, major institutional investors, including American Funds, Blackrock, CalPERS, Fidelity, TIAA-CREF, and Vanguard, as well as major proxy advisory firms such as Institutional Shareholder Services Inc. (ISS) and Glass Lewis, all have current policies that actively promote the annual election of directors. See Alma Cohen & Charles C.Y. Wang, *How Do Staggered Boards Affect Shareholder Value?: Evidence from a Natural Experiment*, 110 J. FIN. ECON. 627, 628 (2013).

These changes have reignited the debate around board insulation, with the battle over staggered boards repeatedly making national headlines.¹⁰⁰ Both short-term and long-term issues have taken center stage in the insulation debate's new momentum, largely due to increased shareholder activism. For board advocates, this development makes the current case for shielding boards from shareholder and market pressures more compelling than ever. In the past decade, however, shareholder advocates have armed themselves with empirical evidence that allegedly supports the view that the adoption of a staggered board is detrimental to shareholder interests.¹⁰¹ In their view, this is the "end of history" for staggered boards.

As recently remarked by Lucian Bebchuk—the best-known proponent of shareholder empowerment and an outspoken critic of staggered boards—"[w]hile insulation advocates have used strong rhetoric in expressing their concerns, . . . [their] claims rely on critical and unsubstantiated premises, overlook significant long-term costs of board insulation, and are not backed by empirical evidence."¹⁰² Under Bebchuk's theory, no further discussion of the merits of staggered boards is necessary because "the market itself has provided a negative answer regarding its worth."¹⁰³ Even a defender of the traditional board-centric model of the corporation, Delaware Supreme Court Chief Justice Leo E. Strine, Jr., has recently conceded that the successful efforts of Bebchuk and other shareholder advocates have turned staggered boards into an "endangered-species,"¹⁰⁴ predicting that "[w]ithin the next few years . . . classified boards will be rarer than novel turns of phrase by political pundits."¹⁰⁵

Bebchuk's argument that "statistics provided by academic research provide objective evidence that is valuable for policymaking"¹⁰⁶ is a cogent one. However, this Article challenges Bebchuk's contention—as well as similar contentions made by other shareholder advocates—that the available empirical evidence indicates that "public officials and institutional investors would do well to reject arguments that are based on the asserted long-term benefits of

100. See, e.g., Michael J. de la Merced, *Wachtell Defends Staggered Boards*, N.Y. TIMES: DEALBOOK (Mar. 21, 2012, 3:31 PM), <http://nyti.ms/1LdelCY>; Steven Davidoff Solomon, *The Case Against Staggered Boards*, N.Y. TIMES: DEALBOOK (Mar. 20, 2012, 12:43 PM), <http://nyti.ms/19FGtNk>; Steven Davidoff Solomon, *Staggered Boards and Company Value*, N.Y. TIMES: DEALBOOK (Nov. 12, 2010, 7:00 AM), <http://nyti.ms/1wPSVmK>; Andrew Ross Sorkin, *An Unusual Boardroom Battle, in Academia*, N.Y. TIMES: DEALBOOK (Jan. 5, 2015, 9:42 PM), <http://nyti.ms/1yuj7Wg>.

101. See *infra* Part I.C.1.

102. Bebchuk, *supra* note 13, at 1642.

103. Murphy, *supra* note 47, at 446.

104. Strine, *supra* note 13, at 497.

105. *Id.*

106. Bebchuk, *supra* note 13, at 1667.

board insulation.”¹⁰⁷ This Article aims to disprove this assertion by setting out new empirical evidence on the value impact of staggered boards as well as a revisited theoretical framework for examining the merits of empowered boards—broadly speaking, boards that retain their historical authority to keep shareholder and market pressures at some distance. Before moving to that discussion, however, Subpart C briefly reviews the existing body of empirical studies on staggered boards, addresses the limitations of those studies, and discusses the impact that they have had on current corporate practices.

C. Empirical Evidence and Corporate Practices

By documenting an association between staggered boards and lower firm value, existing empirical studies have strongly advanced the view that staggered boards promote managerial moral hazard.¹⁰⁸ As explained below, however, these studies are intrinsically limited in their ability to address endogeneity concerns—that is, the ever-present risk that correlation might be mistaken for causation.

1. Existing empirical studies: methodologies and limitations

Studies investigating the wealth effects of staggered boards explore the relationship between corporate governance and firm value as measured by either aggregated governance indices or particular governance provisions. By design, the former category of studies—those which employ aggregated indices—estimate the strength of shareholder rights by focusing on “entrenchment” provisions that reduce the degree to which management is vulnerable to removal by shareholders, including staggered board provisions. Operating under the assumption that any and all protection from removal is detrimental to shareholder value, these studies posit that the larger the number of such “entrenchment” provisions, the weaker the shareholder rights.

The “G-Index,” developed by Paul Gompers, Joy Ishii, and Andrew Metrick,¹⁰⁹ and the “E-Index,” developed by Lucian Bebchuk, Alma Cohen, and

107. See *id.* at 1644, 1687.

108. The view that staggered boards are detrimental to firm value has long been dominant in the empirical scholarship with basically one exception—a study by Thomas Bates, David Becher, and Michael Lemmon. See Thomas W. Bates et al., *Board Classification and Managerial Entrenchment: Evidence from the Market for Corporate Control*, 87 J. FIN. ECON. 656, 658, 675-76 (2008). Recently, more studies have emerged challenging that view, including our own finance study. See Cremers, Litov & Sepe *supra* note 16. For a description of these studies, see Daniel M. Gallagher & Joseph A. Grundfest, *Did Harvard Violate Federal Securities Law?: The Campaign Against Classified Boards of Directors* 33-41 (Rock Ctr. for Corp. Governance, Working Paper No. 199, 2014), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2536586.

109. See Paul Gompers et al., *Corporate Governance and Equity Prices*, 118 Q.J. ECON. 107, 115 (2003).

Allen Ferrell,¹¹⁰ are probably the most influential among governance indices. Using the G-Index, Gompers et al. found that firms with less shareholder protection (i.e., higher index scores) were less valuable in the period 1990-1999.¹¹¹ They also found that staggered boards were positively correlated with other provisions that weakened shareholder rights and reduced firm value.¹¹² Along the same lines, using the E-Index, Bebchuk et al. found that the negative correlation between entrenchment and firm value documented by Gompers et al. was fully driven by six of the G-Index's twenty-four provisions, including staggered boards.¹¹³ Studies focusing on governance indices, however, may present methodological problems, as some governance provisions may matter more than others, some may have an impact only in specific circumstances, and others may have no impact at all.¹¹⁴ For this reason the E-Index, which only includes six provisions, is generally regarded as a better-motivated index than the G-Index.¹¹⁵

An alternative way to investigate the wealth effects of staggered boards is to look *within* governance indices and focus specifically on the association of staggered boards and firm value through the use of either event studies or cross-sectional studies.¹¹⁶ Event studies examine stock price reactions to events that are assumed to capture the wealth effects of staggered boards, such as staggering and destaggering announcements or acquisition announcements in firms with and without staggered boards. The 2002 study published by Lucian Bebchuk, John Coates, and Guhan Subramanian in the *Stanford Law Review* is among the earlier event studies on staggered boards and documented that staggered boards have a significant negative effect on shareholder returns after a hostile bid is made.¹¹⁷ Subsequent event studies have reported results

110. See Lucian Bebchuk et al., *What Matters in Corporate Governance?*, 22 REV. FIN. STUD. 783, 784-85 (2009).

111. See Gompers et al., *supra* note 109, at 109-10.

112. See *id.* at 117.

113. See Bebchuk et al., *supra* note 110, at 785, 789-91.

114. See *id.* at 785 ("We find no evidence that the eighteen [G-Index] provisions not in the E index are negatively correlated . . . with Tobin's Q"); Michael Klausner, *Fact and Fiction in Corporate Law and Governance*, 65 STAN. L. REV. 1325, 1363 (2013) (recognizing that governance indices "contain unnecessary noise" and tempt "correlation with no potential causation").

115. See Sanjai Bhagat et al., *The Promise and Peril of Corporate Governance Indices*, 108 COLUM. L. REV. 1803, 1821-23 (2008) (describing industry adoption of the E-Index). *But see* Cremers, Masconale & Sepe *supra* note 26 (manuscript at 4-5) (producing evidence that challenges the results obtained using the E-Index by Bechuck et al.).

116. See *supra* note 21 and accompanying text.

117. See Bebchuk et al., *supra* note 39, at 891. More specifically, in examining ninety-two hostile bids made against U.S. targets between 1996 and 2000, Bebchuk, Coates, and Subramanian found that having a staggered board reduces shareholder return after a bid by 8% to 10% on average. *Id.* at 890-91.

consistent with this evidence.¹¹⁸ A general problem with all of these studies, however, is that they present inherent endogeneity concerns. In particular, they cannot exclude the existence of a specification problem—arising when changes in the dependent variable are due to changes in some omitted variable rather than the independent variable¹¹⁹—as they bundle the market’s assessment of staggered boards with the market’s inferences of other firm news that might explain both the adoption of a staggered board and the observed reduction in firm value.¹²⁰

A different approach to evaluating the wealth effects of staggered boards is studying their cross-sectional association with firm value, as typically measured by Tobin’s Q—the ratio of the market value of assets to the book value of assets.¹²¹ The 2005 study by Lucian Bebchuk and Alma Cohen is arguably the best known among the studies adopting this methodology. Analyzing the eight-year span from 1995 to 2002, and controlling for other firm characteristics, Bebchuk and Cohen found that having a staggered board is associated, on average, with a statistically significant, and economically meaningful, lower firm value.¹²²

However, cross-sectional studies are also subject to endogeneity concerns. In particular, since governance arrangements are chosen in response to firm-specific circumstances, cross-sectional studies of staggered boards could be affected by a simultaneity (or “reverse causality”) problem—with staggering

118. See Olubunmi Faleye, *Classified Boards, Firm Value, and Managerial Entrenchment*, 83 J. FIN. ECON. 501, 514-15 (2007) (reporting negative abnormal returns around staggering announcements in the period 1986-2002, although both the size and statistical significance of these results depend on the event window); Re-Jin Guo et al., *Undoing the Powerful Anti-Takeover Force of Staggered Boards*, 14 J. CORP. FIN. 274, 283-85 (2008) (documenting positive abnormal returns around announcements to destagger, although their results are insignificant on average); Ronald W. Masulis et al., *Corporate Governance and Acquirer Returns*, 62 J. FIN. 1851, 1853, 1867-69 (2007) (documenting that acquisition announcements made by firms with a staggered board generate lower abnormal bidder returns).

119. See *supra* text accompanying note 22.

120. See Cohen & Wang, *supra* note 99, at 629. Additionally, event studies of staggered boards have sometimes obtained results that are economically and statistically fairly weak. See *supra* note 118. Others studies, instead, have considered events that are quite selective—for example, focusing only on ex post successful acquisitions (as in Masulis et al.) or omitting bid outcomes for a substantially larger set of friendly bids (as in Bebchuk et al.). See sources cited *supra* notes 117-18.

121. See *supra* note 17.

122. See Bebchuk & Cohen, *supra* note 17, at 410, 423-25. In a subsequent study, Olubunmi Faleye similarly found that the set of firms with a staggered board have a lower average firm value than the set of firms that do not. See Faleye, *supra* note 118, at 507-09. Using a variety of techniques, including cross-sectional analysis, Michael Frakes confirmed that staggered boards are negatively associated with firm value. See Michael D. Frakes, *Classified Boards and Firm Value*, 32 DEL. J. CORP. L. 113, 150-51 (2007).

decisions being partly motivated by, rather than the cause of, low firm value.¹²³ The way to mitigate such endogeneity concerns is to consider how *changes* in firm characteristics are associated with changes in firm value. A time-series analysis that employs firm fixed effects is a standard methodology that allows such consideration. By including firm fixed effects, a time-series analysis controls for firm-level variables that are time invariant—in other words, that do not change over time—in a panel dataset. Thus, this methodology essentially allows researchers to examine how firm value changes over time *within* the same firm, rather than across firms, in comparison to changes in that firm’s governance provisions.¹²⁴ But time-series analysis requires significant time variation. Accordingly, the focus of existing studies on a cross-sectional association seems largely attributable to limitations in available data over considerable lengths of time and the low number of changes in board structures, which constrained their ability to perform firm fixed effects regressions.¹²⁵

2. Practical effects and the Harvard Shareholder Rights Project

Notwithstanding the limitations discussed above, the impact of existing empirical studies of staggered boards on corporate practices and investor behaviors cannot be overstated—especially in light of the widespread

123. All cross-sectional studies on staggered boards explicitly acknowledge this difficulty. See, e.g., Bebchuk & Cohen, *supra* note 17, at 410; Faleye, *supra* note 118, at 509; Frakes, *supra* note 122, at 116-17.

124. See *supra* notes 23-24 and accompanying text.

125. Alma Cohen and Charles C.Y. Wang have recently examined the wealth effect of staggered boards by focusing on two Delaware court rulings from 2010 that had opposite effects on the ability of staggered boards to prevent the rapid removal of directors. See Cohen & Wang, *supra* note 99, at 628-29. In the context of Air Products’ epic quest to win over takeover target Airgas, the Delaware Chancery Court initially upheld a shareholder-initiated bylaw amendment that accelerated the date of Airgas’s next annual shareholder meeting—substantially shortening the delay caused by waiting two annual meetings forced on Air Products by Airgas’s staggered board. See *Airgas, Inc. v. Air Prods. & Chems., Inc.*, No. 5817-CC, 2010 WL 3960599, at *1 (Del. Ch. Oct. 8, 2010). Only one month later, however, the Delaware Supreme Court reversed the Chancery decision and held that measures designed to shorten the terms of service of staggered directors were impermissible. See *Airgas, Inc. v. Air Prods. & Chems., Inc.*, 8 A.3d 1182, 1194-95 (Del. 2010). Measuring announcement returns after each court ruling, Cohen and Wang found that the first ruling positively affected firm value, whereas the second ruling decreased firm value. See Cohen & Wang, *supra* note 99, at 628, 633-35. Since court rulings are not endogenous to firm circumstances, nor can they be fully anticipated by market participants, examining the wealth effect of staggered boards through the quasi-experimental design used by Cohen and Wang should better address endogeneity concerns. However, in replicating their analysis, we find that their results are not robust in two respects: first, they seem sensitive to the removal of a single outlier; second, and more importantly, they do not survive in our replications when no or different industry fixed effects are included. The results of our replication of Cohen and Wang are available on request.

conviction that the debate cannot be fully resolved theoretically because both sides are potentially meritorious.¹²⁶ Indeed, these empirical studies have played a critical—perhaps causal—role in promoting the recent trend toward board destaggering.¹²⁷

That role became even more pronounced with the 2010 creation of Harvard Law School's Shareholder Rights Project (SRP).¹²⁸ For three academic years, from 2011-2012 to 2013-2014, the SRP operated a clinical program to help institutional investors¹²⁹ declassify their boards of directors through the drafting and submission of precatory proposals.¹³⁰ In defending board declassification, the SRP proposals used a common format that relied substantially on the empirical studies reviewed above.¹³¹ In its three years of existence, the clinic's work resulted in the declassification of boards at "about 100 S&P 500 and Fortune 500 companies."¹³²

In a recent paper, Stanford Law School's Joseph Grundfest and SEC Commissioner David Gallagher argued that the standard SRP proposal violates antifraud provisions of securities law because its exclusion of recent studies that support staggered boards¹³³ constitutes a material omission.¹³⁴ Defenders of the SRP, on the other hand, have observed that the standard SRP proposal does not purport to offer a full description of the relevant literature, but rather

126. See, e.g., Cohen & Wang, *supra* note 99, at 628; Faley, *supra* note 118, at 502; Frakes, *supra* note 122, at 113; Klausner, *supra* note 114, at 1354.

127. See Guhan Subramanian, *Delaware's Choice*, 39 DEL. J. CORP. L. 1, 2 (2014) (suggesting that increased destaggering "has been led by shareholder activists and bolstered by academic research showing that staggered elections, on average, increase board entrenchment and reduce overall shareholder value").

128. See SHAREHOLDER RTS. PROJECT, <http://srp.law.harvard.edu> (last visited Jan. 1, 2016).

129. The SRP represented eight institutional investors holding assets of over \$400 billion and serving over three million members. See *Investors Working with the SRP Clinic*, SHAREHOLDER RTS. PROJECT, <http://srp.law.harvard.edu/clients.shtml> (last visited Jan. 1, 2016).

130. Under Rule 14a-8, shareholders can use precatory proposals to request the board of directors to take a certain action—including destaggering the board—without mandating the action. See 17 C.F.R. § 240.14a-8 (2015); see also Gallagher & Grundfest, *supra* note 108, at 13-14 (summarizing the requirements for the submission of precatory proposals by shareholders).

131. See Gallagher & Grundfest, *supra* note 108, at 22-23 (reproducing the SRP's standard proposal in its entirety).

132. SHAREHOLDER RTS. PROJECT, *supra* note 128.

133. See Gallagher & Grundfest, *supra* note 108, at 6.

134. See *id.* at 5-6. The test for materiality under federal security law is that of an omission presenting "a substantial likelihood that a reasonable shareholder would consider [the omitted information] important in deciding how to vote." See *TSC Indus. v. Northway, Inc.*, 426 U.S. 438, 449 (1976).

simply states that the precatory proposal's support for destaggering "is consistent" with the cited studies.¹³⁵

We take no position in this debate, and have included it only to highlight two elements of the vigorous policy discussion surrounding the governance role of staggered boards that have so far received little attention. First, in establishing a direct connection between the growing shareholder support for destaggering initiatives and the literature documenting a value-decreasing effect of staggered boards, the standard SRP proposal implicitly adds to the robustness of those studies. If staggered boards were beneficial, rather than detrimental, to firm value—so the argument goes—the statistics should show more staggering up and less staggering down. This approach, however, minimizes the influence that the cited studies have had in shaping investor beliefs about staggered boards. Second, and perhaps more importantly, the standard SRP proposal does not mention the inherent methodological limitations of the cited studies, notwithstanding the standard endogeneity disclaimers that appear in all of them.¹³⁶

In commenting on the recent SRP debate from the pages of the *New York Times*, Andrew Ross Sorkin has observed that "[a]lmost lost as collateral damage is the central question of whether staggered boards benefit or hurt shareholders. It should continue to be pursued as the smoke clears."¹³⁷ This Article adheres to that goal. Acknowledging the methodological limitations of prior empirical studies on staggered boards is a first and necessary step in that direction. The subsequent step is to take up the challenge of providing new time-series evidence on staggered boards. Part II turns to that task.

