

COMMITMENT AND ENTRENCHMENT IN CORPORATE GOVERNANCE

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ABSTRACT

Over the past twenty years, a growing number of empirical studies have provided evidence that governance arrangements protecting incumbents from removal promote managerial entrenchment, reducing firm value. As a result of these studies, “good” corporate governance is widely understood today as being about stronger shareholder rights.

This Article rebuts this view, presenting new empirical evidence that challenges the results of prior studies and developing a novel theoretical account of what really matters in corporate governance. Employing a unique dataset that spans from 1978 to 2008, we document that protective arrangements that require shareholder approval—such as staggered boards and supermajority requirements to modify the charter—are associated with increased firm value. Conversely, protective arrangements that do not require shareholder approval—such as poison pills and golden parachutes—are associated with decreased firm value. This evidence suggests that limiting shareholder rights serves a constructive governance function as long as the limits are the result of mutual agreement between the board and shareholders. We argue that this function commits shareholders to preserve a board’s authority to exploit competitive private information and pursue long-term wealth maximization strategies.

By documenting that committing shareholders to the longer-term matters as much as, if not more than, reducing entrenchment for good corporate governance, our analysis sheds much needed light on issues such as the optimal allocation of power between boards and shareholders, managerial accountability, and stakeholder interests. We conclude by outlining the implications of our analysis concerning the direction corporate governance policies ought to take.

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INTRODUCTION

Corporate governance matters. The complex framework of institutions and processes by which corporations are organized and managed¹ affects corporate

¹ Corporate governance comprises both external and internal mechanisms. The board of directors, shareholder rights, and compensation schemes are often described as primary examples of internal governance mechanisms. External governance, instead, refers to the role of market forces in constraining corporate behavior, including the capital, labor, and product markets. Existing studies, however, have largely focused on internal governance. See JONATHAN R. MACEY, *CORPORATE GOVERNANCE* 10 (2008). Although two of us have explained elsewhere why a thorough approach to corporate governance should not leave aside the interactions between internal and external mechanisms, in this Article we will also primarily

performance and thus the aggregate welfare of society. This explains why the question of what draws the line between “good” (i.e., value-increasing) and “bad” (i.e., value-decreasing) corporate governance has long been central to corporate legal theory.² Attempts to answer that question took a step forward in the 1980s, when empirical analysis to investigate and counterpoise alternative governance models first became available.³ Discussions over the merits of such models no longer needed to rely on opinions only. Rather, empirical predictions following from each model could be tested against the actual data, through statistical analysis that estimated the validity of those predictions. Studies employing corporate governance indices, which first made their appearance in the late 1990s,⁴ proved especially useful. By benchmarking a firm’s governance quality against several governance provisions, governance indices provided a research design well suited to evaluate the various dimensions of a governance model.⁵

The rise of corporate governance indices has made winners and losers in the corporate governance debate. With its empirical evidence that incumbent protection from removal by shareholders—“entrenchment”—is detrimental to firm value, the literature on governance indices has provided strong support for a shareholder-centric governance model.⁶ Economically, the case for this model rests on the proposition that shareholders, as the corporation’s residual claimants, have the greatest incentives to provide value-enhancing governance inputs.⁷ As a corollary, shareholder advocates view any restrictions on shareholder power as inefficiently insulating managers from shareholder discipline.⁸ Conversely, since the emergence of governance indices, advocates of the traditional board-centric model of the corporation—under which boards were largely protected by shareholder interference—have largely stood in the minority.⁹

Further evidence of the influence of governance indices has been the rise and popularity of commercial governance indices, which are widely used by proxy advisory firms to provide voting recommendations to investors.¹⁰ Indeed, commercial indices not

focus on internal governance in order to facilitate comparative assessments with prior studies. *See* Simone Sepe, *Regulating Risk and Governance in Banks: A Contractarian Perspective*, 62 EMORY L. J. 327, 327 (2012) (examining the implications of the causal relationship between external and internal governance mechanisms in the banking sector); K.J. Martijn Cremers & Vinay B. Nair, *Governance Mechanisms and Equity Prices*, 60 J. FIN. 2859, 2859 (2005) (investigating the value-impact of the interactions between external and internal governance).

² *See infra* note 24.

³ *See infra* notes 62-63 and accompanying text.

⁴ *See infra* Part II.B.

⁵ *See id.*

⁶ *See infra* notes 47-58 and accompanying text (describing the historical development of this model).

⁷ The standard economic reference for the basic assumptions underpinning the shareholder empowerment case is Michael Jensen and William Meckling’s agency theory of the corporation. *See* Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 305, 305 (1976).

⁸ *See* La Porta et al., *The Economic Consequences of Legal Origins*, 46 J. ECON. LIT. 285, 285 (2008) (describing the proposition that protection of outside investors limits the extent of their expropriation by insiders as “standard in corporate law”).

⁹ *See infra* note 60.

¹⁰ *See infra* notes 91-93 and accompanying text.

only share the same methodology of academic indices, but also their unequivocal support for enhanced shareholder rights.¹¹

This Article rebuts, empirically and theoretically, the currently dominant view that stronger shareholder rights are an all-purpose remedy in corporate governance. It does so by revisiting the evidence obtained in the empirical literature on governance indices—employing what is, to the best of our knowledge, the largest available dataset on corporate governance arrangements, covering thirty years of governance choices (from 1978 to 2008)—and developing a novel theoretical account of what *really* matters for firm value.

In revisiting the existing empirical evidence, we focus on the more widely used among the academic governance indices, the entrenchment index or “E-Index”. Introduced in 2009 by a team of legal and financial experts—Lucian Bebchuk, Alma Cohen, and Allen Ferrell (BCF)¹²—the E-Index provides evidence that six entrenchment provisions matter the most for firm value: staggered boards, poison pill, golden parachutes, supermajority requirements for charter amendments, supermajority requirements for bylaws amendments, and supermajority requirements for mergers.¹³ As of August 2015 over three hundred empirical studies had used the E-Index as a measure of governance quality,¹⁴ indicating that, as a matter of fact, the E-Index has become the standard reference to define entrenchment and, hence, “bad” governance. Yet, in estimating the association between the E-Index (and each of its six constituent components) and firm value, BCF only relied on a twelve-year period (from 1990 to 2002).¹⁵ Conversely, we can rely on a much more comprehensive dataset over a much longer period of time, allowing for a more robust statistical analysis of the time series association between corporate governance and firm value.¹⁶

Our empirical findings call into question the “kitchen sink” approach to incumbent protection from removal as adopted by the E-index and other academic and commercial governance indices. In contrast to that approach’s assumption that *any* form of incumbent protection is detrimental to shareholders,¹⁷ we show that only protective

¹¹ See *infra* notes 93-96 and accompanying text.

¹² See Lucian Bebchuk et al., *What Matters in Corporate Governance*, 22 REV. FIN. STUD. 783, 784-85 (2009).

¹³ See Bebchuk et al., *supra* note 12, at 784-85; see also *infra* Part III.B.1 (discussing each of these governance arrangements in detail).

¹⁴ Professor Bebchuk reports on his website that as of August 2015, at 307 studies have used the E Index that he and his coauthors developed. See Professor Lucian Arye Bebchuk, *Links to 307 Studies Available on SSRN That Use the Entrenchment Index (Bebchuk, Cohen, and Ferrell, 2009)*, HARV. L. SCH., <http://www.law.harvard.edu/faculty/bebchuk/studies.shtml> (last updated August 2015). Discussions of the E-Index have also frequently appeared in law reviews. See, e.g., Bhagat et al., *The Promise and Peril of Corporate Governance Indices*, 108 COLUM. L. REV. 1803, 1821-23 (2008); Lucian A. Bebchuk, *The Myth That Insulating Boards Serves Long-Term Value*, 113 COLUM. L. REV. 1637, 1685-86 (2013); Michael Klausner, *Fact and Fiction in Corporate Law and Governance*, 65 STAN. L. REV. 1325, 1353, fn. 155 (2013).

¹⁵ See Bebchuk et al., *supra* note 12, at 796.

¹⁶ See *infra* notes 125-26 and accompanying text (discussing the implications of using a time-series analysis in empirical research).