II. New Empirical Evidence

This Part empirically revisits the association between staggered boards and firm value by employing a panel dataset that covers thirty-four years of staggering and destaggering decisions (from 1978 through 2011). The use of this comprehensive dataset distinguishes our contribution from prior empirical studies, allowing us to consider both the cross-sectional and time-series evidence of the association between staggered boards and firm value. In particular, unlike prior studies, our study examines both the pre-1990 evidence, in which many firms staggered up, and the increased destaggering that occurred in recent years. The inclusion in the dataset of these episodes of both significant staggering up and staggering down allows us to examine

135. See Jonathan R. Macey, *SEC Commissioner, Law Professor Wrongfully Accuse SRP of Securities Fraud*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Dec. 15, 2014), <http://corpgov.law.harvard.edu/2014/12/15/sec-commissioner-law-professor-wrongfully-accuse-srp-of-securities-fraud>.

136. See *supra* note 123 and accompanying text.

137. See Sorkin, *supra* note 100.

average firm value before and after a change in board structure within the same firm and investigate comparisons of long-term value associations that are unique to the literature. This Article's contribution should thus be regarded as a significant improvement to the identification strategies—methods used to evaluate causal relationships in econometrics—of prior staggered board studies.

A. Data Description

The overall data sample for our study covers the time period from 1978 to 2011 and includes data from 3023 large publicly traded U.S. firms. Variables are briefly explained in Appendix Table A and descriptive statistics are given in Appendix Table B.

Data come from several sources. Data for *Staggered Board*, an indicator variable for the presence of a staggered board and the study's key independent variable, were obtained from two main sources. For the time period 1990–2011, as in prior studies that examined the wealth effects of staggered boards during the same period, we use the corporate governance dataset maintained by Risk Metrics, which acquired the Investor Responsibility Research Center (IRRC).¹³⁸ For the time period from 1978 to 1989, we use a dataset constructed by one of us for an earlier coauthored study that provides information on the same provisions tracked by the IRRC from 1990 to 2011, including staggered boards.¹³⁹ Data were also collected on whether staggered board provisions appeared in the firm charter or bylaws.¹⁴⁰

Since our main focus is on the value relevance of staggered boards, the main dependent variable in the analysis is firm value. Consistent with many prior studies investigating the relation between governance arrangements and firm value, we measured firm value using Tobin's Q (*Q*),¹⁴¹ retrieving data from Compustat.

138. The IRRC did not publish its governance volumes in each year of the 1995–2002 sample period employed by several prior studies. *See, e.g.,* Bebchuk & Cohen, *supra* note 17, at 418. Thus, these studies effectively have available data for only the four years in which the IRRC published its volume, i.e., 1995, 1998, 2000, and 2002. *See id.* For the missing years, these studies instead filled in the data by assuming that the governance provisions reported in published years held for the preceding year(s) when no IRRC volume was published. *See id.* In contrast, this Article employs hand-checked data on staggered boards in all missing years using proxy statements from the SEC's EDGAR website. *See generally* EDGAR Search Tools, SEC. & EXCHANGE COMMISSION, <http://www.sec.gov/edgar/searchedgar/webusers.htm> (last visited Jan. 1, 2016).

139. *See* Martijn Cremers & Allen Ferrell, *Thirty Years of Shareholder Rights and Firm Value*, 69 J. FIN. 1167, 1171–74 (2014).

140. Bylaws-based staggered boards are rare, representing only 6.8% of firm-year observations—or 13.7% of staggered board occurrences—in the sample on average. *See also* Coates, *supra* note 44, at 1392–93 (describing how most states prohibit firms from providing for staggered boards in their bylaws).

141. *See supra* note 17.

To control for factors other than the adoption of a staggered board that could have an impact on firm value, we always include in our regressions the following standard controls, using Compustat data: the log of the book value of total assets (*Assets*), the return on assets calculated as the ratio of the firm's EBITDA¹⁴² over the book value of total assets (*ROA*), the ratio of capital expenditures over the book value of total assets (*CAPX*), and the ratio of research and development expenditures over sales (*R&D*). Finally, in order to exclude the possibility that our results could be biased by an anticipation effect of future takeover activity,¹⁴³ we also control for the firm's industry takeover activity. As a proxy for this control, we employ the ratio composed of the mergers and acquisitions' dollar volume in the Thomson Securities Data Company (SDC) database as against the total market capitalization, separately for firms in forty-eight industry groups, from CRSP for the previous calendar year (*Industry M&A Volume*).

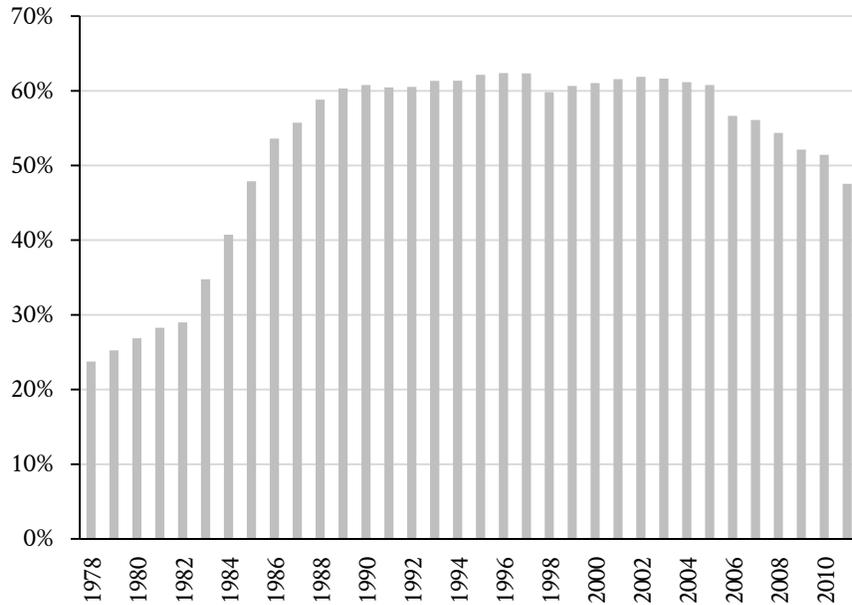
B. Staggering and Destaggering Decisions

Figure 1 shows the percentage of firms with a staggered board in the sample each year from 1978 to 2011. The results indicate substantial time variation. In particular, the years from 1978 to 1983 illustrate a slow trend of staggering up, which rapidly accelerates from 1984 until 1992. A fairly stable ratio (hovering around sixty percent) of firms have staggered boards in the period from 1992 to 2006. After 2006, the ratio of firms with a staggered board steadily declines, until reaching about forty-seven percent in 2011.

142. EBITDA is earnings before tax, interest, depreciation, and amortization.

143. See *infra* note 169 and accompanying text.

Figure 1
Percentage of Firms with a Staggered Board*



* Figure 1 plots the percentage of firms in the sample that had a staggered board at the end of their fiscal year.

The patterns shown in Figure 1 indicate a decline in the use of staggered boards, although this decline appears less dramatic in our data than suggested by other recent studies.¹⁴⁴ Almost half of the firms in our sample had a staggered board in 2011—which should give shareholder advocates some pause before concluding that “corporate America has largely given up staggered elections for the board of directors.”¹⁴⁵ Although in decline, staggered boards remain a salient feature of the U.S. corporate landscape. The debate on staggered boards thus seems unlikely to become marginal any time soon.¹⁴⁶

144. See, e.g., Kahan & Rock, *supra* note 72, at 1009 (documenting that the use of staggered boards has declined from 44% to 16% between 2003 and 2009 among S&P 100 firms). This difference is likely attributable to the difference in the sample of firms between this study and the study of Kahan and Rock. They examined a much lower number of firms and focus on the S&P 100, i.e., the 100 largest U.S. companies. See *id.* at 1008. On the contrary, our study primarily focuses on the S&P 1500. Consistent with Kahan and Rock, however, our results show that the highest incidence of destaggering has taken place among the largest firms in the sample.

145. Subramanian, *supra* note 127, at 2.

146. See Gallagher & Grundfest, *supra* note 108, at 4.

Figure 1, however, only documents how the incidence of staggered boards has evolved over time—it does not provide information on staggering and destaggering decisions. This information is important because shareholder advocates argue that the staggered boards we observe today are just relics of the past, with most firms having adopted a staggered board before the allegedly detrimental effects of this governance feature became public knowledge. More precisely, these advocates assume that shareholders virtually stopped ratifying staggered boards after 1990,¹⁴⁷ when the Delaware Supreme Court’s decision in *Paramount v. Time*, which upheld the board’s right to “just say no,” became fully known to investors.¹⁴⁸ On this assumption, they conclude that “in the vast majority of companies that have staggered boards” after 1990, the presence of a staggered board “cannot be grounded in genuine shareholder consent,”¹⁴⁹ because had shareholders “been asked to ratify [the charter-based staggered board] of their companies after 1990, . . . they would have most likely refused to do so.”¹⁵⁰ With this conclusion in mind, gathering information about staggering and destaggering decisions is important to better understand whether the current decline in staggered boards is attributable to shareholders’ discontinued consent to staggered boards or, rather, an increase in destaggering decisions.

Figure 2 shows the cumulative number of changes in firms that have staggered up and staggered down over the past thirty-four years, only considering changes during years included in the sample.

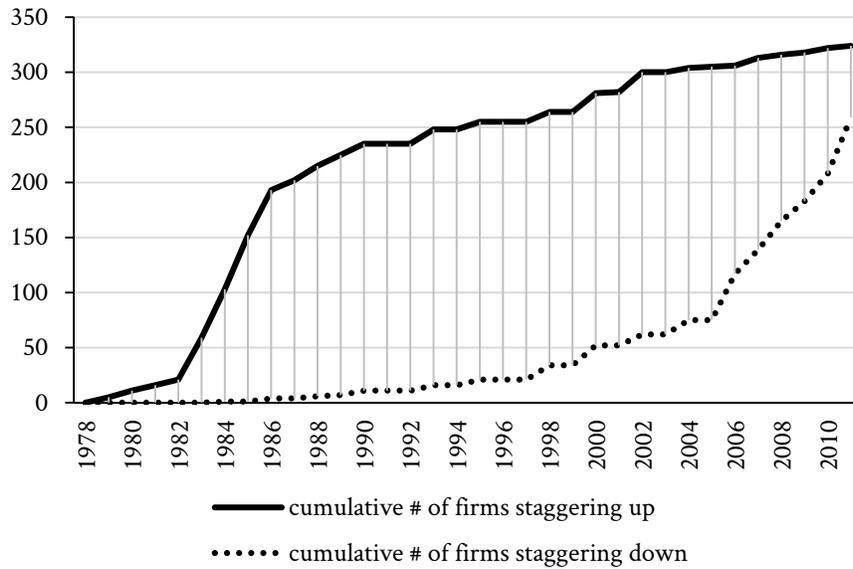
147. See, e.g., Bebchuk & Cohen, *supra* note 17, at 410, 426 (claiming that since the 1990s, shareholders have been “reluctant” and “unwilling” to adopt staggered boards); Bebchuk et al., *supra* note 39, at 942 (suggesting that when staggered boards were adopted after *Paramount v. Time* it was because the shareholders either didn’t have a say or didn’t have a choice); Frakes, *supra* note 122, at 116-17 (suggesting that staggered boards have “a time-invariant nature”); cf. Michael Klausner, *Institutional Shareholders, Private Equity, and Antitakeover Protection at the IPO Stage*, 152 U. PA. L. REV. 755, 757-59 (2003) (asserting that the decline in adoption of staggered boards “apparently reflects management realization that there is no point in even asking shareholders to support a classified board”).

148. See *supra* notes 87-89 and accompanying text.

149. Bebchuk et al., *supra* note 39, at 944.

150. *Id.* at 943.

Figure 2
Cumulative Changes in Board Structure*



* Figure 2 plots the cumulative number of changes in board structure, separating the number of firms adopting a staggered board (“staggering up”) and the number of firms removing a staggered board (“staggering down”).

Beginning with firm decisions to stagger up,¹⁵¹ one may observe that the number of staggering events has continued to grow, although at a decreasing rate. This continued growth contradicts the argument of shareholder advocates that shareholders have long stopped consenting to staggered boards. Indeed, from 1978 to 2011, a total of 324 firms in our sample adopted a staggered board. Admittedly, the largest annual increases in staggered boards were registered in the years from 1983 to 1986—before the definitive approval by the Delaware judiciary of a board’s right to “just say no.” In that four-year period, 172 firms (or about 53% of the total staggering events in our sample) moved to a staggered board structure. From 1990 to 2011, however, 89 firms (or 27.5% of the total staggering events in our sample) staggered up. These data indicate that shareholders have continued to approve staggered boards after 1990, although

151. This Article ignores changes occurring due to firms entering and exiting the sample. Firms enter and exit the sample due to their inclusion and exclusion in the relevant databases. Accordingly, these numbers have to be interpreted with caution, as the number of firms in the sample changes over time and had a significant one-time jump after 1989. For 1978-1989, the sample includes all publicly traded firms in the Fortune 1000, on average about 850 a year, and after 1990, the sample includes basically all S&P 1500 firms.

less frequently than in the pre-1990 era. Indeed, 65 out of the 89 firms that staggered up since 1990 did so before 2002, and only 24 firms have staggered up between 2002 and 2011. Thus, the real shift in shareholder sentiment seems to have taken place during the 2000s—a long time after the antitakeover significance of staggered boards became common knowledge.

Firm decisions to dismantle their staggered boards show a similar, but reversed, pattern. Firms have been making destaggering decisions at an increasing rate, which helps explain decreasing staggered board levels over time. From 1978 to 2011, 259 firms in our sample removed a staggered board of directors, with 207 firms (or 80% of the total number of destaggering events in our sample) agreeing to destagger their board after 2001. Most staggered board removals took place after 2005, with 142 firms (or 55% of the total destaggering events in our sample) agreeing to destagger their board between 2006 and 2011. In contrast, only 7 sample firms removed a staggered board in the pre-1990 era, a period that exhibited a higher annual incidence of staggering-up decisions. During the 1990s, 41 firms agreed to destagger their board, while 46 firms staggered up.¹⁵² The data thus indicate that: (i) staggering-up activity dominated the period 1978-1989; (ii) the period 1990-2000 registered less staggering up and exhibited a balanced amount of staggering-up and staggering-down activity; and (iii) staggering-down activity dominated the period 2001-2011 (particularly after 2005).

What determined the inversion in the tendency to stagger and destagger over the past decade, specifically after 2005? Recent studies have suggested that the corporate scandals of the early 2000s were “the proverbial ‘straw that broke the camels [sic] back.’”¹⁵³ Following those scandals, the corporate landscape underwent a dramatic transformation, with newly empowered shareholders emerging as the most significant change of the post-Enron era.¹⁵⁴ Thus, the argument goes, the increased dismantling of staggered boards is directly related to the rise of shareholder activism. In fact, as observed by one commentator, “the [increased] rate at which directors have agreed to destagger their boards—after nearly two decades of refusing to do so” is “[t]he most telling measure” of the impact that shareholder activism has had on corporate governance

152. If one considers only the period 1995-2002, one observes 45 changes in staggering activity and 41 changes in destaggering activity, respectively accounting for 17% and 16% of the overall time variation in board changes over the past three decades. This contradicts Bebchuk and Cohen’s conclusion that “there is little point in running a fixed firm effects regression that focuses on the variation over time within each given firm” given that, they argue, the 1995-2002 time period exhibits virtually no variation. Bebchuk & Cohen, *supra* note 17, at 425. In fact, as the next Subpart shows, running a time-series analysis with fixed firm effects for the 1995-2002 period produces surprising results, documenting the existence of a positive association between staggered boards and firm value.

153. Guo et al., *supra* note 118, at 275.

154. See *supra* notes 90-99 and accompanying text.

practices in the last ten years.¹⁵⁵ While these conclusions pertain to destaggering decisions, the same argument could reasonably be advanced to explain the lower rate of staggering up activity in the 2000s.

C. Staggered Boards and Firm Value

1. Cross-sectional and time-series analysis

This Subpart, which constitutes the core of our empirical analysis, estimates the impact of staggered boards on firm value, controlling for fixed differences *within* firms (i.e., firm fixed effects), rather than just fixed differences *across* firms and years (i.e., industry and year fixed effects).

For our analysis, we use a pooled panel of firms at the annual frequency, employing data at the fiscal year-end for each firm for both the dependent and independent (or control) variables. In general, pooled panels combine cross-sectional information—of different firms at particular points in time—with time-series variation—of changes within particular firms over time. In what we call our cross-sectional analysis, we add industry fixed effects only. As board structure is generally stable over time, this means that the coefficient on board structure is dominated by differences across firms. In what we call our time-series analysis, we add firm fixed effects, i.e., a separate dummy for each different firm. This means that the coefficient on board structure is identified solely from changes to board structure, i.e., from events where firms adopt or remove a staggered board. Effectively, the time-series analysis estimates how firm value changes before versus after such changes in board structure.

Table 1 below presents our results. As a starting point, Column (1) shows cross-sectional results for the period 1995-2002 using only year and industry fixed effects, substantially replicating the analysis of the 2005 study of Bebchuk and Cohen (who were the first to focus on that time period).¹⁵⁶ In order to produce comparable results, we include their same controls.¹⁵⁷ Column (2) shows the time-series results for this period, still including the same controls as in Bebchuk and Cohen, but this time replacing the industry fixed effects with firm fixed effects. Columns (3) and (4), respectively, present the cross-sectional and time-series results for the full sample period, 1978-2011. Due to limits in data availability, however, Columns (3) and (4) do not include all of the controls used in Columns (1) and (2).¹⁵⁸

155. Klausner, *supra* note 114, at 1360.

156. See Bebchuk & Cohen, *supra* note 17, at 410.

157. This extended set of controls includes *G-Index*, *Ln (Assets)*, *Insider Ownership*, and *Insider Ownership Squared* (all defined in Appendix Table A). See *id.* at 420-21, 423 tbl.2.

158. While including the extended set of controls of the 2005 study of Bebchuk and Cohen significantly reduces the sample, the finance companion to this Article incorporates these controls, and the resulting analysis indicates that the conclusions remain robust. See Cremers, Litov & Sepe, *supra* note 16, at 60 tbl.A.2.

Table 1
Firm Value and Staggered Boards*

| Dependent Variable: Q | | | | |
|---|---------------------|----------------------|----------------------|-----------------------|
| Independent Variables: | Period: | | | |
| | 1995-2002 | | 1978-2011 | |
| | (1) | (2) | (3) | (4) |
| 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 (-0.57) | -0.005 (-0.33) | | |
| Assets | 0.052*** (3.24) | -0.396*** (-8.10) | -0.027*** (-3.74) | -0.215*** (-12.01) |
| Firm Age | -0.050 (-1.34) | 0.327 (1.59) | | |
| Delaware Incorporation _[t-1] | -0.010 (-0.28) | | 0.014 (0.76) | |
| Insider Ownership | 0.318 (0.95) | 0.562 (1.27) | | |
| Insider Ownership ² | -0.179 (-0.37) | -0.742 (-1.06) | | |
| ROA | 5.939*** (19.11) | 2.071*** (7.74) | 5.073*** (32.74) | 2.939*** (20.27) |
| CAPX | -1.048** (-2.17) | -0.907** (-2.19) | -0.263 (-1.14) | 0.102 (0.60) |
| R&D | 5.499*** (7.17) | 0.423 (0.35) | 4.231*** (12.01) | 1.445*** (2.72) |
| Industry M&A Volume _[t-1] | 0.129 (0.85) | 0.129 (0.93) | -0.235*** (-3.04) | -0.248*** (-3.59) |
| Fixed Effects: | Industry | Firm | Industry | Firm |
| N | 5253 | 5253 | 30,797 | 30,797 |
| R-Squared | 0.63 | 0.84 | 0.51 | 0.74 |

* This Table presents cross-sectional and time-series associations between firm value and the presence of a staggered board. Columns (1) and (2) use data for 1995-2002. Columns (3) and (4) use the full time period 1978-2011. All columns include the following independent variables: *Staggered Board*, *Assets*, *ROA*, *CAPX*, *R&D*, and *Industry M&A Volume*. Columns (1) and (2) add these control variables: *G-Index*, *Firm Age*, *Insider*

Ownership, and *Insider Ownership Squared*. Columns (1) and (3) add the control variable *Delaware Incorporation*. The estimates use pooled-panel Tobin's Q regressions. Columns (1) and (3) include year and industry fixed effects. Columns (2) and (4) include year and firm fixed effects. Variables are defined in Appendix Table A. Statistical significance of the coefficients is indicated at the 1%, 5%, and 10% levels by ***, **, and *, respectively, based on robust standard errors clustered by firm. For the key independent variable—*Staggered Board*—this Table shows two separate standard errors: “(.)” reflects robust standard errors clustered at the firm level; “[.]” reflects robust standard errors that are not clustered.

Consistent with the findings of Bebchuk and Cohen, Column (1) documents that the cross-sectional association between *Staggered Board* and *Q* is negative and economically significant, suggesting that firms with a staggered board have firm values that are 2.4% lower than the average.¹⁵⁹ The coefficient's estimate, however, becomes statistically insignificant (a *t*-statistic of -1.17) when we use robust standard errors clustered at the firm level¹⁶⁰—a standard technique in today's empirical studies, but less frequent a decade ago. Using standard errors that are clustered by firm accounts for the tendency of governance provisions to be quite stable across time. Accordingly, using clustering is more reflective of the actual confidence we can have in reported estimates. Thus, the significant reduction in the cross-sectional coefficient on *Staggered Board* that we find upon using clustering should be interpreted as weakening our confidence in the documented negative impact of staggered boards on firm value in the cross section of firms.

More significantly, replacing industry fixed effects with firm fixed effects—in practice, adding a dummy variable for each unique firm in the pooled panel—reverses the results of Column (1). Indeed, Column (2) shows a statistically significant positive association between *Staggered Board* and *Q* over the period 1995-2002. The economic magnitude of this positive association is also considerable, suggesting that the adoption of a staggered board is

159. The economic significance of the impact of *Staggered Board* on *Q* is obtained by dividing the regression coefficient of -0.042 by the sample average *Q* during 1995-2002 of 1.72. As standard in the finance literature, this Article calculates the economic significance of the regression coefficients considering the change in the dependent variable (firm value as proxied by *Q*) that is associated with a change in the independent variable, normalized by the mean of the dependent variable. For independent variables that are dummy variables (like *Staggered Board*), the change in the independent variable is always equal to one. For continuous variables, the change in the independent variable is equal to the variable's standard deviation. The economic significance of continuous variables is obtained by multiplying the standard deviation of the independent variable with that variable's regression coefficient and then dividing this product by the mean of the dependent variable.

160. The coefficient estimate is, instead, statistically significant at the ten percent level (*t*-statistic of -1.17) based on using robust standard errors that are not clustered.

associated with an increase in firm value of 6.9%,¹⁶¹ which remains statistically significant even using robust standard errors clustered at firm level.¹⁶²

Columns (3) and (4) show similar results concerning the association between staggered boards and firm value for the full thirty-four-year period. Similar to Column (1), Column (3) shows that the cross-sectional association of *Staggered Board* and *Q* is negative and both statistically and economically significant. In particular, the findings suggest that firms with staggered boards have firm values that are 2.6% lower than the average.¹⁶³ This result, however, is again reversed when industry fixed effects are replaced by firm fixed effects. As shown in Column (4), the association between *Staggered Board* and *Q* becomes positive, and both strongly statistically and economically significant. More specifically, the result for Column (4) suggests that staggered boards have an average overall impact on firm value—resulting from combining the changes in *Q* experienced by firms that stagger up *and* by firms that stagger down—that is positive and equal to 3.7%.¹⁶⁴

How might one reconcile the conflicting results from the cross-sectional and the time-series analyses? As we have documented elsewhere, one possibility is that the cross-sectional results are largely due to reverse causality: a relatively low firm value would induce firms to adopt a staggered board, rather than the other way around.¹⁶⁵ This reverse causality could explain the cross-sectional result that firms with staggered boards tend to have lower firm values. However, reverse causality cannot explain the time-series results,

161. The economic significance of the time-series impact of *Staggered Board* on *Q* is obtained by dividing the regression coefficient of 0.119 by the sample average *Q* during 1995-2002 of 1.72.

162. As in Column (1), the *t*-statistic of the *Staggered Board* coefficient decreases from 2.15 to 1.82 when standard errors are clustered at the firm level. Reflecting the more limited time variation in staggered board changes during the period 1995-2002 (as compared to other periods in the sample), it is unsurprising that the statistical evidence of the estimated coefficient is reduced upon clustering standard errors. Unlike in the cross section, however, in the time series, the wealth effect of staggered boards is sufficiently strong such that the coefficient remains statistically significant at the ten percent level even when one uses clustering.

163. The economic significance of the impact of *Staggered Board* on *Q* is obtained by dividing the regression coefficient of -0.041 by the sample average *Q* during 1978-2011 of 1.58. As with the analysis of the 1995-2002 subperiod, the *t*-statistic of the *Staggered Board* coefficient increases from -4.98 to -2.38 when standard errors are clustered at the firm level.

164. The economic significance of the impact of *Staggered Board* on *Q* is obtained by dividing the regression coefficient of 0.059 by the sample average *Q* during 1978-2011 of 1.58. As with the analysis of the 1995-2002 subperiod, the *t*-statistic of the *Staggered Board* coefficient decreases from 4.65 to 2.11 when standard errors are clustered at the firm level.

165. See Cremers, Litov & Sepe, *supra* note 16, at 21-22, 51 tbl.7. Specifically, a standard deviation decrease in firm value can explain 35.1% to 57.8% of board staggering events in the sample, depending on which predicting model is employed. *Id.* at 22.

which document that firm value tends to go up after the adoption of a staggered board and down after the removal of a staggered board.

These striking results raise difficult questions for critics of staggered boards who argue that staggered boards are detrimental to shareholders' interests. If that assumption were true, one should find that the negative cross-sectional association between staggered boards and firm value becomes statistically significantly stronger in firm fixed effects regressions.¹⁶⁶ Instead, the results indicate that the sign of the coefficient is reversed in the time-series analysis, suggesting that the direction of causality runs from having a low firm value to adopting a staggered board.

It could be argued, however, that the above analysis does not investigate the disentangled effects of staggering up and staggering down on firm value. As a result, the analysis cannot exclude the possibility that either staggering up or staggering down is really what is driving the overall results. Such possible entangling is not a trivial issue. If staggering up emerged as the primary driver of the empirical results, we could not prove that “bundling” and expected takeovers do not provide alternative explanations for the results. Bundling occurs when a firm's management uses its agenda control to combine a charter amendment that the shareholders disfavor—for example, according to shareholder advocates, the adoption of a staggered board—with additional amendments enjoying shareholder support, such as the approval of a merger yielding shareholders a large payout.¹⁶⁷ Under these circumstances, the advantages offered to the shareholders by the whole amendment package would explain the increase in firm value associated with the adoption of a staggered board.¹⁶⁸ Bundling, however, cannot explain destaggering because shareholder advocates assume that destaggering is beneficial to shareholders and, therefore, should not require an additional sweetener to enjoy shareholder support.

Related to the phenomenon of bundling is another possible explanation: an anticipation effect. Under this explanation, a staggering-up decision could reflect an increased probability that the firm would become a takeover target; the anticipation of takeover would be the true source of the observed increase in value (at least until the market price incorporated the fact that the board had staggered up, removing anticipation of a takeover and allowing the price to

166. If staggered boards caused firms to have a lower firm value, performing firm fixed effects regressions should add to the robustness of this result by eliminating potential bias in the estimated coefficient. *See supra* notes 23-24 and accompanying text.

167. *See* Lucian A. Bebchuk & Ehud Kamar, *Bundling and Entrenchment*, 123 HARV. L. REV. 1549, 1552 (2010).

168. *See id.* at 1552-54 (producing evidence that they interpret as supporting the existence of a “bundling explanation” for the adoption of staggered boards).

resettle).¹⁶⁹ However, the anticipation effect does not explain the decrease in firm value after the removal of a staggered board. Indeed, for shareholder advocates, destaggering should increase the ex ante probability of a takeover, and thus the anticipation effect should trigger an increase, rather than a decrease, in firm value. In order to address the possibility that these alternative explanations might be applied to the time-series evidence above, this Article next attempts to investigate the disentangled effects of staggering and destaggering decisions.

2. Disentangled effects

To disentangle the effects of staggering and destaggering decisions, we use two different dummy variables. The dummy *Staggering Up* equals one after the firm has adopted a staggered board (and only as long as the firm does not subsequently destagger). Note that in order to “adopt” a staggered board for the purposes of the dummy *Staggering Up*, the firm must have previously been present in the sample without a staggered board. As a result, in firm fixed effects regressions, *Staggering Up* captures the difference in valuation associated with the adoption of a staggered board. Similarly, *Staggering Down* equals one after the firm has removed a staggered board, such that this dummy captures the difference in firm value associated with the removal of a staggered board.

Table 2 below shows our results. Columns (1) and (2), respectively, present results for *Staggering Up* and *Staggering Down* for the full sample, 1978-2011. After testing for the full period, subsample analyses were performed to establish the robustness of the results across different sample periods. Specifically, Columns (3) and (4) present results for *Staggering Up* and *Staggering Down* for the first half of the time period, 1978-1994, while Columns (5) and (6) present results for the second half, 1995-2011. For all columns in this Table, the *t*-statistics were provided based on robust standard errors that are clustered at firm level.

169. As takeovers usually produce high abnormal returns to the targets' shareholders, the expectation of a future takeover may increase the target's share price, as a result of an anticipation effect. See, e.g., Alex Edmans et al., *The Real Effects of Financial Markets: The Impact of Prices on Takeovers*, 67 J. FIN. 933, 934 (2012) (“[A]n anticipation effect may lead to reverse causality from takeover activity to market valuations, with forward-looking prices inflated by the probability of a future takeover.” (emphasis omitted)).

Table 2
Firm Value and Staggering Up Versus Staggering Down*

| Dependent Variable: Q | | | | | | |
|------------------------------------|-----------------------|-----------------------|----------------------|----------------------|-----------------------|-----------------------|
| Independent Variables: | Period: | | | | | |
| | 1978-2011 | | 1978-1994 | | 1995-2011 | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Staggering Up | 0.0381 (1.14) | | 0.0232 (0.76) | | 0.130** (2.21) | |
| Staggering Down | | -0.129*** (-3.09) | | -0.0598 (-1.06) | | -0.138*** (-2.80) |
| Assets | -0.214*** (-11.95) | -0.216*** (-12.03) | -0.104*** (-4.18) | -0.104*** (-4.17) | -0.360*** (-15.13) | -0.362*** (-15.13) |
| ROA | 2.967*** (20.28) | 2.964*** (20.39) | 1.916*** (11.78) | 1.919*** (11.77) | 2.512*** (14.39) | 2.511*** (14.39) |
| CAPX | 0.115 (0.67) | 0.115 (0.67) | 0.139 (0.78) | 0.137 (0.77) | 0.27 (1.09) | 0.26 (1.06) |
| R&D | 1.465*** (2.76) | 1.445*** (2.74) | 2.659** (2.09) | 2.652** (2.07) | -0.137 (-0.24) | -0.139 (-0.24) |
| Industry M&A Volume _{t-1} | -0.155*** (-2.86) | -0.155*** (-2.86) | -0.0789 (-0.87) | -0.0791 (-0.87) | -0.131** (-2.15) | -0.128** (-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 | 0.74 | 0.783 | 0.783 | 0.764 | 0.764 |

* This Table presents results separately associating changes in firm value with firm decisions to adopt a staggered board (*Staggering Up*) or to remove a staggered board (*Staggering Down*) in addition to a set of control variables. All columns include the following variables: *Staggering Up*, *Staggering Down*, *Assets*, *ROA*, *CAPX*, *R&D*, and *Industry M&A Volume*. The analysis includes the following subperiods: 1978-2011 in Columns (1)-(2), 1978-1994 in Columns (3)-(4), and 1995-2011 in Columns (5)-(6). The estimates use pooled-panel Tobin's Q regressions. All specifications include year and firm fixed effects (not shown). Variables are defined in Appendix Table A. Statistical significance of the coefficients is indicated at the 1%, 5%, and 10% levels by ***, **, and *, respectively, based on robust standard errors clustered by firm.

As shown in Columns (1) and (2), which consider the full sample, the effect of board destaggering seems to dominate the effect of board staggering. Indeed, the coefficient estimate of *Staggering Up* (shown in Column (1)) is positive at 3.8%, but statistically insignificant with a *t*-statistic of 1.14. Conversely, the coefficient of *Staggering Down* (shown in Column (2)) is negative at 12.9% and highly statistically significant, with a *t*-statistic of 3.09. The economic magnitude of the association between *Staggering Down* and *Q* is also considerable, suggesting that dismantling a staggered board is associated with a reduction in firm value of 8.2%.¹⁷⁰

Results for the subperiod 1978-1994, presented in Columns (3) and (4), similarly show that *Staggering Up* positively influences firm value while *Staggering Down* negatively influences firm value. However, the coefficient estimates for this subperiod are statistically insignificant for both *Staggering Up* and *Staggering Down*. Results for the subperiod 1995-2011, shown in Columns (5) and (6), confirm the positive and negative associations, respectively, of *Staggering Up* and *Staggering Down* with *Q*. In this case, however, both coefficients are statistically and economically significant—with *Staggering Up* being associated with a 7.5% increase in firm value¹⁷¹ and *Staggering Down* being associated with a 7.9% decrease in firm value.¹⁷² The subsample results thus suggest that the limited statistical evidence for the positive association between *Staggering Up* and firm value in the full sample might be attributable to the fact that most staggering up activity occurred during the 1980s,¹⁷³ a period during which the data illustrate weaker associations between board structure and firm value.

The results of Table 2 are thus incompatible with the conjecture that bundling or expected takeover activity might explain the overall time-series positive association between staggered boards and firm value, as these alternative hypotheses cannot explain the significant detrimental effects that destaggering decisions exert on firm value.

Overall, the empirical evidence suggests that staggered boards serve a positive, constructive role in corporate governance.¹⁷⁴ However, a theory of board empowerment is needed to offer a complete account of both *how*

170. The economic significance of the impact of *Staggering Down* on *Q* is obtained by dividing the regression coefficient of -0.129 by the sample average *Q* during 1978-2011 of 1.58.

171. The economic significance of the impact of *Staggering Up* on *Q* is obtained by dividing the regression coefficient of 0.130 by the sample average *Q* during 1995-2011 of 1.74.

172. The economic significance of the impact of *Staggered Down* on *Q* is obtained by dividing the regression coefficient of -0.138 by the sample average *Q* during 1995-2011 of 1.74.

173. See *supra* Figure 2.

174. Empirically, this conclusion is supported by further tests performed in the finance companion of this Article including, among others, first-difference regressions, portfolio analysis, and matching analysis. See Cremers, Litov & Sepe, *supra* note 16, at 4.

staggered boards increase firm value, and *why* the competing push for empowered shareholders is not only empirically erroneous, but also theoretically lacking. We tackle this issue in Part III.

III. Empowered Boards: Microeconomic Foundations

This Part revisits the theoretical foundations of the board empowerment claim by drawing primarily from three different strands of economic literature: general equilibrium theory in the context of incomplete markets; asset pricing; and contract theory. Our analysis of these three theoretical strands makes clear that market imperfections are more complex and more important than typically acknowledged in the corporate law debate.¹⁷⁵ Once these imperfections are taken into account, they not only strip away the alleged desirability of shareholder empowerment, but also expose the existence of a larger tradeoff in corporate governance than shareholder advocates generally realize.

Indeed, while shareholder advocates admit that shareholder empowerment may result in increased short-termism, they quickly dismiss this tradeoff as being of little relevance because they consider short-termism to be a marginal risk relative to the risk of moral hazard.¹⁷⁶ On the polar opposite side, board advocates seem largely unconcerned about directorial or managerial moral hazard,¹⁷⁷ instead emphasizing that short-termism poses a first-order problem in corporate governance. So far, however, these commentators have drawn more from real-world experience than from theory for support,¹⁷⁸ which helps explain the perception that their claims rest on a fragile theoretical basis within the larger academic debate.¹⁷⁹

175. Michael Klausner engages in a paradigmatic revision of corporate law theory grounded on a similar premise, although he seems to appreciate the rise of shareholder power as a market-driven correction. See Klausner, *supra* note 114, at 1328-30.

176. See *supra* note 79 and accompanying text.

177. See Marcel Kahan & Edward B. Rock, *Corporate Constitutionalism: Antitakeover Charter Provisions as Precommitment*, 152 U. PA. L. REV. 473, 482 (2003).

178. See, e.g., Martin Lipton, *Bite the Apple; Poison the Apple; Paralyze the Company; Wreck the Economy*, HARV. L. SCH. F. CORP. GOV. & FIN. REG. (Feb. 26, 2013), <http://corpgov.law.harvard.edu/2013/02/26/bite-the-apple-poison-the-apple-paralyze-the-company-wreck-the-economy> (basing support for board insulation on “decades of . . . experience” accumulated while advising companies); Martin Lipton & Theodore Mirvis, *Harvard’s Shareholder Rights Project Is Wrong*, HARV. L. SCH. F. CORP. GOV. & FIN. REG. (Mar. 23, 2012), <http://corpgov.law.harvard.edu/2012/03/23/harvards-shareholder-rights-project-is-wrong> (criticizing the SRP’s destaggering activity on the ground of experience, suggesting that staggered boards are a beneficial governance arrangement).