¹⁷ See Bebchuk et al., *supra* note 12, at 788.

arrangements that can be unilaterally adopted by directors (i.e., “unilateral protection arrangements”)—poison pills, golden parachutes, and supermajority requirements to amend the bylaws—are associated with decreased firm value and hence fit the entrenchment theory of incumbent protection. *Conversely*, protective arrangements that require shareholder approval (i.e., “bilateral protection arrangements”)—staggered boards, supermajority requirements to amend the charter and to approve mergers—are associated with increased firm value. This finding suggests that these arrangements serve a constructive, rather than detrimental governance function.

That function, we argue, is mitigating what we refer to as the shareholders’ limited commitment problem,¹⁸ which arises out of market imperfections—in the first instance, the possibility that market prices may fail to fully capture the long-term implications of directorial decisions.¹⁹ Faced with asset-pricing inefficiency and vested with strong exit rights, shareholders—all public shareholders, as a matter of course—are unable to credibly commit to long-term value creation. That is, they have no basis on which to decide *not* to seek board removal or dump their shares upon a disappointing short-term outcome, as they are unable to distinguish whether such an outcome is due to mismanagement or to the pursuit of a project whose value will not be realized until later. In response to this problem, to protect themselves, directors and managers rationally develop incentives to privilege short-term stock price gains over long-term cash flows. Similarly, shareholders’ inability to commit to the long term may distort the incentives of other firm stakeholders—employees, customers, suppliers, and creditors—to optimally invest in their relationship with the firm, if the specificity of their investments makes them vulnerable to short-term changes in investment policy. In either case, the result is reduced firm value in the long run.

Bilateral protection arrangements help mitigate the above distortions by committing shareholders *ex-ante* not to interfere with board decision-making in the near term, increasing longer-term shareholder *and* firm value. The adoption of a staggered board commit shareholders to longer directorial terms, making it more difficult for shareholders to renege on prior engagements *vis-à-vis* managers and stakeholders. Similarly, supermajority requirements to amend the charter and approve mergers add to a firm’s long-term commitment by introducing a bias in favor of institutional stability—making it more difficult to alter basic organizational rules unless both the board and a large majority of shareholders agree to the changes.

This novel theoretical account suggests that promoting a firm’s commitment to the long-term matters as much as—and potentially more than—reducing entrenchment in corporate governance. In order to empirically corroborate this conclusion, we divide the E-Index into two separate sub-indices: a *commitment index* (or, more briefly, C-Index),

¹⁸ Two of us have coined the term “shareholders’ limited commitment problem”, as well as explored its theoretical foundations in full, in a recent earlier work. See K.J. Martijn Cremers & Simone M. Sepe, *The Shareholder Value of Empowered Boards*, 68 STAN. L. REV. (forthcoming 2016) (on file with authors).

¹⁹ After the 2008 financial crisis, asset-pricing models that allow for the possibility of mispricing have been the subject of a large literature. See, e.g., Darrell Duffie, *Asset Price Dynamics with Slow-Moving Capital*, 65 J. FIN. 1238, 1238 (2010) (providing a summary of these studies).

only including the E-Index's three bilateral provisions, and an *incumbent index* (or, more briefly, I-Index), only including the E-Index's three unilateral provisions. Consistent with our account of corporate governance, we document that increased scores on the C-Index (i.e., more commitment) are associated with increases in firm value. Conversely, increased scores on the I-Index (i.e., more entrenchment) are associated with decreases in firm value. As a further empirical test, we examine whether the use of bilateral protection arrangements is more valuable to firms where the shareholders' limited commitment problem appears to be more severe, as predicted by our theory. To this end, we focus on three categories of firms: (1) firms with more long-term innovation, (2) firms for which stronger firm-specific investments by non-financial stakeholders, such as employees and customers, are likely to be more important, and (3) firms with more potential for excessive future risk taking to the detriment of financial stakeholders such as creditors.²⁰ In all three cases, we find empirical results that strongly support our commitment theory of bilateral protection arrangements.

This Article's analysis bears major implications for the debate on both the means and ends of corporate governance. Shareholder advocates have been very successful in portraying a shareholder-centric model as an efficient form of direct corporate democracy.²¹ They have been equally successful in representing the board-centric model as an inefficient form of corporate dictatorship, where incumbents can unilaterally and opportunistically protect themselves from removal at the expense of shareholders.²² This account of corporate governance, however, misleadingly throws everything into one pot, failing to recognize the importance of the shareholders' limited commitment problem. It also omits to consider that some protective arrangements are bilateral, i.e., premised on prior shareholder consent—consistent with the basic organizational principles of a republic rather than a dictatorship.

Our analysis redresses both mistakes. Shedding much needed light on the inter-temporal dynamics of value maximization, we first show that pursuing that goal requires enhanced board protection in the short-term without eliminating exposure to shareholder discipline in the longer-term. Increased protection from removal is necessary at the beginning of a director's tenure, when directors are more likely to have competitive private information that the market lacks on the actions that contribute to longer-term value. This is because that protection efficiently enables directors to take actions that "tolerate," rather than "punish," what may mistakenly appear to the market as "early failure" (e.g., low short term earnings). Conversely, over time, as a director's tenure matures and market prices are more likely to catch up with directors' informational advantage, shareholders become better positioned to discipline directorial and managerial actions.

Second, we show that the "republican board-centric model"—which empowers boards to resist short-term market pressure with the prior agreement of shareholders—

²⁰ See *infra* notes 225-27, 237 and accompanying text (discussing the proxies that we use to identify these specific features of corporate production).

²¹ See *infra* note 76 and accompanying text.

²² See *infra* note 75 and accompanying text.

better approximates the above organizational structure. Such a model adds value that a direct shareholder democracy cannot provide by ensuring that shareholder discipline operates in the long-term, rather than the short-term. Contrary to what frequently argued by shareholder advocates,²³ a staggered board does not remove directors from the judgment of the market. Rather, it provides a time frame for directorial evaluation by the shareholders that is less likely to be biased by informational inefficiencies. Similarly, supermajority requirements to amend the charter and to approve mergers do not reduce long-term directorial accountability, but constructively strengthen board authority in the short-term.

Our analysis also bears noteworthy policy implications. For one thing, it suggests that the emphasis placed by providers of commercial governance indices on stronger shareholder rights may be pushing governance practices at many U.S. corporations in counter-productive directions. This is especially troubling if one considers that supporting stronger shareholder rights (and less incumbent protection) promotes increased shareholder activism, which, in turn, leads to more voting advisory activity and increased revenues for proxy advisors. In response, action by the Security Exchange Commission (SEC)—requiring, as a first step, disclosure of the proprietary algorithms used in the construction of commercial indices—would be desirable to allow more transparency and discussion about the governance recommendations provided by proxy advisors. This in turn, would help answer the question of whose interests those recommendations really serve. Similarly, the evidence produced in this Article challenges reform interventions that have increasingly sustained shareholder empowerment in the past two decades. Going forward, policymakers would do well to reconsider the case for limiting shareholder power in the short-term and the direction governance policies ought to take to support long-term value creation.

The remainder of this Article proceeds as follows. Part II provides background on the history of the corporate governance debate, the rise of governance indices, and the present state of corporate governance research. Part III revisits the evidence for the association between the E-Index (and each of the six provisions it includes) and firm value, and, based on that evidence, develops a novel theoretical account of what really matters in corporate governance. Part IV puts that account to further empirical testing, finding strong support for our claim that promoting shareholder commitment to the long term matters as much as, if not more than, reducing entrenchment for good corporate governance. Part V discusses the implications that our analysis bears for the optimal allocation of power between boards and shareholders, managerial accountability, and stakeholder interests. Part VI outlines desirable policy changes. Part VII concludes.

II. CORPORATE GOVERNANCE: WHERE DO WE STAND?

The optimal allocation of power between boards and shareholders, the resolution of conflicts of interests among corporate constituencies, and the structuring of managerial

²³ See e.g., Bebchuk, *supra* note 14, at 1681 (“[H]aving a staggered board considerably enhances the extent to which directors are insulated from shareholder pressure.”)

incentives are widely recognized as essential corporate governance objectives.²⁴ However, the principles that should guide corporate actors and lawmakers in structuring governance arrangements that efficiently pursue these objectives continue to be the subject of an intense debate. In this Part, we provide the background for understanding the importance and context of this debate, beginning with an overview of the main concepts that have historically informed corporate governance discussions. After that, we continue to trace the trajectory of those discussions by focusing on the rise of empirical corporate governance research—and, in particular, governance indices—and its increasing influence over time in defining what “good corporate governance” is about. We conclude this Part with an assessment of the present state of the corporate governance debate.

A. Organizations, Markets, and American Corporate Law

Although corporate governance theories tend to defy easy classification, a recurring distinction is between the corporation as a social organization—largely based on notions of entity, centralization, and authority—and the corporation as a creature of the market—largely based on notions of individualism, decentralization, and contract.²⁵

Until about the end of the 19th century, the corporate legal discourse took for granted that corporations owed their existence to a public concession by the state that chartered them.²⁶ Emphasizing the state’s constitutive role, this view conceived of the corporation as an entity transcending its individual participants and charged with the pursuit of public, rather than private, interests.²⁷ The regulatory notion of early American corporate law was accordingly justified as a means to preserve the public purpose utility of the corporate form.²⁸

Things began to change at the turn of the century. With the rise of the large corporation characterized by the separation of ownership from control,²⁹ and the ascent of

²⁴ Scholarly contributions on these issues are too voluminous to be cited in full. For a non-exhaustive review of these and other prominent governance issues, *see e.g.*, Lucian A. Bebchuk & Michael Weisbach, *The State of Corporate Governance Research*, 23 REV. FIN. STUD. 939, 939 (2010).

²⁵ For a seminal attempt at capturing the different ideals that have historically characterized the corporate governance debate, *see* Roberta Romano, *Metapolitics and Corporate Law Reform*, 36 STAN. L. REV. 923, 923 (1984).

²⁶ *See, e.g.*, E. MERRICK DODD, AMERICAN BUSINESS CORPORATIONS UNTIL 1860, WITH SPECIAL REFERENCE TO MASSACHUSETTS 14-15 (1954); William W. Bratton, *The New Economic Theory of the Firm: Critical Perspective from History*, 41 STAN. L. REV. 1471, 1484 (1989) (discussing the historical roots of the “special charter” phase of corporations).

²⁷ *See, e.g.*, Romano, *supra* note 25, at 931. The earliest corporations were generally chartered to undertake activities advancing the commonwealth—such as public utilities, transportation, banking, insurance, and water works—rather than corporate profitability. J. HURST, THE LEGITIMACY OF THE BUSINESS CORPORATION IN THE LAW OF THE UNITED STATES, 17-18 (1970).

²⁸ *See, e.g.*, David Millon, *Theories of the Corporation*, 1990 DUKE L. J. 201, 207-13 (1990) (discussing the extensive body of statutory and common law rules to which early corporations were subject).

²⁹ The classic reference is to the work of Adolf Berle and Gardiner Means, who first exposed the separation of ownership from control as the distinctive trait of the public modern corporation. *See* ADOLF A. BERLE, JR. & GARDINER C. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY (1932).

individualism and economic *laissez-faire* attitude,³⁰ corporations increasingly came to be seen as pursuing primarily private rather than public interests.³¹ As illustrated by the classic debate between Adolph Berle and Merrick Dodd in the 1930s,³² the shift to a private law approach to corporate relationships raised novel questions about the direction that developing corporate law rules ought to take. By analyzing the corporation through the lens of shareholders' property rights, Berle (both writing alone³³ and in its famous book with Gardiner Means, *The Modern Corporation and Private Property*)³⁴ naturally insisted on maximizing shareholder wealth as the appropriate corporate end and, in turn, on curbing managerial discretion as the means to reach that end.³⁵ On the polar opposite side, Dodd remained true to the view of the corporation as a social organization, advocating a corporate model that granted directors and managers broad discretion in the pursuit of corporate interests³⁶—including the interests of other stakeholders.³⁷

Although Berle and Means's corporate paradigm has exerted enduring influence on the modern corporate governance discourse, it is Dodd's account that more closely captures the business model that long prevailed in corporate America.³⁸ At the center of that business model was the "management corporation,"³⁹ revolving around directors and executives who did not see themselves as shareholders' trustees. Rather, they saw themselves as retaining virtually exclusive authority over the corporation, including authority to consider non-shareholder interests.⁴⁰ After a brief encounter with corporatism during the New Deal⁴¹—in which the idea of a public role of the corporation

³⁰ See Ciepley, *Beyond Public and Private: Toward a Political Theory of the Corporation*, 107 AM. POL. SC. REV. 139, 139 (2014).

³¹ See, e.g., *id.* at 139-40; Millon, *supra* note 28, at 213.

³² See William W. Bratton & Michael L. Wachter, *Shareholder Primacy's Corporatist Origin: Adolf Berle and The Modern Corporation*, 34 J. CORP. L. 100, 122-135 (2008) (offering an exhaustive discussion of the Berle-Dodd debate throughout its evolution over the years).

³³ See, e.g., ADOLF A. BERLE, JR., *STUDIES IN THE LAW OF CORPORATE FINANCE* (1928) [BERLE, *CORPORATE FINANCE*]; Adolf A. Berle, *Corporate Powers As Powers In Trust*, 44 HARV. L. REV. 1049, 1049 (1931) [Berle, *Powers in Trust*]; Adolf A. Berle, Jr., *For Whom Corporate Managers Are Trustees: A Note*, 45 HARV. L. REV. 1365, 1365 (1932) [Berle, *Trustees Note*].

³⁴ See BERLE & MEANS, *supra* note 29, at 84-89.

³⁵ See *id.* at 247-76; BERLE, *CORPORATE FINANCE*, *supra* note 33, at 36-39; Berle, *Powers in Trust*, *supra* note 33, at 1050-74; Berle, *Trustees Note*, *supra* note 33, 1365-70.

³⁶ See Merrick Dodd, *For Whom Corporate Managers Are Trustees: A Note*, 45 HARV. L. REV. 1145, 1147-48 (1932).

³⁷ See *id.* at 1154.

³⁸ Berle himself later came to concede that his debate with Dodd "ha[d] been settled (at least for the time being) squarely in favor of Professor Dodd's contention." ADOLF A. BERLE, JR., *THE 20TH CENTURY CAPITALIST REVOLUTION* 169 (1954). Even before this concession to Dodd, Berle had adjusted his positions as events unfolded in his own time, embracing a view of corporate law that was closer to organicist ideals. See Bratton & Wachter, *supra* note 32, at 120-21; Romano, *supra* note 25, at 936.

³⁹ See Bratton, *supra* note 26, at 1477-78 (describing the appearance, success, and endurance of the management corporation).

⁴⁰ See Lynn Stout, *The Corporation as a Time Machine: Intergenerational Equity, Intergenerational Efficiency, and the Corporate Form*, 38 SEATTLE U. L. REV. 685, 711 (2015). For an exhaustive review of the political, sociological, and economic dimension of managerialism, see WILLARD F. ENTEMAN, *MANAGERIALISM: THE EMERGENCE OF A NEW IDEOLOGY* 152-93 (1993).

⁴¹ Corporatism emphasizes groups over individuals and cooperation over competition. A classic reference is Leo Panitch, *The Development of Corporatism in Liberal Democracies*, 10 COMP. POL. STUD.

resurfaced under the form of a call for the social responsibility of managers⁴²—the management corporation thrived on a unique corporate capitalism system. This system abandoned any element of economic progressivism,⁴³ but continued to privilege a centralized decision-making paradigm: a governance model centered on “empowered boards,” largely protected from shareholder interference.⁴⁴ Undergirding that model was a tacit social consensus that corporate growth took priority over corporate profits, as long as managers could compensate shareholders with stable dividends.⁴⁵ In the prevailing mindset of the time, only empowered boards could accomplish that goal, both because of their informational advantage over dispersed shareholders and their unique ability to resist the risk appetite of the “money makers”—bankers, brokers, and all sorts of speculators—who had played a major role in contributing to the Great Depression.⁴⁶

That mindset suddenly changed in the late 1970s and early 1980s, mainly due to sudden stagflation and abysmal stock market performance, both of which problematized the productive mode of the management corporation.⁴⁷ Concurrently, the rise of the hostile takeover challenged boards’ empowered status—with the tender offer granting shareholders the right to remove incumbents through the simple exercise of stock market purchasing power, as well as a novel lever to influence investment policy.⁴⁸ With perfect timing, it was then that the neoclassical theory of the firm made its appearance. Rejecting centralized decision-making as a distinctive trait of totalitarianism,⁴⁹ neoclassicists viewed the firm as a web of contractual relationships among individuals, whose ongoing transactions were efficiently coordinated by the price mechanism.⁵⁰ Michael Jensen and William Meckling’s 1976 article, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, is the landmark publication that

61 (1977) (describing corporatism as an ideology that developed in the nineteenth century against the individualism and competition of the emerging capitalistic mode of production and which emphasized class harmony, organic unity, and mutual rights and obligations). For an exhaustive discussion of the influence played by corporatist ideals on the early phases of the New Deal, see David Ciepley, *LIBERALISM IN THE SHADOW OF TOTALITARIANISM* 98-128 (2006).