179. See, e.g., Bebchuk, *supra* note 13, at 1667 (arguing that “experience[]” is “not a good basis for policymaking”); cf. Bratton & Wachter, *supra* note 55, at 29 (“The shareholder opponents ask for too much when they call for present law reform to turn back empowered shareholders, for their claim of perverse short-term effects requires a more sustained interrogation than occurs in the debate’s confines.”).

The theoretical foundations we provide below serve to fill this void in the debate, pointing to the existence of a weightier tradeoff in governance structures.¹⁸⁰ Our analysis reveals that concerns about managerial moral hazard are subordinate to the competing concerns posed by what we refer to as the shareholder limited-commitment problem. This problem is a consequence of market imperfections that render shareholders unable to credibly commit to the long-term horizon and, in turn, distort the incentives of both managers and other firm stakeholders to make optimal firm-specific investments. As explained below, an empowered board—which includes both staggered boards and, more broadly, boards that retain their historical authority to resist short-term shareholder and market pressures—emerge as a desirable governance tool with which to address these distortions. It does so by serving as a value-increasing device through which shareholders can credibly commit themselves to long-term engagements vis-à-vis managers and other firm stakeholders, in their own interest and that of society as a whole.

A. General Equilibrium Theory in a Shareholder Economy

General equilibrium analysis attempts to explain how prices coordinate the activities of an entire economy—including production, exchange, and consumption activities—in a way that leads to an efficient allocation of resources.¹⁸¹ In contrast, partial equilibrium analysis focuses on a single market or product, assuming that the prices of all other markets or products are fixed.¹⁸² While this simplifying assumption renders economic discussion more tractable, a general shortcoming of partial equilibrium analysis is that it may fail to accurately model real-world phenomena.

This shortcoming exposes the limits of Jensen and Meckling's agency theory in modeling shareholder behavior.¹⁸³ By casting the interactions among market actors as a principal-agent relationship within the limited economic domain of a single firm, Jensen and Meckling reduce market imperfections to managerial moral hazard. This simplified setting assumes away shareholders' future consumption preferences as well as feedback from other markets, and all market prices and value-relevant information are assumed to be general knowledge. Under these assumptions, no shareholder disagreement ever occurs over production choices, as all shareholders unanimously favor (expected) high-profit production plans over (expected) low-profit production plans.¹⁸⁴

180. *See infra* Part III.C.

181. For a general discussion of general equilibrium theory, see ANDREU MAS-COLELL ET AL., MICROECONOMIC THEORY 515, 545-46 (1995).

182. *See id.* at 312, 325.

183. *See supra* notes 70-71 and accompanying text.

184. *See, e.g.*, Oliver D. Hart, *Take-Over Bids and Stock Market Equilibrium*, 16 J. ECON. THEORY 53, 53 (1977).

Sidestepping the shareholders' collective action problems, the only residual issue is the question of how to best induce the board and managers not to deviate from the firm's objective maximization function; empowered shareholders—in the jargon of economists, a shareholder economy—emerge as the naturally desirable solution.

Considerable complications arise, however, when we relax the assumption that shareholders' consumption preferences¹⁸⁵ are uniform.¹⁸⁶ The problem is not only the divergence of interests that arises between shareholders with short-term objectives (i.e., liquidity needs) and long-term goals; divergence in risk preferences matters greatly as well. For example, shareholders who prefer a steady flow of income could favor a lower-profit production plan as long as it reliably delivers a stable dividend stream. Under general equilibrium theory, an additional assumption is therefore necessary to ensure that the firm's profit maximization will continue to be objectively defined: the existence of complete markets.¹⁸⁷ Under this assumption, there is a complete set of contingent markets that allows the buying and selling of claims on any good at every future point of time and in all possible economic circumstances.¹⁸⁸ This set allows shareholders to insure their consumption preferences against unwanted uncertainty by trading securities that are contingent on future states of the world.¹⁸⁹ In this environment, the Fisher Separation Theorem illustrates that the production function (i.e., a firm's choice of investments) becomes independent of shareholder preferences.¹⁹⁰ Accordingly, a firm's profit maximization function is once again objectively defined as the maximization of that firm's net present value.¹⁹¹ Consequently, as in Jensen and Meckling's

185. See Jacques H. Dreze, (*Uncertainty and the Firm in General Equilibrium Theory*, 95 ECON. J. (SUPPLEMENT: CONF. PAPERS) 1, 1 (1985) (explaining that “the primitive data, which the economist treats as exogenous and does not seek to explain” in fact “[b]asically . . . correspond to the *opportunities* and *motivations* of all agents”).

186. See *id.* (“General equilibrium theory . . . defines clearly the boundary between economic analysis and the exogenous primitive data or assumptions from which it proceeds; that is, it defines a precise, self-contained ‘model.’” (emphasis omitted)).

187. See Hart, *supra* note 184, at 53 (explaining that the argument that shareholders unanimously favor high-profit plans “relies implicitly on the assumption that either the future is certain or that firms can insure themselves against uncertainty by making contracts for contingent futures commodities”).

188. See 1 MICHAEL MAGILL & MARTINE QUINZII, *THEORY OF INCOMPLETE MARKETS* 2 (1996) (describing complete markets).

189. For example, “a firm contemplating a new investment could simultaneously protect itself against demand uncertainties by selling its output at each date on a futures market, and against supply uncertainties by purchasing insurance against output deficiencies, whether they be due to machine breakdowns, low labour productivity or mismanagement.” Dreze, *supra* note 185, at 3.

190. See IRVING FISHER, *THE THEORY OF INTEREST: AS DETERMINED BY IMPATIENCE TO SPEND INCOME AND OPPORTUNITY TO INVEST IT* 141 (1930).

191. See *id.*

partial equilibrium framework, empowered shareholders again emerge as a desirable solution.

The market structure observed in the real world, however, is quite distant from the idealized structure of complete markets in which everything is tradable in advance.¹⁹² Among other factors, transaction costs, nonverifiable symmetric information, and asymmetric information limit existing insurance opportunities.¹⁹³ Under the more realistic assumption of *incomplete* markets, the argument that production is independent of shareholder preferences breaks down, as shareholders can no longer rely on fully contingent contracts to insure their future consumption needs. How to practically manage the firm's assets and opportunities under a profit-maximization objective becomes a subjective decision, which varies with shareholder preferences.¹⁹⁴

Consequently, shareholder disagreement may occur—as evidenced by the fact that one does not generally observe unanimous shareholder deliberations—causing equilibrium security prices to no longer be uniquely defined.¹⁹⁵ Research on specific investment criteria in the context of incomplete markets has accordingly concluded that even the most promising forms of shareholder economy result in inefficient allocations,¹⁹⁶ unless it is possible to artificially replicate a mechanism of full insurance.¹⁹⁷

192. See Dreze, *supra* note 185, at 3 (“Incomplete markets are the rule . . .”); Jean-Jacques Laffont, *A Brief Overview of the Economics of Incomplete Markets*, 65 ECON. REC. 54, 54 (1989) (“[W]hen uncertainty, information and long-term horizons are considered, the model [of complete competitive markets] loses most of its descriptive power.”). See generally 1 MAGILL & QUINZII, *supra* note 188, at 2-3, 2 n.1 (providing a brief account of the history of the theory of incomplete markets).

193. See Laffont, *supra* note 192, at 55-56 (discussing the main sources of market incompleteness).

194. See Peter M. DeMarzo, *Majority Voting and Corporate Control: The Rule of the Dominant Shareholder*, 60 REV. ECON. STUD. 713, 714 (1993); see also Sanford J. Grossman & Oliver D. Hart, *A Theory of Competitive Equilibrium in Stock Market Economies*, 47 ECONOMETRICA 293, 293 (1979) (“In a world without a complete set of contingent markets . . . firms’ profits at different dates and contingencies cannot be aggregated into a single index, and so profit maximization is not well-defined.”); Hart, *supra* note 184, at 53-54 (“[I]n the absence of contingent commodity markets, there is in general *no* goal for a firm to pursue which represents the interests of all its shareholders.”).

195. See 1 MAGILL & QUINZII, *supra* note 188, at 384. Magill and Quinzii explain that when shareholders value income streams based on heterogeneous consumption preferences, they may differently estimate a firm’s market value, with the result that the current security price might fail to reflect optimal production decisions. *Id.*

196. See J. Geanakoplos et al., *Generic Inefficiency of Stock Market Equilibrium when Markets Are Incomplete*, 19 J. MATHEMATICAL ECON. 113 (1990); Michael Magill et al., *A Critique of Shareholder Value Maximization 1* (Swiss Fin. Inst., Research Paper No. 13-16, 2013), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2246797 (“[A] competitive equilibrium with shareholder value maximizing firms (capitalist equilibrium) is never Pareto optimal.”).

197. See Jacques H. Drèze, *Investment Under Private Ownership: Optimality, Equilibrium and Stability*, in ALLOCATION UNDER UNCERTAINTY: EQUILIBRIUM AND OPTIMALITY 129, 129-
footnote continued on next page

General equilibrium theory with incomplete markets thus challenges the claim that shareholders are optimally situated to make decisions that maximize firm value. Nonetheless, general equilibrium theory focuses on market dynamics, touching only upon institutional mechanisms (i.e., the internal operations of the firm).¹⁹⁸ In order to move to a positive account of board empowerment, a broader theoretical approach is necessary. This Article develops such an approach in Subparts B and C below.

B. Asset Pricing Theory and Shareholder Commitment

1. Price dynamics and shareholder value

An additional assumption on which shareholder advocates rely to defend shareholder empowerment is that asset prices may serve as an efficient informational focal point, thus mitigating asymmetric-information issues between firm insiders and outsiders. Board advocates reject this claim by asserting that the informational focal point provided by market prices is at best imperfect. Accordingly, discussion of asset pricing theory in corporate law can be described as hinging on assumptions about the greater or lesser informational efficiency of market prices, as reflected in the strong or semi-strong versions of the ECMH.¹⁹⁹ The financial economics literature, however, evidences a tension between two more radically opposed views of financial-

30 (Jacques H. Drèze ed., 1974). Drèze proposes an investment rule under which shareholders are allowed to make side payments in order to reach unanimity on production decisions, using these payments to insure their future consumption needs against uncertainty. *See id.* at 139-42 (describing an economy in which each consumer-owner has a vector of transfers). Although this mechanism might be theoretically feasible in a close corporation, operationalizing the Drèze criterion in the public corporation would involve prohibitively large transaction costs.

198. Economist Peter M. DeMarzo has investigated whether shareholder disagreement can be solved through institutional decision criteria such as majority voting. *See DeMarzo, supra* note 194. He showed that a majority-voting equilibrium might exist if the largest shareholder has complete control over the firm, as this naturally mitigates potential shareholder disagreement over production decisions. *See id.* at 714. Under the more common hypothesis of relative control, however, multiple price equilibria obtain, with the majority-voting criterion leading to unstable decisions and possibly a failure to select the optimal production plan. *See id.* Most importantly, DeMarzo also showed that centralized decisionmaking—board control—might offer a remedy to that failure. *See id.* at 728. On the assumption that board preferences incarnate a weighted average of shareholder preferences, vesting the board with control over the voting agenda—for example, through the attribution of veto power—can lead to optimal production decisions. *See id.* at 728-29. Under this result, empowering the board is thus a means to effectively address the indeterminacy and nonoptimality of production decisions in joint-ownership structures, rather than a source of deviation from efficient decisionmaking.

199. *See supra* note 75 and accompanying text.

market dynamics.²⁰⁰ While the Hayekian view of markets substantially reproduces the semi-strong version of the ECMH, the Keynesian view holds that prices are cyclically influenced by herding and short-run speculation and are thus cyclically uninformative.²⁰¹

As explained by Keynes through his influential metaphor of financial markets as a beauty contest,²⁰² rational herding behavior may induce investors to react to aggregate market demand rather than to their own information, because “each competitor has to pick, not those faces which he himself finds prettiest, but those which he thinks likeliest to catch the fancy of the other competitors.”²⁰³ Understanding market prices thus requires not just an understanding of all market actors’ average expectations about future liquidation value, but also an understanding of all market actors’ beliefs about other market actors’ beliefs (that is, higher-order beliefs).²⁰⁴ Because consideration of higher-order beliefs incentivizes an excessive reliance on public information, the mean path of prices may depart from the consensus estimate about the fundamental value of a firm,²⁰⁵ negating the predictive power of even the semi-strong form of the ECMH.²⁰⁶

200. See Giovanni Cespa & Xavier Vives, *Dynamic Trading and Asset Prices: Keynes vs. Hayek*, 79 REV. ECON. STUD. 539, 539-40 (2012).

201. See *id.*

202. See JOHN MAYNARD KEYNES, *THE GENERAL THEORY OF EMPLOYMENT INTEREST AND MONEY* 156 (1936). The speculative-market hypothesis has been later formalized by Michael Harrison and David Kreps, see J. Michael Harrison & David M. Kreps, *Speculative Investor Behavior in a Stock Market with Heterogeneous Expectations*, 92 Q.J. ECON. 323 (1978), and more recently by José Scheinkman and Wei Xiong, see José A. Scheinkman & Wei Xiong, *Overconfidence and Speculative Bubbles*, 111 J. POL. ECON. 1183 (2003).

203. KEYNES, *supra* note 202, at 156.

204. The intuition for this result can be grasped through the following illustration, which borrows from a work by Franklin Allen, Stephen Morris, and Hyun Song Shin. See Franklin Allen et al., *Beauty Contests and Iterated Expectations in Asset Markets*, 19 REV. FIN. STUD. 719, 720-21 (2006). Consider an ordinary investor who has to predict the value of a financial asset and has both private and public information on the asset’s value. If the investor knows that the asset’s value depends on the average expectation of its future payoff, she will put more weight on the public information than the private information, as only the former is observed by all individuals. See *id.* For additional discussion of higher-order beliefs in asset pricing theory, see Philippe Bacchetta & Eric Van Wincoop, *Higher Order Expectations in Asset Pricing*, 40 J. MONEY, CREDIT & BANKING 837, 838-39 (2008); and Bruno Biais & Peter Bossaerts, *Asset Prices and Trading Volume in a Beauty Contest*, 65 REV. ECON. STUD. 307, 307-09 (1998).

205. See Allen et al., *supra* note 204, at 721; Bacchetta & Van Wincoop, *supra* note 204, at 839. Under the assumption of excessive reliance on public information and higher-order beliefs, “if public information suggests that payoffs will be high, then this can lead to high asset prices even if many traders have private information that the true value is low”—partially explaining the occurrence of bubbles. Allen et al., *supra* note 204, at 741-42. The fact that asset pricing bubbles continually emerge indirectly confirms that prices cyclically converge to a Keynesian equilibrium.

206. See Cespa & Vives, *supra* note 200, at 540, 566.

Speculative factors unrelated to the true value of market assets may also push prices away from fundamentals. Indeed, when the possibility of differential investor information is taken into account, better-informed investors may rationally choose to exploit their partly private information and act as price-makers rather than price-takers by speculating on short-run price differences.²⁰⁷ As with higher-order beliefs, the result is that the impact of fundamentals on market prices is sterilized, increasing the likelihood of mispricing.

Once one takes into account the possibility of a Keynesian market, prices cannot be safely relied upon to get shareholders past the barrier of asymmetric information. This is especially true for corporate production involving the development of nonstandardized, innovative technologies, particularly where that production relies heavily on firm-specific employee investments. Indeed, information about the long-term value of these investments tends to be “soft”—mostly limited to firm insiders—and hence less accurately reflected in market prices.²⁰⁸ By contrast, channeling resources to such investments tends to require large capital expenditures in the short term, which necessarily decreases a firm’s current earnings. This decrease in present earnings is a type of “hard” information that the current stock price can more easily incorporate.²⁰⁹ As a result, shareholders are more likely to misinterpret a short-term drop in profits as a sign of underperformance, when in reality it might reflect the expenses of an investment whose value will not be realized immediately.

The possibility of informational inefficiency affecting shareholder evaluation of managerial actions helps explain why short-termism is likely to be a much more severe problem than the corporate law scholarship typically acknowledges. In the standard rendering, short-termism is considered a consequence of shareholder “impatience.”²¹⁰ The assumption of impatient shareholders, however, underestimates the problem of short-termism by providing a motivation attributable to only *some* shareholders, not all of them; impatience cannot reasonably be said to constitute a systematic shareholder issue. A better explanation is that short-termism is a primary manifestation of the limited-commitment problem that affects *all* shareholders as a matter of course. Economically, a commitment problem arises each time decisionmakers have incentives to renege on prior engagements where the anticipation of this

207. *See id.* at 541.

208. *See, e.g.*, JEAN TIROLE, *THE THEORY OF CORPORATE FINANCE* 250 (2006) (defining “soft” information as that which “cannot be verified by the investors”); Alex Edmans et al., *The Real Costs of Financial Efficiency when Some Information Is Soft* 2-3 (Eur. Corp. Governance Inst., Finance Working Paper No. 380/2013, 2015), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2316194.

209. *See* Edmans et al., *supra* note 208, at 2.

210. *See supra* note 67 and accompanying text.

circumstance reduces ex ante welfare.²¹¹ Something similar happens in the corporate context when shareholders cannot credibly commit to value-increasing, long-term investments. In an attempt to maximize the value of their holdings—and unable to tell whether a short-term drop in firm outcomes reflects mismanagement or an investment that is slow in paying off—shareholders will either seek a change in investment policy through board removal or dump their shares, increasing the likelihood of a change in control.²¹² In either case, directors and managers risk losing their jobs, with the result that they may rationally develop “myopic incentives,”²¹³ passing up profitable long-term projects that are more likely to be mispriced or overinvesting in short-term projects that are less profitable.²¹⁴ In a sense, the lack of shareholder commitment induces managers to make the decisions that

211. *Supra* note 30.