⁴² The idea was originally presented in a speech, *New Individualism*, delivered by President Roosevelt in 1932, but prepared by Berle and his wife Beatrice. See Bratton & Wachter, *supra* note 32, at 110-11.

⁴³ According to political scientist David Ciepley, it was the impress left on the United States by the rise of totalitarianism—of which economic progressivism was seen as a dangerous antecedent—which had a major role in directing this change of approach. See Ciepley, *supra* note 41, at 1-9; see also David Ciepley, *Authority in the Firm (and the Attempt to Theorize it Away)*, 16 *CRITICAL REV.* 81, 83-84 (2004).

⁴⁴ See Cremers & Sepe, *supra* note 18, at 2-4.

⁴⁵ See Bratton, *supra* note 26, at 1492-93.

⁴⁶ See *id.* (describing management discretion as an essential feature of the management corporation); Ciepley, *supra* note 43, at 105-107 (discussing the concerns caused by the “money makers” during the New Deal’s progressive era); Lynn Stout, *Response - The Toxic Side Effects of Shareholder Primacy*, 161 *U. PA. L. REV.* 2003, 2005 (2013) (describing the management corporation as immune to the logic of share price maximization).

⁴⁷ See Bratton & Wachter, *supra* note 32, at 144; Stout, *supra* note 46, at 2007-2008.

⁴⁸ See Bratton, *supra* note 26, at 1520-21.

⁴⁹ See Ciepley, *supra* note 43, at 139-40.

⁵⁰ See, e.g., Armen A. Alchian & Harold Demsetz, *Production, Information Costs, and Economic Organization*, in *ECONOMIC FORCES AT WORK* 73-74 (Armen Alchian ed., 1972).

formalized and directed the change of approach.⁵¹ Emphasizing the position of shareholders as the firm's residual claimants, Jensen and Meckling re-conceptualized shareholder wealth maximization as the best proxy for overall wealth maximization and managerial moral hazard as the primary inefficiency to be addressed by corporate governance.⁵² Viewed through this perspective, the market for corporate control was recast as the exercise of discrete contracting among shareholders that efficiently limited opportunistic managers from misusing valuable assets.⁵³

With the end of the hostile takeover era in the mid-1990s, the case for a decentralized decision-making paradigm of the corporation took the novel form of a claim for “shareholder empowerment,” which has since gained consistent consensus.⁵⁴ Shareholder empowerment first emerged as a response to the alleged impairment of the market's operation due to the introduction of antitakeover statutes and the increased use by incumbents of anti-takeover measures.⁵⁵ Its original agenda mainly included proposals for facilitating managerial and board removal by shareholders,⁵⁶ but it has progressively expanded to include proposals substantially shifting control of business policy from the board to shareholders.⁵⁷ Underpinning this extensive reform program is the argument, built on neoclassical assumptions, that shareholders, as residual claimants, have the best incentives to provide value-maximizing governance inputs.⁵⁸ Conversely—shareholder advocates argue—the incentives of directors and managers may deviate, driven by their private interest in compensation, private benefits, and job retention.

⁵¹ See Jensen & Meckling, *supra* note 7. Frank Easterbrook and Daniel Fischel are credited with having reinstated Jensen and Meckling for corporate legal theory. See FRANK H. EASTERBROOK & DANIEL R. FISCHEL, *THE ECONOMIC STRUCTURE OF CORPORATE LAW* (1991).

⁵² See Jensen & Meckling, *supra* note 7, at 305-08.

⁵³ 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).

⁵⁴ Notably, the leading voice among shareholder advocates is Harvard Law School Professor 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 A. Bebchuk, *The Case Against Board Veto in Corporate Takeovers*, 69 U. CHI. L. REV. 973, 973 (2002) (challenging board primacy in the takeover context); Lucian A. Bebchuk, *The Case For Increasing Shareholder Power*, 118 HARV. L. REV. 833, 851-75 (2005) (advocating for the expansion of shareholder governance rights) [Bebchuk, *Shareholder Power*]; Lucian A. Bebchuk, *The Myth of the Shareholder Franchise*, 93 VA. L. REV. 675, 694-711 (2007) [Bebchuk, *Shareholder Franchise*] (advocating for a reform of corporate elections so to make directors more accountable to shareholders). For an exhaustive examination of the historical roots of the shareholder empowerment claim, see Dalia Tsuk Mitchell, *Shareholder Proxies: The Contours of Shareholder Democracy*, 63 WASH. & LEE L. REV. 1503, 1503 (2006).

⁵⁵ See William W. Bratton & Michael L. Wachter, *The Case Against Shareholder Empowerment*, 158 U. PA. L. REV. 653, 671 (2010) (including among the reform items of the original shareholder agenda majority voting, the right to replace all incumbents every two or three years, the right to expanded access to the proxy statement, and the reimbursement of solicitation expenses).

⁵⁶ See *id.* (including among the items of the extended shareholder agenda access to management's proxy statements, the power to trump contrary board-adopted bylaws, and shareholder-initiated charter amendments)

⁵⁷ See *id.*

⁵⁸ See, e.g., Henry Hansmann & Rainier 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.”).

Board advocates—defending the received board-centric model of the corporation on the ground of directors’ informational advantage vis-à-vis dispersed shareholders⁵⁹—have largely stood in the minority since the emergence of the shareholder empowerment claim.⁶⁰ In fact, shareholder empowerment has become more a reality than an aspiration today, mainly due to steady increases in shareholder concentration and activism, and the occurrence of legal changes that have rewarded the efforts of shareholder advocates.⁶¹ There is, however, one additional factor—largely underappreciated in the corporate law scholarship—which has played a significant role in advancing the shareholder empowerment case. As we explain below, that factor is the rise of corporate governance research supporting the idea that stronger shareholder rights equate to better corporate governance.

B. The Rise of Governance Indices

Neoclassical theorists not only introduced new economic and financial concepts into the corporate governance debate, they also ushered in a revolution in methodology, incorporating empirical analysis into the study of corporate law.⁶² Jensen and Meckling’s postulate that maximizing shareholder value is the best means of maximizing firm value provided the theoretical underpinning for that revolution. On that postulate, it was now possible to test the efficiency of corporate law rules and corporate governance arrangements by estimating their impact on corporate performance as proxied by measures of shareholder value.⁶³

Since the mid-1980s, the march of corporate law scholars into the realm of empirical research has steadily and inexorably increased,⁶⁴ producing innumerable

⁵⁹ Although board advocates defend various theories of board authority, the informational advantage of boards emerges as a shared feature of these theories. 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 board authority, while rejecting shareholder wealth maximization); Bratton & Wachter, *supra* note 55, at 658-61 (2010) (defending the traditional board-centric model of the corporation). Members of the Delaware judiciary also feature prominently among board advocates. See, e.g., Jack B. Jacobs, “Patient Capital”: Can Delaware Corporate Law Help Revive It?, 68 WASH. & LEE L. REV. 1645 (2011); Leo E. Strine, Jr., Response, *Toward a True Corporate Republic: A Traditionalist Response to Bebchuk’s Solution for Improving Corporate America*, 119 HARV. L. REV. 1759, 1759 (2006). 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 (1979).

⁶⁰ See Bratton & Wachter, *supra* note 32, at 100, 146.

⁶¹ See Cremers & Sepe, *supra* note 18, at 3, 15-16.