212. This description of the dynamics underlying the shareholders’ limited-commitment problem is consistent with investors’ average holding periods. *See, e.g.*, Patrick Bolton & Frédéric Samama, *L-Shares: Rewarding Long-Term Investors* 3, 43-44 (Eur. Corp. Governance Inst., Finance Working Paper No. 342/2013, 2012), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2188661 (documenting the existence of increasingly shorter average holding periods by investors from 1960 to 2005); Martijn Cremers et al., *Stock Duration, Analysts Recommendations, and Misvaluation* 10-13, 31 tbl.1 (Dec. 2014) (unpublished manuscript), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2190437 (documenting that the average length of time a stock is held in an institutional portfolio is about 1.39 years). An earlier version of the latter study reported that holding durations of institutional investors have lengthened slightly since 1985 (from 1.2 years to 1.5 years). Martijn Cremers et al., *Stock Duration, Analysts Recommendations, and Misvaluation* 10-11, 30 tbl.2 (Jan. 15, 2013) (unpublished manuscript), <http://www.geneva-summit-on-sustainable-finance.ch/wp-content/uploads/2013/03/sautner.pdf>. Nevertheless, average holding periods remain largely incompatible with a long-term investment horizon, which is usually set at around 5 years. *See* Dominic Barton, *Capitalism for the Long Term*, HARV. BUS. REV., Mar. 2011, at 85, 86.

213. Rational-myopia studies were pioneered by Jean-Jacques Laffont and Jean Tirole, and Jeremy Stein. *See* Jean-Jacques Laffont & Jean Tirole, *Repeated Auctions of Incentive Contracts, Investment, and Bidding Parity with an Application to Takeovers*, 19 RAND J. ECON. 516, 529-31 (1988) (showing formally that if investments are “invisible,” high investments might be mistaken for low effort); Jeremy C. Stein, *Efficient Capital Markets, Inefficient Firms: A Model of Myopic Corporate Behavior*, 104 Q.J. ECON. 655, 656-61 (1989) (modeling suboptimal investment where managers maximize a weighted average of near-term stock prices and long-run value); Jeremy C. Stein, *Takeover Threats and Managerial Myopia*, 96 J. POL. ECON. 61, 62-67 (1988) (showing formally that managers of a firm threatened by a takeover will sell an underpriced asset).

214. *See, e.g.*, John R. Graham et al., *The Economic Implications of Corporate Financial Reporting*, 40 J. ACCT. & ECON. 3, 32-35 (2005) (reporting that eighty percent of surveyed chief financial officers declared being willing to reduce investments in research and development (R&D) and other long-term projects in order to meet earnings targets); M.P. Narayanan, *Managerial Incentives for Short-Term Results*, 40 J. FIN. 1469, 1470 (1985) (“By selecting a project that yields short-term profits, the manager can expect to improve the perception about her ability . . . [T]his potential advantage to the manager might outweigh the fact that from the long-term point of view the project is not the best available . . .”).

an uninformed market wants to see, because managers anticipate that pursuing their informational advantage might be punished, rather than rewarded, by the market.²¹⁵

2. Pricing inefficiencies and ownership reconcentration

Given these crucial implications of asset pricing inefficiency, the key question is: What market features drive prices to converge to a Keynesian or Hayekian equilibrium? An intuitive response is that capital market structures and investors' underlying institutional frameworks play a key role in influencing asset pricing dynamics.

As a starting point, consider Berle and Means's classic account of twentieth-century capital markets.²¹⁶ With their widely dispersed and passive shareholders, the Berle-Means markets largely share the defining features of Hayekian markets. Indeed, dispersed shareholders ridden with collective action problems fit the paradigm of price-taker investors, in that they are largely unable to access any differential information or the means to influence market trends. The new millennium, however, has seen the U.S. capital markets experience radical changes.²¹⁷ Individual investors now mainly hold their equity interests through sets of intermediary institutions. Additionally, the rise of activist hedge funds has reduced the classic shareholder collective action problem, thereby giving new significance to shareholder governance. From an asset pricing perspective, these transformative changes seem to point to a higher likelihood of Keynesian prices, as they increase both the likelihood of herding and speculative behaviors.

In an environment where institutional investors' performances are evaluated in relative terms over fairly short periods, "beating the market" is now the common imperative.²¹⁸ Under this imperative, herding is likely to be a defining market feature, because computing the beliefs of other institutional investors emerges almost as an intrinsic need when an investor's portfolio is evaluated against a competitive benchmark.

215. See Philippe Aghion & Jeremy C. Stein, *Growth Versus Margins: Destabilizing Consequences of Giving the Stock Market What It Wants*, 63 J. FIN. 1025, 1026 (2008); Lucian Arye Bebchuk & Lars A. Stole, *Do Short-Term Objectives Lead to Under- or Overinvestment in Long-Term Projects?*, 48 J. FIN. 719, 719-20 (1993); Adam Brandenburger & Ben Polak, *When Managers Cover Their Posteriors: Making the Decisions the Market Wants to See*, 27 RAND J. ECON. 523, 529, 533 (1996).

216. See ADOLF A. BERLE, JR. & GARDINER C. MEANS, *THE MODERN CORPORATION AND PRIVATE PROPERTY* 84-89 (reprint ed. 1982).

217. See *supra* notes 90-99 and accompanying text.

218. See Gilson & Gordon, *supra* note 94, at 889-90 (describing the competitive-pressure mechanisms that affect the performance of institutional investors).

Assuming that hedge funds can serve an informational role—as recently suggested by Ronald Gilson and Jeffrey Gordon²¹⁹—does not imply that prices are less likely to be Keynesian. Gilson and Gordon argue that hedge funds, acting as specialists in monitoring and undertaking fundamental analysis, and institutional investors, acting as specialists in low-cost diversification, combine to offer efficient, market-based stewardship of business decisions.²²⁰ The existence of a permanent class of informed investors, however, is not necessarily conducive to prices that are closer to fundamentals. In contrast, market-making trading that sterilizes the impact of private information, thus pushing current prices further away from fundamentals, might be a rational response for informed investors.²²¹ Accordingly, the risk that “both institutional investors and activist investors may be myopic, to the end of increasing the value of a speculative option,”²²² seems larger than assumed by Gilson and Gordon, with undervalued negative implications for the alleged efficiency of market inputs.

In the best-case scenario, under the current market structure with ownership concentration in intermediary institutions, one cannot rule out the possibility of Keynesian prices. In the worst case, this possibility becomes salient. Either way, short-termism concerns—and, more generally, concerns about the adverse effects of the shareholder limited-commitment problem—can no longer be dismissed as nonexistent or even of only marginal importance.

219. *See id.* at 867 (defining activist shareholders, such as hedge funds, as “governance intermediaries” that actively use governance levers to influence firm investment policy, often seeking the support of institutional shareholders).

220. Gilson and Gordon see the informational role served by hedge funds as capable of reducing what they call the “agency costs of agency capitalism.” *Id.* at 890, 893. This new kind of agency cost stems from the business model of institutional investors, which constrains them to assessing investments based exclusively on stock market performance—the only metric compatible with the competitive pressure to which they are subject. *See id.* at 889-90. In this environment, the exercise of rapid-exit rights, rather than corrective voice, is the ordinary response to low firm performance. *See id.* at 890-92. Thus, the informational role served by hedge funds should be seen as an “endogenous response to the monitoring shortfall that follows from ownership reconcentration in intermediary institutions.” *Id.* at 867.

221. *See, e.g.,* Patrick Bolton et al., *Executive Compensation and Short-Termist Behaviour in Speculative Markets*, 73 REV. ECON. STUD. 577, 579-80 (2006) (explaining that under the hypothesis of speculative markets, active shareholder intervention is more likely to be the cause of rather than a solution to short-termism concerns); Joshua Coval & Erik Stafford, *Asset Fire Sales (and Purchases) in Equity Markets*, 86 J. FIN. ECON. 479, 480-82 (2007) (documenting that large flows by mutual fund investors lead prices of stocks held by the funds to shift away from fundamental value for prolonged periods of time); Edmans et al., *supra* note 169, at 935 (constructing “a measure of price pressure induced by mutual funds not due to informational reasons but rather to flows they face from investors”).

222. Gilson & Gordon, *supra* note 94, at 917.

C. Governance Tradeoffs and Priorities: A Contract Theory Approach

By taking into consideration the existence of multiple sources of market incompleteness, incomplete-markets theory uncovers the limits of an analytical approach that exclusively focuses on the managerial moral hazard problem and thereby rejects the optimality of shareholder empowerment. Asset pricing theory exposes a primary source of distortions in shareholder incentives: their lack of commitment due to pricing inefficiencies. Yet this combined analysis still does not answer the question of what a desirable governance model for the public corporation would look like, given the complexity of market imperfections. In light of the competing concerns posed by managerial moral hazard and the shareholder limited-commitment problem, addressing this question demands an inquiry into the order of governance priorities.

1. Dynamic contracts and renegotiation

In investigating governance tradeoffs and priorities, we begin by revisiting the shareholder-manager relationship as a dynamic, long-term contract. This approach allows us to draw on a basic insight of contract theory: a contract is dynamically efficient as long as, and only if, it is renegotiation-proof.²²³ This means that the principal can commit to playing by a consistent set of rules irrespective of what information she may learn about the agent over the development of the contractual relationship.²²⁴ With full principal commitment, the optimal long-term contract simply replicates the initial optimal contract across each period of the parties' relationship.²²⁵ Conversely, when the principal cannot commit to avoiding future renegotiation, the initial contract may fail to be incentive-compatible. Ex post (that is, after the principal has learned new information about the agent), renegotiation allows the principal to efficiently redesign the initial allocation of contractual entitlements. However, ex ante (that is, at the time the agent is hired), the possibility of future renegotiation distorts the agent's incentives.²²⁶ Indeed, the agent anticipates that the principal will use any information she—the agent—might reveal in the course of their relationship to renegotiate contractual entitlements. In turn, she may react to this expectation by taking actions that

223. See JEAN-JACQUES LAFFONT & DAVID MARTIMORT, *THE THEORY OF INCENTIVES: THE PRINCIPAL-AGENT MODEL* 303-04, 319 (2002).

224. See *id.* at 304 & n.2.

225. See *id.*

226. See, e.g., BERNARD SALANIÉ, *THE ECONOMICS OF CONTRACTS: A PRIMER* 192-95 (1997); Klaus M. Schmidt, *Contract Renegotiation and Option Contracts*, in 1 *THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW* 432, 432 (Peter Newman ed., 1998).

please the principal in earlier periods but are detrimental to the principal's interest in the long run.²²⁷

A party's ability to unilaterally renegotiate the terms of a contract is a special kind of renegotiation. In particular, the relationship between shareholders and firm insiders (i.e., directors and managers) fits this contractual paradigm, as shareholders can remove directors and top management or simply sell their shares, which may trigger a change in control and the replacement of incumbents. On this reconceptualization of shareholder-manager relationships, the shareholder limited-commitment problem thus emerges as the combined result of asset pricing imperfections and unilateral renegotiation rights. Because shareholders are unable to tell whether the board and top managers are performing or underperforming before the full realization of an investment decision, they cannot credibly commit to long-term investment strategies—in other words, shareholders cannot commit *not* to use their unilateral renegotiation rights. Under this analytical framework, the optimal incentive scheme needs to (i) induce managers to exert effort *and* (ii) mitigate the *ex ante* distortions arising from the shareholders' inability to assure management they will not engage in *ex post* renegotiation of corporate contracts. The next step is considering whether a shareholder-empowerment model or a board-empowerment model can better approximate such an incentive scheme.

2. Tradeoffs and priorities

By facilitating board removal, shareholder empowerment strengthens the shareholders' right of unilateral renegotiation. Stronger renegotiation rights may be a valid solution to the moral hazard problem in a static context in which commitment issues do not arise. In such a context, the attribution of such rights to the principal may have beneficial disciplinary effects on the agent's incentives to exert effort, assuming renegotiation (i.e., termination) is costly to the agent or staying employed is very lucrative.²²⁸

The assessment of shareholder empowerment, however, radically changes in a scenario involving intertemporal choices and pricing inefficiencies. In this scenario, the disciplinary benefits of stronger renegotiation rights come at the expense of exacerbating the distortion of incentives that arises from the lack of shareholder commitment. Indeed, directors will be more likely to prefer short-term over long-term projects when they stand for reelection annually and, thereby, face a greater risk of removal upon a short-term drop in

227. See Drew Fudenberg & Jean Tirole, *Moral Hazard and Renegotiation in Agency Contracts*, 58 *ECONOMETRICA* 1279, 1289-96 (1990) (modeling the problems that may arise when, at the interim stage, the principal is unable to tell how well the agent is performing and may have incentives to renegotiate the contract).

228. See John Y. Zhu, *Myopic Agency* 3-4 (May 6, 2015) (unpublished manuscript) (on file with author).

performance.²²⁹ If the manager's compensation is performance based (that is, tied to current stock prices), myopic incentives might be further exacerbated, as pay-for-performance schemes also punish early failures.²³⁰ This punishment might consist of lower rewards or even termination of the manager's contract. On the other hand, however, a governance model with an empowered board that is protected against short-term shareholder and market pressures might increase the risk of directorial or managerial moral hazard, as this model limits disciplinary effects via the threat of shareholder renegotiation.

Given the tradeoff posed by the competing problems of managerial moral hazard and lack of shareholder commitment, it makes sense to proceed by attempting to understand which problem should be granted priority over the other. We will first consider the case for privileging shareholder empowerment, positing that moral hazard is the more severe governance problem. Under the proposed reconceptualization of the shareholder-manager relationship, this assessment turns on an evaluation of the relative benefits of providing shareholders with enhanced renegotiation rights against the respective costs of such rights. We argue that two main factors suggest that the costs of shareholder empowerment are likely to exceed its benefits.

First, as explained above, the risk of short-termism is especially pronounced for corporate-production processes that involve the development of nonstandardized, innovative technology and that rely more on specific human capital contributions.²³¹ It might be tempting to downplay the importance of this kind of production as only affecting a restricted set of companies, thereby curtailing the relevance of short-termism concerns. However, this would underestimate the vast transformation that corporate production has undergone in the last thirty to forty years.²³² Corporations

229. Economists Mathias Dewatripont and Eric Maskin formally showed that the disciplinary effects of a decentralized-credit model, where refinancing decisions are in the hands of new potential investors—another form of unilateral principal renegotiation—may foster an overemphasis on short-term results if the realization of the firm's project occurs only in the long term and if, at the interim stage, good projects are hardly distinguishable from bad projects. See M. Dewatripont & E. Maskin, *Credit and Efficiency in Centralized and Decentralized Economies*, 62 REV. ECON. STUD. 541, 541-42 (1995).

230. See Gustavo Manso, *Motivating Innovation*, 66 J. FIN. 1823, 1823-24 (2011) (arguing that pay-for-performance schemes that reward or penalize managers based on near-term outcomes may have adverse consequences if the goal is to induce managers to explore new, untested investments); Zhu, *supra* note 228, at 1-2 (arguing that pay-for-performance schemes that “reward[] high output today” are likely to encourage managers to cause the firm's present expected output to rise, potentially at the expense of future returns).

231. See *supra* notes 208-09 and accompanying text.

232. See Carol A. Corrado & Charles R. Hulten, *How Do You Measure a “Technological Revolution”?*, 100 AM. ECON. REV. (PAPERS & PROC.) 99, 100 (2010) (“[T]he recent technological revolution, in its various manifestations, is associated with a dramatic
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born in the industrial age derived most of their value from physical assets and manufacturing activities. In twenty-first-century corporations, however, firm value increasingly depends on intangible assets, such as technological know-how, patents, research and development projects, brand names, and trade secrets.²³³ Along the same lines, human capital has grown away from its neoclassical representation as an unspecified input. In part as a reflection of technological progress, which naturally tends to require more specific skills and know-how, human capital is, today, an increasingly specialized resource.²³⁴ As a result of these radical changes, investments in innovation and other long-term specific projects are no longer an exception, but arguably a defining feature of many twenty-first-century corporations.²³⁵

Second, short-termism is not the only adverse consequence that a lack of shareholder commitment may engender. Revisiting the lack of shareholder commitment as a renegotiation problem introduces an additional set of concerns that has received little attention in recent discussions of optimal governance models.²³⁶ To the extent that shareholders can seek a change in investment policy or sell their shares whenever it benefits them, the corporate contracts of the firm's various stakeholders—including suppliers, consumers,

shift in the composition of investment spending and in the factors driving the growth of output per worker hour." (emphasis omitted)).

233. As explained by Carol Corrado and Charles Hulten:

[T]he innovation that has shaped recent economic growth is not an autonomous event that falls like manna from heaven. Nor is it a result of R&D and ICT investments alone. Instead, a surge of new ideas (technological or otherwise) is linked to output growth through a complex process of investments in technological expertise, product design, market development, and organizational capability. This process affects all sources of growth to one extent or another but is most clearly detected in the growing contribution of intangible capital.

Id. at 103.

234. See, e.g., Alex Edmans, *Does the Stock Market Fully Value Intangibles?: Employee Satisfaction and Equity Prices*, 101 J. FIN. ECON. 621, 622, 627-29 (2011) ("I find a strong, robust, positive correlation between [employee] satisfaction and shareholder returns. This result provides empirical support for recent theories of the firm focused on employees as the key assets." (citations omitted)); Luigi Zingales, *In Search of New Foundations*, 55 J. FIN. 1623, 1641-42 (2000) (emphasizing the importance of human capital over physical capital in today's corporations).

235. Michael E. Porter, *Capital Disadvantage: America's Failing Capital Investment System*, HARV. BUS. REV., Sept.-Oct. 1992, at 65, 65-66 (arguing that investments in innovation and intangible assets are critical to any corporation's success in today's globalized era); Zingales, *supra* note 234, at 1640-42 (arguing that the nature of the firm has changed, such that human-capital intensive firms are increasingly more common today).

236. The new short-term/long-term perspective embraced by the corporate governance debate has reframed the debate as exclusively pertaining to the shareholder sphere. Other stakeholders' interests—which once took center stage in corporate law discussions—hardly find any place in contemporary discussions about desirable governance models. For an exception, see Roe, *supra* note 79, at 1004, which rejects the view that short-termism concerns may offer a reason to support a stakeholder model of the corporation.

workers, and creditors—are also subject to the threat of unilateral shareholder renegotiation. In a classic holdup framework,²³⁷ ex post renegotiation causes the stakeholders' corporate investment to lose value—the more specific their investments, the more value they lose. This potential for holdup distorts ex ante incentives to invest optimally in the firm, inducing stakeholders to increase the cost of their corporate performance and/or reduce the level of their investment.²³⁸ As with short-termism, the ultimate result is reduced firm value.

The different role played by formal contracting with respect to shareholders' and managers' corporate interests, on the one hand, and stakeholders' corporate interests, on the other, only partially alters the terms of analysis. As is well known, the shareholder-manager contract is mostly implicit, as the shareholders' corporate interests are so broad as to be largely noncontractible.²³⁹ The stakeholders' more limited corporate interests, however, can be bargained for and therefore protected by explicit contracts.²⁴⁰ From a strictly legal viewpoint, the firm is the stakeholders' contractual counterparty. Therefore, it could be argued that shareholder actions—such as seeking board removal to implement a change in investment policy—have limited influence on how the firm's contractually specified relationships with the various stakeholders are performed. This argument, however, fails to consider that the long-term nature of most stakeholder contracts necessarily makes these contracts highly incomplete. Hence, there remain large areas for discretionary and legally unenforceable understandings concerning the parties' performances.²⁴¹ It is within these areas that the lack of shareholder commitment will matter the most.