⁶² See Roberta Romano, *After the Revolution in Corporate Law*, 55 J. LEGAL. EDUC. 342, 351 (2005).

⁶³ See *id.* at 356 (noting that empirical work depends on shared goal specification and that the end of maximizing shareholder wealth provided that specification). See also *infra* Part III.A.2. (revisiting this view of the relationship between shareholder wealth maximization and efficiency analysis of corporate law).

⁶⁴ See Randall S. Thomas, *The Increasing Role of Empirical Research in Corporate Law Scholarship*, 92 GEO. L.J. 981, 982-83 (2004) (reviewing MARK ROE, POLITICAL DETERMINATES OF CORPORATE GOVERNANCE: POLITICAL CONTEXT, CORPORATE IMPACT (2003)).

studies examining how individual governance arrangements empirically relate to corporate performance.⁶⁵ Arrangements and mechanisms that have been studied include, among others, board composition and size, shareholder activism, proxy fights, antitakeover defenses, and voting rights.⁶⁶ These studies, however, have failed to identify a consistent relationship between governance and performance. A plausible explanation for this outcome—as observed by Professors Sanjai Baghat, Brian Bolton, and Roberta Romano—is that “there are limitations with a research design that examines the effect on performance of only one dimension of a firm’s governance when governance mechanisms are numerous and interaction effects are quite probable.”⁶⁷

The limitations affecting studies of individual governance arrangements also help explain the growing popularity of governance indices. Unlike the former studies, empirical studies employing governance indices investigate a firm’s governance quality by focusing on multiple governance provisions, which are assumed to be conducive to either desirable or undesirable outcomes. These multiple provisions are then combined into an index, in which, typically, a score is added for any of the selected provisions that is present in a given firm. This methodology thus effectively collapses the multiple dimensions of a firm’s governance into one number: the overall index’s score.

For Baghat et al., this ability of governance indices to “quantify” a firm’s governance quality through one easily understandable measure is the indices’ key attribute.⁶⁸ From a policy perspective, however, the indices’ primary advantage is to offer an empirical design that is well suited to test theoretical predictions about the efficiency of alternative governance models, which, by definition, involve a multiplicity of governance dimensions rather than just one dimension. Consistent with this view, the three governance indices that are widely regarded in the literature as the most influential—the “Antidirector Index,” the “G-Index,” and the “E-Index”—all focus on governance elements that attempt to test for the efficiency of the two most popular models of governance: the traditional board-centric model and the increasingly popular shareholder-centric model.

The Antidirector Index represented the first, seminal attempt at pursuing such an analysis of corporate governance. Introduced in 1998 by a team of financial economists—Rafael La Porta, Florencio Lopez de-Silanes, Andrei Shleifer, and Robert Vishny—⁶⁹ this index focused on shareholder protection laws around the world,⁷⁰ providing evidence that stronger shareholder protection is correlated with economic growth and market capitalization.⁷¹

⁶⁵ See Bhagat et al., *supra* note 14, at 1814.

⁶⁶ See *id.* at 1814-18 (providing a summary of these studies).

⁶⁷ See *id.* at 1818.

⁶⁸ See *id.*

⁶⁹ See La Porta et al., *Law and Finance*, 106 J. POL. ECON. 1113, 1113 (1998).

⁷⁰ Specifically, the Antidirector index focused on rules on “voting powers, ease of participation in corporate voting, and legal protection against expropriation by management.” See *id.* at 1115.

⁷¹ See *id.* at 1116. The other notable result delivered by the Antidirector index was that common law countries are more protective of investors than civil law countries. See *id.* For a review of the follow-up research as well as of the criticism engendered by *Law and Finance*, see La Porta et al., *supra* note 8.

The G-Index, introduced in 2003 by another team of financial economists—Paul Gompers, Joy Ishii, and Andrew Metrick⁷²—extended the analysis begun by the Antidirector index, considering firm-level governance arrangements in addition to laws “on the books” and focusing on a sample of large public U.S. firms.⁷³ Specifically, the G-Index is constructed as a composite of twenty-four “management power” (or “weak shareholder rights”) features.⁷⁴ Higher index scores capture firms with a more board-centric governance model, which Gompers et al. call a “dictatorship” model.⁷⁵ Lower index scores capture, instead, firms with a more shareholder-centric governance model, which Gompers et al. refer to as a “democratic” model.⁷⁶ Like the Antidirector index, use of the G-Index yielded results consistent with the theoretical assumption that stronger shareholder rights equate to better governance practices, showing that from 1990 to 1999 firms with higher index scores (i.e., the “Democracy Portfolio”) had higher financial value than firms with lower index score (i.e., the “Dictatorship Portfolio”).⁷⁷

The E-Index (or entrenchment index) is an index including a sub-set of G-Index provisions. Developed in 2009 by a team of Harvard Professors—Lucian Bebchuk, Alma Cohen, and Allen Ferrell (BCF)⁷⁸—the E-Index was motivated to overcome the major methodological concern raised by the G-Index: the inclusion of an excessive number of governance-arrangements of unequal relevance.⁷⁹ The E-Index only retained six of the twenty-four G-Index provisions, which BCF hypothesized mattered the most for excessive management power, i.e., entrenchment.⁸⁰ These provisions include staggered boards, poison pills, golden parachutes, supermajority requirements for mergers, supermajority requirements for charter amendments, and supermajority requirements for bylaws amendments.⁸¹ Consistent with the hypothesis that reducing entrenchment is what matters the most in corporate governance, BCF found that the E-Index’s six governance provisions fully drove the negative empirical correlation of the G-Index with firm value.⁸²

Therefore, the evidence obtained for each of the above governance indices supports the view that stronger shareholder rights, and correspondently lower entrenchment levels, is what draws the line between good and bad governance. The connection between this empirical finding and the case for empowering shareholders is

⁷² See Paul Gompers et al., *Corporate Governance and Equity Prices*, 118 Q. J. ECON. 107, 107 (2003).

⁷³ See *id.* at 109, fn. 4.

⁷⁴ See *id.* at 109.

⁷⁵ See *id.*

⁷⁶ See *id.*

⁷⁷ See *id.* at 109 -10.

⁷⁸ See Bebchuk et al., *supra* note 12.

⁷⁹ See *id.* at 784. (arguing that some of the G-Index provisions “might have little relevance, and some provisions might even be positively correlated with firm value. Among those provisions that are negatively correlated with firm value or stock returns, some might be more so than others.”)

⁸⁰ See *id.* at 788.

⁸¹ See *id.* at 784-85; see also *infra* Part III.B.1 (providing a summary of the explanations offered by BCF to account for the specific institutional mechanisms that create entrenchment within each provision).

⁸² See *id.* at 786.

immediate and, as we shall discuss next, has exerted huge impact not just within academic circles, but among policymakers and real corporate actors as well.

C. The End of History for Corporate Governance

In theory, both a shareholder-centric model and a board-centric model have merits. The introduction of governance indices, however, enabled shareholder advocates to assert seemingly objective empirical evidence to defend the shareholder-centric model as superior: firms with stronger, empowered shareholders outperformed their peers with empowered boards. On this view, it is unsurprising that a few years after the introduction of the Antidirector index, Professors Reinier Kraakman and Henry Hansmann declared that “the end of history for corporate law” had arrived.⁸³ The shareholder-centric view of the corporation, they argued, had “earned its position as the dominant model of the large corporation the hard way, by out-competing” alternative governance models, including the traditional board-centric model.⁸⁴ As proved by the empirical findings obtained for the Antidirector Index—and even more so by the subsequent empirical findings obtained for the G-Index and E-Index—the market itself had provided a negative answer to the value of these alternative models, showing that enhanced board authority and managerial discretion inevitably resulted in “inefficiency of operations and excessive investments in low-value projects.”⁸⁵

The idea that good corporate governance is equivalent to stronger shareholder rights, while managerial entrenchment epitomizes bad governance, has won not just the academic debate. It has also gained predominance in the policy debate, both in the United States and internationally. At the national level, the enhancement of shareholder protection has figured prominently in both the Sarbanes-Oxley Act of 2002⁸⁶ and the Dodd-Frank Act of 2010.⁸⁷ Likewise, at international level, the influential Principles of Corporate Governance issued by the Organization for Economic Co-operation and Development have placed strong emphasis on market forces and the alignment of manager and shareholder interests as primary disciplining devices.⁸⁸

Yet perhaps the most tangible sign of the support provided by governance indices for shareholder empowerment is the use to which they have been put by proxy advisory

⁸³ See Hansmann & Kraakman, *supra* note 58, at 439.

⁸⁴ See *id.* at 468 (referring to the board centric model as “the managerialist model”).

⁸⁵ See *id.* at 444.

⁸⁶ See Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, 116 Stat. 745, 745 (2002) (“To protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to the securities laws . . .”).

⁸⁷ See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 11-203, § 951(a)(1), 124 Stat. 1376, 1899 (2010) (codified as amended at 15 U.S.C. § 78n-1) (introducing say-on-pay shareholder votes and expanding the scope of shareholder proposals). For a discussion of other measures that have sustained shareholder empowerment at regulatory level in the past two decades, see *infra* text accompanying notes 279-82.

⁸⁸ See OECD, OECD PRINCIPLES OF CORPORATE GOVERNANCE 11-12 (2004), available at <http://www.oecd.org/corporate/oecdprinciplesofcorporategovernance.htm> (last visited on Aug. 8, 2015). The OECD Principles are seen as “best practices” for multinational companies, rather than legal rules that could conflict with state or federal law. See *id.* at 4.

firms. These firms provide investors with voting recommendations on the election of directors, shareholder resolutions, merger proposals, and any other matter on which shareholders vote, playing a major role in influencing corporate governance policies at many U.S. corporations.⁸⁹ Institutional Shareholder Services (ISS) alone, the largest proxy advisory firm, claims to advise over 1,700 clients, who manage over \$25 trillion in assets.⁹⁰

In providing their services, ISS and other proxy advisors rely on commercial ratings that not only share the same methodology of academic governance indices,⁹¹ but also their basic assumption that enhanced shareholder rights are consistent with best governance practices. Thus, whether the “company is incorporated in a state without any state anti-takeover provisions” and has a unitary board (or passed a proposal to declassify the board) figure prominently among the most important variables included in the ISS’ “Corporate Governance Quotient.”⁹² Even more noticeably, the “Board Accountability Index” used by Glass, Lewis & Company, the second largest proxy advisor, includes five of the six entrenchment components of the E-Index.⁹³

Further, while the studies employing academic governance indices have generally been cautious in avoiding any causality claim, proxy advisory firms exercise no such caution.⁹⁴ ISS, for example, claims that its ratings can “identify the worst corporate offenders.”⁹⁵ Anecdotal evidence also suggests that advisory ratings *do change* a firm’s governance practices, as boards have grown increasingly aware of the effect that a bad rating can have on their firm’s capacity to attract investors.⁹⁶ It is thus unsurprising, that Martin Lipton, noted corporate lawyer and outspoken defendant of the received board-centric model of the corporation, blames “influential proxy advisory firms” as having

⁸⁹ See Paul Rose, *The Corporate Governance Industry*, 2007 J. CORP. L. 887, 898-906 (2007) (providing a description of the major players in the corporate governance industry).

⁹⁰ See Robert D. Hershey, *A Little Industry with a Lot of Sway on Proxy Votes*, N.Y. TIMES, Jan. 18, 2006, § 3, at 6 (describing proxy advisors generally as wielding extraordinary influence over corporate practices and identifying ISS as the most prominent advisory firm).

⁹¹ Academic and commercial governance indices share the same methodology to the extent that they both collapse several governance dimensions into one single number, i.e., an overall index score. See Baghat et al., *supra* note 14, at 1807. However, commercial governance indices also “differ distinctively in several important dimensions.” See *id.* at 1825. For example, commercial indices vary the weights accorded to different governance provisions, rather than attributing the same weight to each provision as academic indices do. See *id.*; see also Robert M. Daines et al., *Rating the Ratings: How Good are Commercial Governance Ratings?*, 98 J. FIN. ECON. 439, 441-42 (2010) (discussing methodological differences between academic and commercial indices).

⁹² Although the exact variables (and how they are weighted) are proprietary, ISS has disclosed the most important variables in the Corporate Governance Quotient. See ISS, 2014 U.S. PROXY VOTING SUMMARY GUIDELINES 10, available at <http://www.issgovernance.com/file/files/2014ISSUSSummaryGuidelines.pdf> [hereinafter ISS GUIDELINES].

⁹³ See Bhagat et al., *supra* note 14, at 1822-23. As compared to the E-Index, the Board Accountability Index excludes supermajority requirements for charter amendments. See *id.*

⁹⁴ See *id.* at 1806-07.

⁹⁵ See Daines et al., *supra* note 91, at 439.

⁹⁶ In a recent survey, for example, public firm directors have listed corporate governance advisors as the third most influential institution on board, behind only institutional investors and analysts. See *id.* at 440.

played a major role in contributing to the increasing erosion of board authority in favor of enhanced shareholder rights.⁹⁷ What is less frequently observed, though, is that the rise of academic governance indices has provided the intellectual support for the engagement of proxy advisory firms among shareholder advocates.

D. The End of “The End of History”?

For almost two decades, shareholder advocates have relied on the empirical literature on governance indices in their push for shareholder empowerment. They have been remarkably successful, holding the upper hand not just among academics, but also among policymakers and real corporate actors. “Corporate governance,” however, “is a moving target.”⁹⁸ As illustrated earlier, its history is studded with recurring turning points as changes in the marketplace or legal rules continuously bring about new practices and refocus scholar attention on new matters of interest.⁹⁹ After the 2008 financial crisis, we seem to have arrived at another one of these points. Indeed, while the regulatory response to the crisis has again involved an enhancement of shareholder power, corporate governance research has registered a major shift in interests, both theoretically and empirically.

Theoretically, after several years in the rearguard, the case for a board-centric governance model has received renewed interest due to the prominence gained by short-termism concerns during the crisis. These concerns arise out of the risk that “impatient” shareholders—with short-term liquidity needs and discounting future gains heavily¹⁰⁰—might prefer investments with high short-term results at the expense of long-term firm value.¹⁰¹ Challenging the assumption that shareholders have the best incentives to provide value-maximizing governance inputs, short-termism undermines the normative desirability of shareholder empowerment. The standard response by shareholder advocates is that short-termism depends on a market imperfection that has yet to be shown as real.¹⁰² Under the mainstream neoclassical assumption that current stock prices fully capture the present discounted value of a firm’s future income (i.e., the strong version of the Efficient Capital Market Hypothesis),¹⁰³ short-termist incentives could be assumed to translate into a lower stock price today and, then, to be competed away by

⁹⁷ See Martin Lipton, *Some Thoughts for Boards of Directors in 2008*, BRIEFLY, Jan. 2008, at 1.

⁹⁸ See William W. Bratton & Michael L. Wachter, *The Eclipse of the Shareholder Paradigm* 42, (Feb. 2015) (unpublished manuscript) (on file with authors).

⁹⁹ See *supra* Part II.A.

¹⁰⁰ See, e.g., Bratton & Wachter, *supra* note 98, at 36 (describing short-termism as a problem arising for “short-term investors who need to sell while the stock is underpriced.”).

¹⁰¹ It appears that the first commentator to raise short-termism concerns was Martin Lipton. See William T. Allen & Leo E. Strine, *When the Existing Economic Order Deserves a Champion: The Enduring Relevance of Martin Lipton’s Vision of Corporate Law*, 60 BUS. LAW. 1383, 1383-84 (2005). In more recent times, short-termism concerns have come from academics, organizational leaders, business columnists, corporate lawyers, and business organizations. See Bebchuk, *supra* note 14, at 1639-40 & n.2-11 (quoting the most important contributions expressing short-termism concerns).

¹⁰² See, e.g., Mark Roe, *Corporate Short-Termism—In the Boardroom and in the Courtroom*, 68 BUS. LAW. 977, 978-79 (2013).

¹⁰³ See Eugene F. Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, 25 J. FIN. 383, 383 (1970).

efficient markets.¹⁰⁴ Today, however, that argument is diluted of much of its strength. As shown by the near collapse of the U.S. financial system, “security mispricing, instead of being a temporary self-correcting problem, [is], . . . , a problem that could and had spiraled out of control.”¹⁰⁵ Therefore, short-termism concerns are not merely theoretical; they are real, and weaken the case for efficient shareholder control of the corporation.