In the case of employees, for example, the employer's right of at-will termination leaves significant room for the exercise of discretionary power and is, therefore, subject to shareholder influence via renegotiation. It appears to be no coincidence, then, that a standard governance intervention technique

237. A holdup problem occurs “when a transactor . . . decides it is wealth-maximizing to take advantage of contractual incompleteness to expropriate the rents on the specific investments made by its transacting partner.” Benjamin Klein, *Hold-Up Problem*, in 2 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 241, 241 (Peter Newman ed., 1998).

238. Lynn Stout has proposed a similar ex ante/ex post perspective to analyze the effects of antitakeover defenses, criticizing past empirical studies for failing to consider the ex ante benefits of having such defenses. See Lynn A. Stout, *Do Antitakeover Defenses Decrease Shareholder Wealth?: The Ex Post/Ex Ante Valuation Problem*, 55 STAN. L. REV. 845, 853-56 (2002).

239. See William W. Bratton & Michael L. Wachter, *A Theory of Preferred Stock*, 161 U. PA. L. REV. 1815, 1819 (2013).

240. See *id.* (discussing how outside lenders, as opposed to stockholders, can enter into contracts that “approach completeness”).

241. See Stout, *supra* note 238, at 847-48 (highlighting the importance of implicit corporate contracting).

of activist hedge funds is to cut the cost of labor by reducing the number of workers.²⁴² A similar argument applies to suppliers and large customers who are engaged in long-term, firm-specific investments and are therefore vulnerable to changes in the firm's operating strategy, such as those that occur upon board removal by the shareholders or, worse, a takeover.²⁴³ In the case of creditors, the problem arises out of the shareholders' preference for high-risk, high-return projects, because shareholders expect to reap the full upside of these projects if things go well. If things turn awry, however, creditors bear most of the downside risk.²⁴⁴ In light of these preferences, the shareholders' ability to influence a firm's investment policy—for example, by using the threat of removal to pressure the board—could have dramatic consequences for creditors, especially considering that risk is a variable that is difficult to bargain for *ex ante*.

The pervasive risk of short-termism that accompanies modern corporate production and the salience of the stakeholder problem provide theoretical support for arguing that the costs of shareholder empowerment exceed its benefits. The final step in our theoretical inquiry is thus making the case for a model of board empowerment, positing that the lack of shareholder commitment is the more severe governance problem.

3. Empowered boards as commitment devices

Under the reconceptualization of the lack of shareholder commitment as a renegotiation problem, the adoption of a staggered, empowered board emerges as desirable to mitigate the value-reducing distortions that the threat of shareholder renegotiation may engender in managers and stakeholders. A staggered board mitigates these distortions by functioning as a commitment device through which shareholders can bind themselves *ex ante* to not unilaterally renegotiate manager or stakeholder contracts in the short term, thereby improving their position *ex post*.²⁴⁵

242. See, e.g., Alon Brav et al., *The Real Effects of Hedge Fund Activism: Productivity, Asset Allocation, and Labor Outcomes*, 28 REV. FIN. STUD. 2724, 2748-52 (2015).

243. For earlier studies exploring the inefficiencies arising from the possibility that business strategies might revert through a change in control, see Andrei Shleifer & Lawrence H. Summers, *Breach of Trust in Hostile Takeovers*, in CORPORATE TAKEOVERS: CAUSES AND CONSEQUENCES 33 (Alan J. Auerbach ed., 1988), which focuses on shareholder-stakeholder relationships. See also Charles R. Knoeber, *Golden Parachutes, Shark Repellents, and Hostile Tender Offers*, 76 AM. ECON. REV. 155, 166 (1986) (stating that antitakeover defenses may be beneficial to constrain shareholder opportunism).

244. See, e.g., Sepe, *supra* note 30, at 332, 338.

245. Other corporate law scholars have explored the idea that staggered boards may serve as a (pre-)commitment device to increase the board's bargaining power and the expected returns of target shareholders *during* a takeover. See Kahan & Rock, *supra* note 177, at 484 & n.32 (quoting other studies discussing the benefits of enhanced board power within the takeover context). Unlike these scholars, this Article argues that staggered boards are more relevant to corporate governance and firm value *before* a takeover
footnote continued on next page

From a tradeoff perspective, however, the question remains whether the benefits of board insulation come at the expense of a higher risk of directorial or managerial moral hazard. Empirically speaking, our results do not show such a linkage. Indeed, the positive time-series association of staggered boards and firm value indicates that any potential increase in costs due to managerial moral hazard is generally more than compensated for by the benefits accruing from committing shareholders more strongly to long-term investment projects.

Theoretically speaking, the potential tradeoff posed by empowered boards is less problematic than that posed by empowered shareholders. Indeed, several instruments remain available to constrain moral hazard once the shareholder limited-commitment problem has been taken care of through an empowered board. First, with shareholders committed to long-term projects, pay-for-performance schemes can effectively be used to constrain managerial moral hazard without increasing the risk of short-termism.²⁴⁶ Second, while a board that is empowered through a staggering provision makes replacing firm insiders more difficult, it does not make them irremovable.²⁴⁷ Corporations with a staggered board incarnate a representative-democracy model, not a dictatorship. The traditionalist view, as observed by Chief Justice Strine, posits that “[i]f investors truly believe that a board is governing poorly and hiding behind its classified status,” they can elect their own slate of directors to the board, “who can then change the system. And if you don’t want to take responsibility for governing, don’t mess with the folks who do.”²⁴⁸

Shareholder advocates might counter that there is no reported instance of a bidder persevering through the two-year delay required by a staggered board to replace a majority of directors.²⁴⁹ Yet this evidence is not enough to conclude that staggered boards create an insurmountable barrier to the

occurs. With a staggered board in place, both managers and stakeholders are protected from the adverse effects arising from the shareholders’ lack of commitment. This protection gives managers and stakeholders incentives to optimally invest in the firm. From this perspective, the theory of empowered boards is closer in spirit to the director-primacy theory of Stephen Bainbridge, *see* Bainbridge, *supra* note 59, and the team-production theory of Margaret Blair and Lynn Stout, *see* Blair & Stout, *supra* note 59. The theory outlined here, however, is grounded on asset pricing considerations, on which neither Bainbridge’s director-primacy nor Blair and Stout’s team-production theories focus.

246. With committed shareholders, compensation schemes inherently exhibit more “tolerance (or even reward) for early failure and reward for long-term success,” mitigating the potential distortive effect of classic pay-for-performance schemes. Manso, *supra* note 230, at 1824.

247. *See* Bebchuk et al., *supra* note 39, at 890 (stating that effective staggered boards are “a powerful, *even if not insurmountable*, antitakeover device” (emphasis added)).

248. Strine, *supra* note 59, at 1773.

249. *See* Subramanian, *supra* note 127, at 6.

replacement of incumbents. For one thing, it could be that the refusal of a bidder to wait through the two-year election cycle reflects an inefficient bid, as suggested by prior empirical work highlighting that “it remains unclear whether the takeover bids that might obtain in the absence of board classification would be efficient for target shareholders.”²⁵⁰ Moreover, the increased incidence of nominally friendly acquisitions suggests both that market discipline has persisted notwithstanding staggered boards and that board replacement does not necessarily demand hostility.²⁵¹ Finally, liability rules and court intervention remain available to shareholders seeking to address instances of outrageous managerial moral hazard or violations of fiduciary duty.²⁵²

No comparable remedies are available to mitigate the shareholder limited-commitment problem under a model with empowered shareholders, other than the presence of a controlling shareholder.²⁵³ Indeed, several factors combine to make a controlling shareholder’s commitment to a firm’s long-term investment strategy more credible. First, the cost of selling a large block is greater.²⁵⁴ Second, controlling shareholders enjoy better access to firm information.²⁵⁵ Third, they are more likely to be subject to reputational sanctions if they default on a prior commitment.²⁵⁶ The presence of a controlling shareholder, however, is not a choice “available” to corporate actors, but the endogenous result of capital market dynamics.

To put the results of our inquiry into corporate governance tradeoffs and priorities in economic terms, a desirable governance model needs to solve a

250. Bates et al., *supra* note 108, at 658.

251. See Bratton & Wachter, *supra* note 8, at 676 (“[T]he revival of private equity buyouts showed that disciplinary merger activity can proliferate even in the absence of either actual or threatened hostile bids.”).

252. Courts’ traditional reluctance to challenge director primacy in deciding whether to adopt antitakeover defenses, see *supra* notes 83-89 and accompanying text, might indicate that outrageous moral hazard is an unlikely possibility, consistent with this Article’s empirical analysis.

253. See *supra* note 198.

254. See, e.g., Harold Demsetz, *The Structure of Ownership and the Theory of the Firm*, 26 J.L. & ECON. 375, 375-76 (1983) (describing how diversified ownership impedes shareholder control and therefore profit maximization); Andrei Shleifer & Robert W. Vishny, *Large Shareholders and Corporate Control*, 94 J. POL. ECON. 461, 461-62 (1986) (describing how only large shareholders can profitably monitor management).

255. Controlling shareholders often hold board seats (directly or through a representative), which helps explain their informational advantage. Cf. Clifford G. Holderness & Dennis P. Sheehan, *The Role of Majority Shareholders in Publicly Held Corporations: An Exploratory Analysis*, 20 J. FIN. ECON. 317, 324 (1988) (reporting that majority shareholders or their representatives almost always serve as directors or officers).

256. Greater reputation follows from the position of controllers as directors. Cf. Renée B. Adams et al., *The Role of Boards of Directors in Corporate Governance: A Conceptual Framework and Survey*, 48 J. ECON. LITERATURE 58, 95-96 (2010) (offering a survey of the literature on boards’ reputational issues).

constrained-optimization problem: it must minimize moral hazard while committing shareholders to long-term value creation. Board empowerment better approximates that model.

IV. The Empirics of the Shareholder Limited-Commitment Problem

The theory of board empowerment developed in Part III explains the constructive role of staggered boards that emerges from our time-series analysis. The source of the value added by a staggered board lies in credibly committing shareholders to long-term engagements vis-à-vis directors, managers, and stakeholders. As such, the promotion of long-term projects and optimal stakeholder firm-specific investments emerge as the two main transmission channels through which staggered boards positively impact firm value. This analysis also suggests that the conventional view of the tradeoff posed by board empowerment is inaccurate. Empirically, staggering up a board does not seem to come at the expense of entrenching directors and managers and thereby increasing managerial moral hazard.

This Part subjects the claim that staggered boards add value by mitigating the shareholder limited-commitment problem to additional empirical testing. The ensuing empirical analysis investigates whether the data support our theoretical predictions about (i) identified transmission channels and (ii) the tradeoff between having a staggered board and moral hazard. As discussed below, for both inquiries, the empirical results strongly support our theoretical predictions.

A. Transmission Mechanisms

1. Innovation and intangible assets

The above theoretical analysis suggests that the shareholder limited-commitment problem is likely to be most severe when corporate production involves the development of nonstandardized, innovative technology and relies more on firm-specific human capital—as happens in many of today’s corporations.²⁵⁷ Accordingly, having a staggered board should be more strongly related to increased financial value for corporations with more innovation and long-term, specific investments.

This Article employs two variables to capture these features of corporate production: *R&D*—a proxy for the importance of long-term research and development projects (retrieved from Compustat), and *Intangible Assets*—a proxy for a firm’s level of information asymmetry (also retrieved from

²⁵⁷ See *supra* Part III.B.1.

Compustat). On the one hand, *R&D* is a standard measure of innovation,²⁵⁸ and encouraging managers to specifically invest in both physical assets and human capital is essential to innovating new products and operations. On the other hand, investments in intangible assets such as technological know-how, advertising, patents, software development, brand names, and trade secrets are all likely to figure prominently on the balance sheets of most modern corporations, although in different proportions and combinations. These investments typically involve an intrinsically higher level of informational asymmetry than tangible assets, whose production tends to follow more standardized investment plans.²⁵⁹ Hence, if long-term, specific investments can explain the positive impact of staggered boards on firm value, one would expect that impact to be greater in firms with higher levels of *R&D* and *Intangible Assets*.

Table 3 below shows the results for pooled-panel *Q* regressions on *Staggered Board* both with and without its interactions with *R&D* and *Intangible Assets* (plus the standard controls).

Table 3
Firm Value, Staggered Boards, and
Proxies for Innovation and Intangible Assets*

| Dependent Variable: Q | | |
|-------------------------------------|-------------------|--------------------|
| Independent Variables: | (1) | (2) |
| Staggered Board | 0.071** (2.44) | -0.024 (-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 |

258. See Edwin Mansfield, *R&D and Innovation: Some Empirical Findings*, in *R&D, PATENTS, AND PRODUCTIVITY* 127, 127-29 (Zvi Griliches ed., 1984), <http://www.nber.org/chapters/c10047.pdf>.

259. See, e.g., Edmans et al., *supra* note 208, at 2.

* This Table presents the time-series associations between firm value and the presence of a staggered board using the full time period 1978-2011. All columns include the independent variable *Staggered Board* plus the set of standard controls: *Assets*, *ROA*, *CAPX*, *R&D*, and *Industry M&A Volume*. Column (1) adds the interaction between *R&D* and *Staggered Board*, and Column (2) adds the interaction between *Intangible Assets* and *Staggered Board*. Coefficients on standard controls are not shown in order to save space. The estimates use pooled-panel Tobin's Q regressions including both year and firm fixed effects. Variables are defined in Appendix Table A. Statistical significance of the coefficients is indicated at the 1%, 5%, and 10% levels by ***, **, and *, respectively, based on robust standard errors clustered by firm.

The results of Table 3 strongly support the theoretical prediction that the adoption of a staggered board is more valuable to firms where the shareholders' limited-commitment problem tends to be more severe, such as firms with more innovation and long-term specific investments. Indeed, these results show that a staggered board is related to changes in firm value considerably more strongly in firms with more *R&D* and *Intangible Assets*. For example, the interaction of *R&D* * *Staggered Board* (see Column (1)) has a positive and both statistically and economically significant coefficient. In particular, firms whose *R&D* is one standard deviation higher than the mean (i.e., "high R&D" firms) experience a 7.4% higher *Q* after staggering up relative to firms whose *R&D* is at the mean.²⁶⁰ This result means that firms that are more invested in development and innovation benefit more from having a staggered board. Remarkably, as compared to the direct economic effect of *Staggered Board*, the economic effect of *Staggered Board* for high R&D firms is nearly 11.9%.²⁶¹ Likewise, firms with *Intangible Assets* (see Column (2)) that are one standard deviation higher than the mean present a 2.5% higher *Q* if they stagger up, relative to firms with average *Intangible Assets*.²⁶² As for more innovative firms, this result means that firms engaged in investments that imply more asymmetric information benefit more from having a staggered board.²⁶³

260. The economic significance of the interacted impact of *R&D* and *Staggered Board* on *Q* is calculated by dividing the regression coefficient of 1.956, times the standard deviation of *R&D* of 0.06, by the sample average *Q* during 1978-2011 of 1.58.

261. The total economic significance of *Staggered Board* on *Q* for high R&D firms is calculated by summing the economic significance of the interacted impact of *R&D* and *Staggered Board* on *Q* (i.e., 7.4%) and adding the economic significance of *Staggered Board* alone on *Q*. The latter is calculated by dividing the regression coefficient of 0.071 by 1.58 (the sample average *Q* during 1978-2011), which delivers 4.5%.

262. The economic significance of the interacted impact of *Intangible Assets* and *Staggered Board* on *Q* is calculated by dividing the regression coefficient of 0.164, times the standard deviation of *Intangible Assets* of 0.24, by the sample average *Q* during 1978-2011 of 1.58.

263. This evidence is consistent with prior finance studies documenting that investments in R&D and intangibles tend to be associated with higher firm value in the long term, while often being underestimated in the short term, which suggests the existence of
footnote continued on next page

2. Stakeholder participation

The theoretical analysis presented in Part III of this Article further indicates that the limited-commitment problem would be most severe for firms whose business by nature requires more commitment between the corporation and one or more of its stakeholders.²⁶⁴ Empirically, one should thus find that the adoption of a staggered board has a greater positive impact on firm value in these firms, as they should benefit more from securing the long-term engagement of shareholders toward stakeholders.

This Article tries to capture the need for more intense stakeholder commitment using three different variables as proxies: *Large Customer*, *Labor Productivity*, and *Contract Specificity*. *Large Customer* is an indicator variable set equal to one if the firm has at least one customer accounting for ten percent or more of its sales, which we use as a proxy for the importance of (long-term) firm customers in creating financial value.²⁶⁵ *Labor Productivity* identifies industries with a higher marginal product of labor and hence, more firm-specific investments by the employees.²⁶⁶ Finally, *Contract Specificity* is a proxy for relationship-specific investments.²⁶⁷ Firms in industries with higher *Contract Specificity* use a higher fraction of inputs (i.e., products and services) that are not sold on an organized exchange or reference priced in a trade publication and for which the market thus appears less complete. As a result, the engagement in these contracts requires more firm-specific investments and more firm commitment.²⁶⁸ Two of these proxies, *Labor Productivity* and *Contract Specificity*, are at the industry level and thus have the advantage of being arguably not (fully) under the firm's control, which mitigates endogeneity concerns. Indeed, using features that are shared by all firms within a given industry reduces the risk that differences in Tobin's Q can result from

severe information asymmetry problems. See, e.g., Louis K.C. Chan et al., *The Stock Market Valuation of Research and Development Expenditures*, 56 J. FIN. 2431, 2431-34 (2001); Allan C. Eberhart et al., *An Examination of Long-Term Abnormal Stock Returns and Operating Performance Following R&D Increases*, 59 J. FIN. 623, 623-27 (2004).

264. See *supra* notes 239-44 and accompanying text.

265. Data for *Large Customer* come from the historic Compustat Segment tapes for 1986-2007. About a quarter of firms in the sample have a *Large Customer*.

266. Data for *Labor Productivity* are at the industry level and come from the U.S. Bureau of Labor Statistics (using the four digit SIC code) and is available for only a subset of firms.

267. This variable is borrowed from a study by Nathan Nunn. Nathan Nunn, *Relationship-Specificity, Incomplete Contracts, and the Pattern of Trade*, 122 Q.J. ECON. 569 (2007). Data for *Contract Specificity* are at the industry level for 1997 and made available at Nathan Nunn's website. See Nathan Nunn, *Data*, HARV. UNIV., <http://scholar.harvard.edu/nunn/pages/data-0> (last visited Jan. 1, 2016). This variable is available only for about a quarter of the industries in the sample and is set as "missing" if unavailable.

268. On asset specificity, see generally OLIVER E. WILLIAMSON, *THE ECONOMIC INSTITUTIONS OF CAPITALISM: FIRMS, MARKETS, AND RELATIONAL CONTRACTING* 52-56 (1985).

unobserved firm characteristics that determine both the adoption of a staggered board and more firm-specific investments.

Table 4 below presents the results of pooled-panel *Q* regressions on *Staggered Board* both with and without interactions with the aforementioned commitment proxies (plus the standard controls).

Table 4
Firm Value, Staggered Boards, and
Proxies for Stakeholder Relationships*

| Dependent Variable: Q_{it} | | | |
|--|----------------------------------|--------------------|-------------------|
| Independent Variables: | (1) | (2) | (3) |
| Staggered Board | 0.043 (1.45) | -0.0493 (-0.91) | -0.249 (-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 | 9628 |
| R-Squared | 0.715 | 0.748 | 0.695 |

* This Table presents the time-series associations between firm value and the presence of a staggered board using the full time period 1978-2011. All columns include the independent variable *Staggered Board*, plus the set of standard controls: *Assets*, *ROA*, *CAPX*, *R&D*, and *Industry M&A Volume*. Column (1) adds the interaction between *Large Customer* and *Staggered Board*, Column (2), the interaction between *Labor Productivity* and *Staggered Board*, and Column (3), the interaction between *Contract Specificity* and *Staggered Board*. Coefficients on standard controls are not shown to save space. The estimates use pooled-panel Tobin's *Q* regressions, including year and firm fixed effects. Variables are defined in Appendix Table A. Statistical significance of the coefficients is indicated at the 1%, 5%, and 10% levels by ^{***}, ^{**}, and ^{*}, respectively, based on robust standard errors clustered by firm.

As shown in Table 4, all interaction coefficients have positive signs, although results are statistically stronger for *Large Customer* and *Labor Productivity*. Specifically, as shown in Column (1), the interaction of *Staggered Board* and *Large Customer* has a positive and both statistically and economically significant coefficient equal to 4.6% (*t*-statistic of 2.38).²⁶⁹ This result suggests that the decision to adopt or remove a staggered board is associated with a substantially larger increase and decrease, respectively, in firm value for firms with a large customer. The interaction between *Staggered Board* and *Labor Productivity* (Column (2)) also has a positive and both strongly statistically and economically significant coefficient. Economically, the coefficient implies that if a firm is in an industry whose labor productivity is a standard deviation above the average, the adoption of a staggered board is associated with a 3.9% greater increase in firm value²⁷⁰ compared to firms in industries with average labor productivity. The coefficient of the interaction between *Staggered Board* and *Contract Specificity* in Column (3) is also positive, but statistically insignificant (*t*-statistic of 1.62, with an associated *p*-value of 0.105). We note, however, that *Contract Specificity* is available only for a limited sample,²⁷¹ which might help explain the lack of statistical evidence.

These results strongly support the view that staggered boards help commit shareholders and directors to a longer horizon vis-à-vis other stakeholders because adopting (or removing) a staggered board is more strongly related to changes in firm value for (1) firms with large long-term customers, indicating a mutual longer-term commitment between the firm and those customers;²⁷² (2) firms in industries requiring relationship-specific investments or operating in markets that are more incomplete; and (3) firms with more firm-specific labor productivity, or whose employee commitment is more important for value creation.

269. The economic significance of the interacted impact of *Large Customer* and *Staggered Board* on *Q* is calculated by dividing the regression coefficient of 0.073 by the sample average *Q* during 1978-2011 of 1.58.

270. The economic significance of the interacted impact of *Labor Productivity* and *Staggered Board* on *Q* is calculated by dividing the regression coefficient of 0.0994, times the standard deviation of *Labor Productivity* of 0.62, by the sample average *Q* during 1978-2011 of 1.58.

271. See *supra* note 267.

272. This evidence is consistent with the result of Johnson et al., *supra* note 32, at 309, documenting that the adoption of antitakeover defenses in IPOs exhibiting firm-specific relationships with customers, suppliers, and strategic partners is associated with increased firm value.

B. What *Really* Matters in Corporate Governance?

As discussed in Part II.C.1, a substantial body of empirical literature has employed aggregate governance indices to measure how insulating managers and boards from shareholder and market pressures affects firm value. The G-Index and the E-Index are among the best known of these indices.²⁷³ The G-Index aggregates several entrenchment provisions, including staggered boards, and finds a negative correlation with firm value.²⁷⁴ The E-Index retains only six of the G-Index's original provisions (in order to limit methodological concerns arising from the G-Index's inclusion of an excessive number of provisions): staggered boards, poison pills, golden parachutes, supermajority requirements for merger, supermajority requirements for charter amendments, and supermajority requirements for bylaws amendments.²⁷⁵ For the authors of the E-Index, these six provisions are what "really matter for firm value,"²⁷⁶ as they find that such provisions "fully drive" the negative correlation with firm value identified by the Gompers, Ishii, and Metrick study.²⁷⁷ However, both studies consider different provisions individually rather than in particular combinations.²⁷⁸ Thus, it could be that staggered boards serve a different function depending on whether they are adopted in isolation or in combination with other provisions that are included in the G-Index or the E-Index. This hypothesis suggests that the benefits and costs of a staggered board vary depending on the existence or absence of other provisions.

Specifically, when a firm employs a staggered board, but has not adopted the other provisions included in the above indices, it could be that the commitment function dominates. By contrast, when a firm adopts a staggered board in combination with other provisions included in the indices, the entrenchment function might dominate—contrary to our conclusion that the adoption of a staggered board does not lead to increased entrenchment. Empirically, we test for this hypothesis by investigating the interactions between the adoption of a staggered board and the other provisions included in the G-Index and the E-Index. If adopting a staggered board serves a value-decreasing entrenchment function when used in combination with the provisions of the indices, we should find that a staggered board's positive effect on firm value in the time-series analysis becomes negative when interacting with these provisions.

273. See *supra* notes 109-10 and accompanying text.

274. See *supra* notes 111-12 and accompanying text.

275. See Bebchuk et al., *supra* note 110, at 785, 789-91.

276. *Id.* at 824.

277. *Id.* at 823.

278. See *id.* at 805.

Table 5 presents the results of the pooled-panel *Q* regressions on *Staggered Board* with and without its interactions with the G-Index and the E-Index. In the analysis of both the G-Index (Columns (1) and (2)) and the E-Index (Columns (4) and (5)), *Staggered Board* is removed in computing the indices in order to separate its effect on firm value. For robustness, Columns (3) and (6) estimate the impact of each index on firm value after including *Staggered Board*.

Table 5
Firm Value, Staggered Boards, and Governance Indices*

| Dependent Variable: Q | | | | | | |
|--|----------------------|---------------------|----------------------|----------------------|----------------------|---------------------|
| Independent Variables: | (1) | (2) | (3) | (4) | (5) | (6) |
| Staggered Board | 0.0655** (2.20) | 0.051 (1.01) | | 0.0981** (2.54) | 0.0806* (1.77) | |
| G-Index (without SB) | -0.0134** (-2.43) | 0.0154** (-2.39) | | | | |
| G-Index (without SB) * Staggered Board | | 0.00361 (0.64) | | | | |
| G-Index | | | -0.00995* (-1.81) | | | |
| E-Index (without SB) | | | | -0.0317** (-2.54) | -0.0420** (-2.29) | |
| E-Index (without SB) * Staggered Board | | | | | 0.0168 (0.83) | |
| E-Index | | | | | | -0.00929 (-0.79) |
| Fixed Effects: | Year + Firm | | | | | |
| N | 22,748 | 22,748 | 22,748 | 21,453 | 21,453 | 21,453 |
| R-Squared | 0.73 | 0.73 | 0.73 | 0.762 | 0.762 | 0.761 |

* In this Table, we present the time-series associations between firm value and the presence of a staggered board using the full time period 1978-2011. All columns include the independent variable *Staggered Board*, plus the set of standard controls: *Assets*, *ROA*, *CAPX*, *R&D*, and *Industry M&A Volume*. Column (2) adds the interaction between *G-Index (without SB)* and *Staggered Board*, and Column (4) between *E-Index (without SB)*

and *Staggered Board*. Coefficients on standard controls are not shown to save space. The estimates use pooled-panel *Q* regressions including year and firm fixed effects. Variables are defined in Appendix Table A. Statistical significance of the coefficients is indicated at the 1%, 5%, and 10% levels by ***, **, and *, respectively, based on robust standard errors clustered by firm.

Columns (1) through (3) of Table 5 focus on the G-Index. We begin, in Column (1), by estimating the time-series association of *Staggered Board* and the *G-Index (without SB)* with firm value. We find that the coefficient on *Staggered Board* is positive and statistically significant, while the coefficient on the *G-Index (without SB)* is negative and statistically significant. This result seems to suggest that the adoption of a staggered board is *not* a primary driver of entrenchment, as the G-Index provisions continue to have a negative effect on firm value once we remove *Staggered Board* from the index. Next, in Column (2), we estimate the commingled effect of *Staggered Board* and the *G-Index (without SB)*. We find that the interaction is insignificant, which similarly contradicts the hypothesis that adopting other entrenching features changes the function served by staggered boards. This interpretation is strengthened by the result we obtain in Column (3), which shows the effect of the *G-Index* on firm value once we include *Staggered Board*. While the coefficient remains negative and significant, the economic magnitude of the effect is substantially reduced as compared to the results we obtain in Column (1) (where we removed *Staggered Board*). This suggests that staggered boards are not a complement to other entrenching features, but rather constrain any negative effects produced by the adoption of such features on firm value.

Columns (4) through (6) present results from a similar analysis for the E-Index. In Column (4), we show the separate effects of *Staggered Board* and the *E-Index (without SB)* on firm value. As for the *G-Index (without SB)*, we find that the coefficient on the *E-Index (without SB)* is negative and statistically significant, while the coefficient on *Staggered Board* is positive and statistically significant. Similar to the result we obtain for the G-Index, this result seems to suggest that the adoption of a staggered board is *not* a primary driver of entrenchment, as the E-Index provisions continue to have a negative effect on firm value once we remove *Staggered Board* from the index. In Column (5), we find that the coefficient interaction on the *E-Index (without SB)* is statistically insignificant, which again suggests that adopting other entrenching features does not change firm value, regardless of how effective such provisions are in promoting entrenchment. Finally, in Column (6), we find that the effect of the *E-Index* on firm value becomes statistically insignificant once we include *Staggered Board*. This result radically negates the thesis that the adoption of a staggered board is a primary driver of entrenchment and, conversely, reinforces the theory that staggering up might reduce the detrimental effects that entrenching provisions have on firm value.

V. Rescuing American Corporate Law

Everyone in the current corporate governance debate agrees on one thing: the corporate landscape has been transformed by unprecedented changes. Unanimous consent also exists on the overall result of this transformation: shareholders have never been as empowered as they are today.²⁷⁹ Disagreement, however, occurs when it comes to assessing the normative consequences of this result. Unsurprisingly, shareholder advocates are not satisfied with the gains they have already made. Notwithstanding the remarkable success they have had in advancing their reform agenda, they see shareholder empowerment as not yet accomplished.²⁸⁰ More surprisingly, even scholars who acknowledge the risks posed by increasing shareholder authority conceive of newly empowered shareholders as a market-driven correction—an endogenous corporate governance change that should be granted the favorable normative presumption accorded to private arrangements.²⁸¹

Once market imperfections are fully taken into account, however, the theoretical proposition that existing corporate governance arrangements are necessarily optimal breaks down. As we have shown, with incomplete markets there is no assurance that observed security prices and governance arrangements (such as current shareholder empowerment) reflect optimal decisions.²⁸² Market imperfections thus provide an economic justification for allocation of authority consistent with the traditional board-centric structure of corporate governance. Granting formal authority over the corporation to the board succeeds where private ordering fails because board control constrains the value-reducing consequences of shareholder disagreement and asset pricing inefficiencies.

In the shareholder-empowerment era, however, shareholders have transformed into corporate stewards, gaining increased power to shape corporate governance rules and even influence the substance of corporate decisions. Board power has correspondingly eroded. These changes to the balance of corporate power struck under the received board-centric model jeopardize that model's continuing ability to deliver efficient outcomes. As shown by the empirical and theoretical analysis developed in this Article, weaker boards and stronger shareholders are likely to exacerbate the

279. See, e.g., Bainbridge, *supra* note 63, at 231-32 (discussing the substantial gains made by shareholder advocates in recent years); Bratton & Wachter, *supra* note 55, at 1 ("At some point during the last decade everyone in corporate law woke up to a change in the fact pattern: shareholders are no longer disempowered."); Klausner, *supra* note 114, at 1329 (arguing that the balance of corporate power has shifted toward shareholders).

280. See Bratton & Wachter, *supra* note 8, at 671-73 (illustrating the law-reform agenda of shareholder advocates).

281. See, e.g., Bratton & Wachter, *supra* note 55, at 33.

282. See *supra* Part III.A.

shareholders' limited-commitment problem, with detrimental effects for both shareholders and society as a whole. Hence, the current state of affairs in corporate governance calls for a recalibration of the power distribution between boards and shareholders. When one considers the added complication that regulatory intervention has bent to the shareholder paradigm's reform agenda, that call becomes even more urgent.

Having established that shareholder empowerment is a problem that needs to be addressed, we next explore the two possible paths to reform: the first considers proposals to disempower shareholders, while the second focuses on a proposal to reempower boards.

A. Disempowering Shareholders

Recent proposals to disempower shareholders have included amending current proxy rules to reduce the scope and frequency of shareholder proposals,²⁸³ extending the fiduciary duties of controlling shareholders to activist minorities,²⁸⁴ adopting tax strategies to encourage longer holding periods for institutional investors,²⁸⁵ expanding SEC disclosure requirements for activist investors,²⁸⁶ and imposing stricter SEC regulation on proxy advisory services.²⁸⁷

A detailed discussion of each of these proposals is beyond the scope of this Article. However, a general concern with the potential reforms just mentioned is whether implementation would be sufficient to recalibrate the balance of

283. See Bainbridge, *supra* note 63, at 246 (proposing, among other measures, to turn Rule 14a-8 of the Securities Act of 1933, which enables the submission of shareholder proposals, into a default provision, as opposed to a mandatory one).

284. See Iman Anabtawi & Lynn Stout, *Fiduciary Duties for Activist Shareholders*, 60 STAN. L. REV. 1255, 1295-1300 (2008).

285. See, e.g., Aspen Inst., *Overcoming Short-Termism: A Call for a More Responsible Approach to Investment and Business Management* 3 (2009), http://www.aspeninstitute.org/sites/default/files/content/docs/bsp/overcome_short_state0909.pdf (proposing to tax capital gains on a sliding scale at a rate that is inversely proportional to the length of time a stock has been held); see also Joseph E. Stiglitz, *Using Tax Policy to Curb Speculative Short-Term Trading*, 3 J. FIN. SERVICES RES. 101, 109 (1989) (making an early proposal along the same lines).

286. See, e.g., Strine, *supra* note 13, at 499 (theorizing about the adoption of a system where “[t]here was complete, up-to-date information about the economic interests of stockholders who have to file under Schedule 13D”); Wachtell, Lipton, Rosen & Katz, *Petition for Rulemaking Under Section 13 of the Securities Exchange Act of 1934*, RM No. 4-624 (SEC Mar. 7, 2011), <https://www.sec.gov/rules/petitions/2011/petn4-624.pdf> (proposing amendments to Rule 13-d to require disclosure within one day of gaining five percent beneficial ownership and to expand the definition of beneficial ownership under the reporting rules).

287. See, e.g., Strine, *supra* note 13, at 499 (suggesting that a traditionalist would propose to prevent institutional investors from “rely[ing] upon proxy advisory firms’ recommendations that did not reflect the investment horizons and investing strategy of their investors”).

power between boards and shareholders. These proposals would arguably help to eliminate the externalities introduced by regulatory changes supporting shareholder empowerment. Nevertheless, they seem incapable of reversing the much larger changes to the traditional allocation of corporate powers ushered in by market forces. It is implausible that the new bargaining leverage shareholders have gained from the combination of ownership reconcentration and the rise of hedge funds will roll back any time soon. Thus, attempts to disempower shareholders might ultimately fail, absent complementary reform intervention to reempower boards.

Reempowering boards might provide a better strategy to restore an economically efficient balance of corporate powers. Consistent with this Article's theoretical and empirical results on the merits of staggered boards, we argue that strengthening a board's ability to use staggered elections effectively to gain protection from short-term shareholder and market pressures serves that purpose.

B. (Re-)Empowering Boards

In order to mitigate the value-reducing distortions arising from shareholder and market pressures, this Article proposes the following reforms: (1) adopting rules to make staggered elections quasi-mandatory, and (2) giving boards exclusive power over charter amendments that opt out of the staggered board system. By reempowering U.S. boards vis-à-vis shareholders, such reforms would promote long-term value creation that is in the interest of shareholders themselves and society as a whole.

As discussed in Part I.A, charter-established staggered boards can be removed only with the bilateral approval of the board and the shareholders, in contrast to bylaw-established staggered boards, which can be unilaterally altered by shareholders. This distinction explains why only the former are usually described as “effective” means of insulating the board from shareholder and market pressures.

But how effective are charter-based staggered boards today? Based on the increased percentage of firms that agree to destagger their boards as a result of shareholder pressure,²⁸⁸ it seems not very. This evidence runs contrary to the conventional account that describes effective staggered boards as a strong insulation mechanism—one that cannot be dismantled without first winning control of the board, which commonly requires waiting two election cycles.²⁸⁹ Indeed, under the pressure of proxy advisory firms and the threat of vote-withholding campaigns,²⁹⁰ boards have grown increasingly receptive to shareholder destaggering proposals. The result is a substantial weakening of

288. See *supra* Part II.B.

289. See *supra* notes 41-46 and accompanying text.

290. See *supra* note 97.

the insulating power of even allegedly effective staggered boards. After all, as mentioned above, the Harvard SRP alone has contributed to board destaggering “at about 100 S&P 500 and Fortune 500 companies” in just three years.²⁹¹

Increased destaggering thus emerges as a primary manifestation of the current trend toward the erosion of board power. Under Delaware law, the board retains the exclusive right to begin charter amendments—including, in principle, amendments to existing staggering provisions.²⁹² However, shareholder precatory proposals, combined with the new bargaining leverage gained by shareholders, enable shareholders to initiate changes in charter-based staggering provisions from a de facto standpoint. The result is a shift in formal authority from the board to the shareholders that contributes to moving corporate law in an inefficient direction by destroying the “commitment value” of staggered boards. Indeed, the theory of board empowerment has shown that staggered boards serve as a value-increasing commitment device that helps mitigate the ex ante distortionary effects of the shareholder limited-commitment problem. What makes a commitment credible, however, is the level of difficulty encountered in attempting to renege on the commitment ex post.²⁹³ Thus, shareholders’ ability to coerce board approval to destagger weakens substantially the corrective mechanism provided by a staggered board.