The argument that the rise of activist hedge funds and the steady increase in institutional shareholdings have added to the risk of short-termism has also proved central to the new momentum of board advocates.¹⁰⁶ On the one hand, most hedge funds are impatient investors in search of near or intermediate term value.¹⁰⁷ On the other, money managers—who exercise much of shareholder power today—are also likely to support corporate policies designed to boost short-term earnings, as they thrive by increasing their portfolios’ current value.¹⁰⁸ In spite of the attempt by shareholder advocates to downplay short-termism as a marginal problem, the current corporate scenario would thus make it much more likely that a substantial number of shareholders might have a short-term investment horizon.¹⁰⁹

Empirically, new studies have also appeared that examine the ill effects stemming from the combination of asset pricing inefficiency and short-term shareholder pressure. Theoretical models of rational managerial myopia—which were developed during the takeover era but so far lacked empirical confirmation—have provided the common starting point of these studies.¹¹⁰ Departing from the mainstream neoclassical account of the market for corporate control,¹¹¹ myopia models suggested that an excessive focus on stock market results, combined with imperfectly informative market prices, could induce managers to privilege short-term stock price gains over long-term cash flows.¹¹² As these

¹⁰⁴ See Roe, *supra* note 102, at 981-83.

¹⁰⁵ See Allen & Strine, *supra* note 101, at 1383-84 (quoting Michael Jensen).

¹⁰⁶ See, e.g., Wachtell, Lipton, Rosen & Katz, Important Questions About Activist Hedge Funds, The Harvard Law Sch. Forum on Corporate Governance & Fin. Regulation (Mar. 9, 2013, 10:10 AM), <http://blogs.law.harvard.edu/corpgov/2013/03/09/important-questions-about-activist-hedge-funds/> (defending the view that hedge funds and other shareholder advocates “are preying on American corporations”).

¹⁰⁷ See Bratton & Wachter, *supra* note 55, at 682.

¹⁰⁸ See 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 (2013) (describing a divergence of interest between money manager intermediaries with short-termist preferences and their beneficiaries, depicted as long-term investors)

¹⁰⁹ See Cremers & Sepe, *supra* note 18, at 41-42 (arguing that the rise of activist hedge funds and increased institutional shareholdings may increase the likelihood of Keynesian prices).

¹¹⁰ See Bratton & Wachter, *supra* note 98, at 50-58 (providing a brief summary of new myopia studies).

¹¹¹ See *supra* notes 53 and accompanying text.

¹¹² See, e.g., Adam Brandenburger & Ben Polak, *When Managers Cover their Posteriors: Making the Decisions the Market Wants to See*, RAND J. OF ECON. 523, 529 (1996) (arguing that managers may have incentives to take the decisions an uninformed market wants to see when they fear shareholder discipline); M. P. Naranayan, *Managerial Incentives for Short Term Results*, 40 J. FIN. 1469, 1469-70 (1985) (“[B]y selecting a project that yields short-term profits, the manager can expect to improve the perception about her ability”); Jeremy C. Stein, *Takeover Threats and Managerial Myopia*, 96 J. POL. ECON. 61, 63-67 (1988) (showing formally that managers threatened by a takeover will sell underpriced assets); Jeremy C. Stein, *Efficient Capital Markets, Inefficient Firms: A Model of Myopic Corporate*

concerns challenge the assumption that a firm's anti-takeover provisions are merely a product of managerial opportunism, such provisions have naturally represented a major focus of interest in the new empirical profile. In particular, a series of recent studies has challenged prior empirical results documenting a negative value impact of staggered boards¹¹³—one of the most widely used takeover defenses and a central component of both the G-Index and the E-Index. In arguably the most comprehensive among these studies (hereinafter, the “Cremers-Sepe study”), two of us examined over thirty years of staggering and de-staggering decisions, showing that as firms adopted a staggered board, their financial value increased, whereas firms that repealed a staggered board suffered subsequent drops in firm value.¹¹⁴

Our explanation for the constructive governance role that staggered boards seem to serve—an explanation for which we find strong support in the data—is that they help mitigate what we call the “shareholders’ limited commitment problem” (hereinafter, the “limited commitment problem”).¹¹⁵ Faced with asset pricing inefficiency and vested with strong exit rights, shareholders are unable to credibly commit to long-term value creation. That is, they cannot commit *not* to seek board removal or dump their shares upon a disappointing short-term outcome, as they are unable to tell whether such an outcome is due to mismanagement or to the pursuit of a longer-term project. In response to this problem, directors and managers rationally develop myopic incentives. A related problem arises with the firm's other stakeholders—employees, customers, suppliers, and creditors—as the value of their firm-specific investments might also be reduced by the shareholders’ ability to seek a short-term change in investment policy or rapidly sell their shares.¹¹⁶ In either case, the result is a decrease in firm value in the long run. Viewed through this lens, the adoption of a staggered board adds value by providing for longer directorial terms and, thereby, limiting the ability of shareholders to interfere with directors’ decision-making in the short-term.¹¹⁷

The new matters of interest taken up by governance scholars—asset pricing inefficiency, short-termism, myopic concerns, and the limited commitment problem—all point in the same direction: empowering shareholders may produce externalities that

Behavior, 104 Q. J. ECON. 655, 667 (1989) (modeling suboptimal investments where managers maximize a weighted average of near-term stock prices and long run value).

¹¹³ For a description of these studies, see Daniel M. Gallagher & Joseph A. Grundfest, Did Harvard Violate Federal Securities Law: The Campaign against Classified Board of Directors 34-40 (Rock Center for Corporate Governance Working Paper Series No. 199, 2014), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2536586.

¹¹⁴ See Cremers & Sepe, *supra* note 18, at 27-32.

¹¹⁵ See *id.* at 40-41.

¹¹⁶ See *id.* at 44-45.

¹¹⁷ See *id.* at 47-49; see also Martijn Cremers & Simone M. Sepe, Whither Delaware? Limited Commitment and the Financial Value of Corporate Law, working paper, November 2014, available at <http://ssrn.com/abstract=2519238> (documenting that firm value increases following (re)incorporation 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); William Johnson et al., *The Bonding Hypothesis of Takeover Defenses: Evidence from IPO Firms*, J. FIN. ECON. (forthcoming 2015), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1923667 (empirically documenting that in IPO firms takeover defenses reduce the possibility that a change in control will harm the firm's stakeholders, promoting more favorable contracting terms and increasing firm value).

outweigh any potential benefits. The contrast with the evidence on governance indices and their basic proposition—that stronger shareholder rights are the essential component of good corporate governance—is immediate. Surprisingly, however—and in spite of the huge impact the indices have exerted, and continue to exert, on the real corporate governance debate—no revision of the value impact of the indices, and each of their components, has yet appeared in the literature.

We hence turn to that task, revisiting the empirical evidence obtained for the E-Index as well as each of its six constituent provisions. Three main reasons motivate our choice of focusing on this index among those examined above. First, the Antidirector index focuses on a cross-country analysis, rather than the internal governance arrangements of U.S. corporations, which represent our field of interest.¹¹⁸ Second, as compared to the G-Index, the E-Index presents fewer methodological concerns, as it considers a more restricted number of entrenchment provisions that allegedly fully drive the negative association with firm value.¹¹⁹ Third, as of May 2015 over three hundred empirical corporate governance studies had used the E-Index as a measure of governance quality.¹²⁰ This suggests that, as a matter of fact, the E-Index has become the standard reference in the literature to identify what matters for corporate governance and firm value.

III. CORPORATE GOVERNANCE REVISITED

In this Part, as well as Part IV that follows, we empirically revisit the association between the E-Index (and each of the six provisions it includes) and firm value, expanding the original analysis that appeared in the BCF study (i.e., from 1990 to 2002) to a much larger data sample, which covers thirty years of corporate governance choices (i.e., from 1978 to 2008). In doing so, as explained below, we pursue a two-fold research objective, concerning both the means and ends of corporate governance.