In response, this Article proposes that the adoption of staggered elections be a quasi-mandatory rule. The defining feature of such rules is to set a default from which it is difficult to opt out, by providing for a regime that raises barriers to the parties’ ability to adopt a nondefault alternative.²⁹⁴ As explained by Ian Ayres, quasi-mandatory rules are desirable when the legislature’s goal is “to disproportionately block the more socially problematic opt-outs, while not blocking the less socially problematic opt-outs.”²⁹⁵ Applied to staggered boards, the “more socially problematic opt-outs” are those initiated by the shareholders, which coerce board approval. Conversely, the “less socially problematic opt-outs” are those initiated by the board itself and approved by a large majority of shareholders. Unlike the former opt-outs, the latter are the result of both vertical agreement (between the board and the shareholders) and horizontal agreement (among the shareholders themselves); hence, they are more likely to overcome the problems of indeterminacy and nonoptimality of production decisions that arise under joint ownership.²⁹⁶

291. SHAREHOLDER RTS. PROJECT, *supra* note 128; *see also supra* text accompanying note 132.

292. *See supra* note 42 and accompanying text.

293. *See* Kahan & Rock, *supra* note 177, at 517 (“[A] precommitment is only as strong as the obstacles to subsequent reversal.”).

294. *See* Ayres, *supra* note 35, at 2084-88.

295. *Id.* at 2088.

296. *See supra* notes 192-97 and accompanying text.

Under the proposed regime, the board should have exclusive authority to initiate a charter amendment to opt out of the staggered board default. In order to guarantee the effectiveness of the board's initiation power, Rule 14a-8 of the Securities Exchange Act, which allows shareholders to submit precatory proposals,²⁹⁷ should be amended to exclude destaggering proposals from the range of admissible proposals. This would substantially reduce the leverage that activist shareholders currently have against boards and, in turn, the risk of coerced board approval to destagger. In its strongest version, this proposal would also involve rolling back majority voting standards by mandating the adoption of plurality voting standards. This additional reform would eliminate the ability of shareholders to use withhold campaigns to induce a corporation's directors to dismantle a staggered board. Moreover, in order to ensure widespread shareholder agreement, the board's destaggering proposal should be subject to a two-thirds supermajority requirement.²⁹⁸

As compared to proposals that have suggested replacing the current annual elections default with a triennial- (or quinquennial-) election default²⁹⁹ (neither of which would be difficult to opt out of), our proposal offers the advantage of making socially problematic opt-outs more difficult. Indeed, adopting a default that is easy to opt out of would jeopardize the very purpose of adopting such a default in the first place.³⁰⁰

297. See 17 C.F.R. § 240.14a-8 (2015).

298. The additional requirement of a qualified-shareholder majority addresses the likelihood that activist shareholders may still be able to pressure directors into initiating board destaggering—even once they are deprived of the bargaining power arising from the combination of precatory proposals and withhold campaigns. Further, this proposal also encompasses incentivizing mechanisms for opting back into the staggered board default. Here, the logic should be the opposite of that applied to the opt-out regime, as the goal is to facilitate the subsequent adoption of a staggered board. For example, approval of a staggering proposal should require a simple majority vote by the shareholders. This proposal would be politically feasible because some U.S. states have already adopted a regime of quasi-mandatory staggered elections. See *supra* note 38. Elsewhere, we have also documented that (re)incorporation in “managerial states” (states with more or more severe antitakeover statutes) is associated with a statistically and economically significant increase in firm value, which provides additional empirical support for the desirability of this proposal. See Cremers & Sepe, *supra* note 32, at 2-3.

299. See, e.g., Allen et al., *supra* note 88, at 1073 (proposing a triennial board election); Jacobs, *supra* note 4, at 1662 (proposing a quinquennial board election); Martin Lipton & Steven A. Rosenblum, *A New System of Corporate Governance: The Quinquennial Election of Directors*, 58 U. CHI. L. REV. 187, 225-30 (1991) (same).

300. In addition, with a triennial board, the whole board could be replaced after the expiration of the three-year term, which raises issues of continuity in the transmission of board information from one election cycle to the other. Conversely, the adoption of a staggered board assures continuity of leadership, since at any given time a majority of directors will have prior experience with sitting on the company's board. See *supra* notes 64-65 and accompanying text. Further, given the shorter average holding periods and increased turnover that have come to characterize shareholding at most companies, see *supra* note 212, staggered elections seem better suited to ensure investor

footnote continued on next page

But why not adopt a straight mandatory rule? After all, if the risk of ex post destaggering destroys the value of staggered boards, turning staggering provisions into a mandatory requirement could appear as a logical normative conclusion. This Article argues, however, that a quasi-mandatory rule—which would prevent shareholders from coercing the board into approving destaggering, but would not preclude the company from destaggering upon the voluntary agreement of the board—is preferable. This Article asserts that the promotion of long-term specific investments and the related need to ensure optimal stakeholder investments are the primary channels through which a staggered board increases firm value.³⁰¹ Under this line of reasoning, it is still possible that there will be a subset of companies for which destaggering could pass a social cost-benefit threshold. For example, liquidity needs could persuade directors to accept the requests of prospective investors to destagger the board in exchange for the injection of much-needed capital.³⁰² Another theoretical possibility is that a firm's production could be so standardized as to make long-term specific investments marginal. While in today's competitive environment this possibility seems unlikely, one cannot rule it out altogether. More generally, the existence of some residual level of heterogeneity among corporations needs to be taken into account, and thus setting an inalterable rule is ill advised.

Finally, we are aware of the practical difficulties that this Article's proposal to turn staggered boards into a quasi-mandatory provision is likely to encounter in the current political environment. In its strongest version, this proposal would require coordinated actions involving the SEC (to reform Rule 14a-8) and the individual states, whose laws govern corporate voting procedures. Nonetheless, a critical first step toward attempting future reform intervention necessarily involves reeducating regulators as to the considerations that better serve the interests of shareholders and society as a whole. The framework of analysis offered in this Article, and the conclusion it achieves, should prove useful to that end by providing policymakers with tangible reasons for reconsidering the current direction of corporate governance policies.

representation at the board level, providing new investors with the yearly opportunity to appoint a slate of directors to the board. Finally, while this Article's empirical evidence documents the value-increasing effect of staggered boards, no empirical evidence exists on triennial (or quinquennial) board terms, as they have to date never been implemented in the United States.

301. See *supra* Part IV.A.

302. See Simone M. Sepe, *Intruders in the Boardroom: The Case of Constituency Directors*, 91 WASH. U. L. REV. 309, 317, 358 (2013) (suggesting that the need for funding in start-ups and financially distressed corporations tends to represent the first-order problem and may justify large concessions to investors).

Conclusion

Among the various interdisciplinary approaches embraced by the U.S. legal academy, the intersection between law and economics has emerged as perhaps “the most widespread and unitary.”³⁰³ In the study of business organizations, that intersection has grown into a symbiosis, bringing about “as thorough a revolution . . . as can be imagined, in scholarship and in practice, methodology, and organization.”³⁰⁴ That revolution began in 1976 with the publication of “Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure,” by Michael Jensen and William Meckling.³⁰⁵ Jensen and Meckling’s article introduced a new principal-agent model of the firm, which continues to provide the dominant paradigm of analysis used in contemporary corporate law scholarship. The model’s use of simple assumptions has made it largely accessible and has ensured its “lasting impact on the thinking of corporate law academics.”³⁰⁶ However, the enthusiasm for the straightforward economic logic enabled by those assumptions has oversimplified the application of economics to corporate law. As is well known in economic theory, there are many reasons why the real world departs from the assumptions in Jensen and Meckling’s model:

- 1) [I]n general, markets are not . . . Pareto efficient; 2) markets may not clear;
- 3) markets may not exist, or when they exist, may be thin; 4) rents are pervasive, and indeed, . . . necessary to ensure that high quality products get produced, that workers do not shirk, and so on; 5) even when there are many participants in a market, competition may be highly imperfect . . .³⁰⁷

Taking these departures into account is not merely about academic rigor. Drawing on the simplified outline of corporate relationships provided by the principal-agent model, shareholder advocates have attempted to vindicate the optimality of shareholder empowerment. But the move from the partial equilibrium framework of Jensen and Meckling to a general equilibrium framework shows that such vindication is theoretically lacking. In incomplete markets, shareholders emerge as uninformed and improperly incentivized,

303. Jonathan R. Macey, *Law and the Social Sciences*, 21 HARV. J.L. & PUB. POL’Y 171, 172 (1997) (footnote omitted); see also Richard A. Posner, *The Decline of Law as an Autonomous Discipline: 1962-1987*, 100 HARV. L. REV. 761, 767-68 (1987) (noting that in many important legal fields the “economic perspective either is already dominant or will soon be”).

304. Roberta Romano, *After the Revolution in Corporate Law*, 55 J. LEGAL EDUC. 342, 342 (2005).

305. Jensen & Meckling, *supra* note 70.

306. Romano, *supra* note 305, at 347.

307. Joseph Stiglitz, *Post Walrasian and Post Marxian Economics*, 7 J. ECON. PERSP. 109, 109 (1993) (footnote omitted); see also Allen & Strine, *supra* note 68, at 1383-84 (explaining that, at an academic meeting held in London in 2004, Michael Jensen himself had come to concur with the view “that security mispricing, instead of being a temporary self-correcting problem, was, under current circumstances, a problem that could and had spiraled out of control”).

fundamentally challenging the view that they are optimally situated to make decisions that maximize firm value.³⁰⁸

Subjecting the theoretical assertions that underpin the shareholder-empowerment claim to empirical evaluation—exploiting the primary advantage of the law and economics method over other interdisciplinary approaches³⁰⁹—does not help the shareholder-empowerment argument either. Instead, the new empirical evidence produced by this Article suggests that it is time to reverse the *j'accuse* of shareholder advocates.³¹⁰

Once market imperfections are taken fully into account, it is the received board-centric model of U.S. corporate law that emerges as economically rational. Under that model, the board retains formal authority over the corporation. This Article has shown—theoretically and empirically—that the value of this structure arises from the board's ability to perform tasks that the shareholders cannot. Only the board can guarantee to a corporation's managers and various stakeholders a commitment to long-term value creation—one that benefits, not hurts, shareholders.

In 1937, Ronald Coase famously explained that firms emerge when it is efficient to substitute an “organizing authority”—in more modern terms, a “governance structure”³¹¹—for market contracting coordinated by the price system.³¹² Parties choose these “islands of conscious power” over the market's “ocean of unconscious cooperation” when marketing costs—we would say market imperfections—exceed the benefits of using the price mechanisms.³¹³ In a sense, board authority emerges as a valuable correction to the limitations of the market's “invisible hand.”³¹⁴

With its strong focus on board authority and the central discretionary function of management over capital,³¹⁵ the received legal model of U.S. corporations has always aimed, very successfully, at internalizing market imperfections long before they took center stage in modern economics. The attempt of shareholder advocates to subject that model to the logic of discrete market contracting by shifting authority from boards to markets risks

308. See *supra* Part III.A.

309. See Macey, *supra* note 304, at 172; Romano, *supra* note 305, at 346.

310. See *supra* notes 14-15, 102 and accompanying text.

311. See Oliver E. Williamson, *The Modern Corporation: Origins, Evolution, Attributes*, 19 J. ECON. LITERATURE 1537, 1539 (1981) (emphasis omitted).

312. See R.H. Coase, *The Nature of the Firm*, 4 ECONOMICA 386, 404 (1937).

313. See *id.* at 388, 390-92 (quoting D.H. ROBERTSON, *THE CONTROL OF INDUSTRY* 85 (1930)).

314. See CHANDLER, *supra* note 1, at 1.

315. See *supra* notes 1-5 and accompanying text.

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undermining what seems to be the real genius of American corporate law³¹⁶: its historically empowered boards.

316. Cf. ROBERTA ROMANO, THE GENIUS OF AMERICAN CORPORATE LAW 1, 4-5 (1993) (arguing that “[t]he genius of American corporate law is in its federalist organization,” which allows for incorporation competition among states).

Appendix Table A

Definitions of Variables

Appendix Table A presents brief definitions of the main variables that appear in the analysis. All continuous variables are winsorized at one percent in both tails.

Dependent Variables:

| | |
|---|---|
| Q | Tobin's Q, defined as the market value of assets (i.e., Total Assets – Book Equity + Market Equity) divided by the book value of assets. Calculation follows Fama and French (1992). ³¹⁷ Source of data is Compustat annual data file. |
|---|---|

Independent and Interacted Variables:

| | |
|-----------------|--|
| Staggered Board | Indicator variable equal to one (zero otherwise) if the board is staggered. Data is obtained from Cremers and Ferrell (2014) ³¹⁸ for 1978-1989, and from Risk Metrics, SharkRepellent.net, and hand collection for 1990-2011. |
| Staggering Up | Dummy equal to one after the firm has adopted a staggered board (and only as long as the firm does not subsequently destagger). |
| Staggering Down | Dummy equal to one after the firm has removed a staggered board (and only as long as the firm does not subsequently stagger up again). |
| Assets | Natural logarithm of the book value of total assets. |
| CAPX | Capital Expenditures / Total Assets. |

317. See Fama & French, *supra* note 17.

318. See Cremers & Ferrell, *supra* note 139.

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| | |
|------------------------|---|
| Contract Specificity | Industry-level measure of the fraction of inputs (i.e., products and services) that are not sold on an organized exchange or reference priced in a trade publication, made available at Nunn's website for 1997. ³¹⁹ |
| Delaware Incorporation | Indicator variable if the company is incorporated in Delaware. |
| E-Index | Sum of six governance provisions indicators (including the staggered board) in the corporate charter or bylaws introduced by Bebchuk, Cohen, and Ferrell (2009). ³²⁰ |
| E-Index (without SB) | Sum of five governance provisions indicators (not including the staggered board) in the corporate charter or bylaws introduced by Bebchuk, Cohen, and Ferrell (2009). ³²¹ The E-Index proper includes all six provisions, including the staggered board. |
| Firm Age | Natural logarithm of firm age. The age is calculated as the length of time in years since the first year the company appeared in the CRSP database. |
| G-Index | Sum of twenty-four governance provisions indicators (including the staggered board) in the corporate charter or bylaws introduced by Gompers, Ishii, and Metrick (2003). ³²² |

319. See sources cited *supra* note 267.

320. See Bebchuk et al., *supra* note 110.

321. See *id.*

322. See Gompers et al., *supra* note 109.

| | |
|----------------------|---|
| G-Index (without SB) | Sum of twenty-three governance provisions indicators (not including the staggered board) in the corporate charter or bylaws introduced by Gompers, Ishii, and Metrick (2003). ³²³ The G-Index proper includes all twenty-four provisions, including the staggered board. |
| Industry M&A Volume | The ratio of mergers and acquisitions' dollar volume in SDC to the total market capitalization from CRSP for a calendar year, as per a given Fama-French 49 industry. The CRSP annual industry market capitalization is for ordinary stocks only and excludes ADRs and REITs. If no M&A activity per given industry year is reported in SDC, we assume it to be zero. We include transactions where buyer achieves control of the target. |
| Insider Ownership | The insider ownership in year t is the percentage of shares owned by insiders from all shares. Data is collected from Compact Disclosure for 1986-2006. We supplement these data with the ownership by the top management team from ExecuComp for 2007-2011. From ExecuComp, we use the total shares owned by the top five officers of the firm. |
| Intangible Assets | $(\text{Total Assets} - \text{Net Property Plant \& Equipment}) / (\text{Total Assets})$. |
| Labor Productivity | Industry-level measure of the marginal product of labor, from the U.S. Bureau of Labor Statistics (using the four-digit SIC code). |

323. *See id.*

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| | |
|----------------|---|
| Large Customer | Indicator variable set equal to one if the firm has at least one customer accounting for ten percent or more of its sales, from Compustat Segment data. |
| R&D | R&D expenditures / Sales. |
| ROA | EBITDA / Total Assets. |

Appendix Table B

Descriptive Statistics for Main Variables

Appendix Table B presents sample descriptive statistics for the main dependent and independent variables, as well as the interacting variables.

| Dependent: | Mean | Median | St. Dev. | Min | Max | Obs. |
|------------------------|-------------|---------------|-----------------|------------|------------|-------------|
| Q | 1.58 | 1.29 | 0.87 | 0.72 | 4.66 | 30,797 |
| Independent: | Mean | Median | St. Dev. | Min | Max | Obs. |
| Staggered Board | 0.53 | 1 | 0.5 | 0 | 1 | 30,797 |
| Staggering Up | 0.13 | 0 | 0.34 | 0 | 1 | 30,797 |
| Staggering Down | 0.11 | 0 | 0.31 | 0 | 1 | 30,797 |
| Assets | 7.29 | 7.17 | 1.56 | 4.55 | 11.05 | 30,797 |
| CAPX | 0.06 | 0.05 | 0.05 | 0 | 0.2 | 30,797 |
| Contract Specificity | 0.91 | 0.97 | 0.14 | 0.15 | 1 | 9628 |
| Delaware Incorporation | 0.55 | 1 | 0.5 | 0 | 1 | 30,797 |
| E-Index | 1.84 | 2 | 1.28 | 1 | 6 | 28,029 |
| E-Index (without SB) | 1.28 | 1 | 1.01 | 1 | 5 | 28,029 |
| Firm Age | 2.87 | 3 | 0.98 | 0 | 4.45 | 30,797 |
| G-Index | 8.24 | 8 | 3.36 | 1 | 19 | 28,357 |
| G-Index (without SB) | 7.73 | 8 | 3.14 | 1 | 18 | 28,357 |
| Industry M&A Volume | 0.027 | 0.01 | 0.05 | 0 | 0.359 | 30,797 |
| Insider Ownership | 0.07 | 0.03 | 0.1 | 0 | 1 | 21,216 |
| Intangible Assets | 0.64 | 0.68 | 0.24 | 0.04 | 1 | 27,519 |
| Labor Productivity | 1.41 | 1.05 | 0.62 | 0.49 | 2.9 | 24,880 |
| Large Customer | 0.17 | 0 | 0.37 | 0 | 1 | 30,797 |
| R&D | 0.03 | 0 | 0.06 | 0 | 0.23 | 30,797 |
| ROA | 0.14 | 0.14 | 0.08 | -0.05 | 0.32 | 30,797 |