A. Research Objectives and Empirical Methodology

1. *The Means Axis*

Our primary purpose in revisiting the results obtained for the E-Index is to advance the ongoing debate on the means of corporate governance, offering novel evidence as to what matters for firm value and desirable governance models. The BCF study suggests that reducing managerial entrenchment is what matters the most, strengthening the case for a shareholder-centric governance model.¹²¹ That evidence, however, stands in contrast with more recent empirical studies suggesting that empowering boards to resist shareholder and market pressures is beneficial to promote long-term value creation.¹²² A potential explanation for this conflicting evidence is that not all the provisions included in the E-Index matter equally for aggravating entrenchment, or may have offsetting benefits like mitigating the limited commitment

¹¹⁸ See *supra* text accompanying note 70.

¹¹⁹ See *supra* text accompanying note 82.

¹²⁰ See *supra* note 14.

¹²¹ See *supra* text accompanying notes 78-82.

¹²² See *supra* text accompanying notes 113-17.

problem.

Relatedly, it might be that the E-Index is affected by either a “specification problem” or a “reverse causality problem.” Empiricists refer to the former problem when changes in the dependent variable might be attributable to factors others than changes in the independent variable.¹²³ As applied to the E-Index’s analysis, it could thus be that changes in firm value might be attributable to differences in firm characteristics other than having adopted one of the index’s entrenchment provisions. A reverse causality problem is instead said to occur when the dependent variable causes changes in the independent variable, rather than the other way around.¹²⁴ In our case, low firm value could thus motivate, rather than being caused by, the adoption of any entrenchment provisions.

In order to empirically verify the above hypotheses, we employ both a cross-sectional analysis and a time-series analysis of the association between the E-Index (and its components) and firm value. A cross-sectional analysis compares how differences in firm value are associated with differences in the adoption of the E-Index provisions *across different firms* for any given year in a panel dataset.¹²⁵ This kind of analysis can provide useful snapshots of the association between firm value and the E-Index provisions over different years. However, it cannot capture temporal variations within the same firms and, therefore, is especially vulnerable to either specification or reverse causality problems. This explains why using a time-series analysis that employs firm fixed effects is regarded as a more reliable method of identifying empirical relationships in econometrics.¹²⁶ Unlike a cross-sectional analysis, a time series analysis controls for any and all firm-variables that do not change over time—that is, a firm’s “fixed effects”—for each firm included in a panel dataset.¹²⁷ In other words, this analysis adds a separate dummy variable for each unique firm, allowing the examination of what change in firm value *within that firm* occurred before or after a change in any of the E-Index components. Controlling for firm fixed effects thus significantly mitigates both specification and reverse causality problems.

We emphasize that while BCF also employ firm-fixed effects, they can only rely on a twelve-year period (from 1990 to 2002).¹²⁸ Conversely, we can rely on the availability of data over a considerably longer time-period (from 1978 to 2008) and arguably many more changes in the E-Index components.¹²⁹ As significant time

¹²³ See WILLIAM H. GREENE, *ECONOMETRIC ANALYSIS* 56–58 (7th ed. 2012).

¹²⁴ See *id.*

¹²⁵ See JEFFREY M. WOOLDRIDGE, *INTRODUCTORY ECONOMETRICS: A MODERN APPROACH* 444 (2009).

¹²⁶ See, e.g., Jerry A. Hausman, J.A. & William E. Taylor, *Panel Data and Unobservable Oval Individual Effects*, 49 *ECONOMETRICA* 1377, 1377 (1981) (stating that using fixed effects represents a common unbiased method of controlling for omitted variables).

¹²⁷ JEFFREY M. WOOLDRIDGE, *ECONOMETRIC ANALYSIS OF CROSS SECTION AND PANEL DATA* 668 (2002) (“The time series dimension . . . allows us to control for unobserved heterogeneity in the cross section units, and to estimate certain dynamic relationships.”).

¹²⁸ See Bebchuk et al., *supra* note 12, at 802, Table 4.

¹²⁹ This seems especially important if one considers the transformations that have taken place in the corporate landscape both before and after the time period examined by BCF. As discussed earlier, the

variation is essential to meaningful time-series analysis, our analysis should then be regarded as allowing a more robust statistical analysis of the time series association between corporate governance and firm value.¹³⁰

2. *The End Axis*

Our ability to trace the association between governance arrangements and firm value over thirty years also matters for the debate around the ends of corporate governance. In the standard account, that debate would have been resolved by Jensen and Meckling's intuition that maximizing shareholder wealth is the best means toward maximizing overall wealth.¹³¹ As received by many corporate law scholars, especially in the 1990s and early 2000s, that intuition implied that maximizing shareholder wealth was the only end of corporate law.¹³² As a proof of claim, these scholars argued that it was the empirical consensus on shareholder primacy that had enabled the use of empirical tools in corporate governance research, opening the door to employing shareholder value metrics as measures of corporate governance efficiency.¹³³

This account, however, fails to consider the inter-temporal dynamics of the shareholder wealth maximization mandate, while also oversimplifying the relationship between that mandate and the use of shareholder value metrics in efficiency analysis. Without a specification of what the process of creating shareholder wealth involves over time, such a process inevitably turns into a requirement to cater to today's stock price. That requirement, however, ignores crucial inter-temporal issues in the efficiency of market prices. Indeed, only under the assumption of perfectly informative prices can managing based on the current market price be assumed to serve the end of overall value maximization. Yet, as soon as we depart from the strong version of the Efficient Capital Market Hypothesis, a hypothesis that the crisis has exposed as unrealistic, managing based on the current price promotes short-termism and other inefficiencies.¹³⁴ Further, for similar negative results to arise, one need not to assume that market prices are

years from 1978 to 1989 correspond to the "takeover era". *See supra* text accompanying notes 47-48. This era marked the beginning of the erosion of the traditional board-centric model by active institutional investors, which produced significant variation in the use of antitakeover defenses and other entrenchment provisions. *See* Martijn Cremers & Allen Ferrell, *Thirty Years of Shareholder Rights and Firm Valuation*, 69 J. FIN. 1167, 1167 (2014). The period 2002-2008 also witnessed a dramatic transformation of U.S. corporate governance. On the one hand, there was the introduction of substantial regulatory reforms, both at federal and state level, following Enron and the other corporate governance scandals of the early 2000s. *See supra* text accompanying notes 86-87. On the other hand, shareholder empowerment progressively became a reality in those years. *See supra* text accompanying notes 54-58.

¹³⁰ Our ability to investigate comparisons of the long-term value associations of governance choices also helps addressing more general criticisms that have been raised against the use of governance indices. These criticisms have mainly been directed at challenging the notion that a "one-size-fits-all" model of corporate governance might exist. *See, e.g.*, Bhagat et al., *supra* note 14, at 1808; Rose, *supra* note 89, at 924-25. For these scholars, corporate governance "depends on context and on firm's specific circumstances". *See* Bhagat et al., *supra*, at 1808. Hence, governance arrangements that are good for one firm might be bad for another, and vice versa. Empirically, this argument translates into an endogeneity concern—more precisely, a specification problem—which our time-series analysis should help to mitigate.

¹³¹ *See supra* note 52 and accompanying text.

¹³² *See supra* note 63 and accompanying text.

¹³³ *See id.*

¹³⁴ *See supra* text accompanying notes 100-05.

systematically uninformative.¹³⁵ It is instead sufficient to assume that market prices are “discontinuous”, that is, unable of fully capturing the implications of directorial and managerial decisions until those implications begin to show up in cash flows over time.¹³⁶

Corporate law scholars have grown wary of the limitations affecting a “static” mandate to maximize shareholder wealth, especially after the roller-coaster ride of share prices during the 2008 financial crisis. In response, they have increasingly emphasized the need to focus on long-term shareholder value as a more appropriate proxy for overall value maximization.¹³⁷ This signals a scholarly effort to transition to a more dynamic understanding of the shareholder wealth maximization mandate, which seeks to incorporate inter-temporal directives. Yet, acknowledging that short-term shareholder wealth might not be an accurate proxy for aggregate wealth does not challenge the use of shareholder value metrics for efficiency analysis altogether, as suggested by some scholars.¹³⁸ Rather, it suggests that claims of societal efficiency (rather than mere shareholder efficiency) should rely less on event studies, which focus on short-term variations in measures of shareholder value, and more on studies that examine changes in such measures over the long-term. Accordingly, our ability to rely on long-term changes in shareholder value well positions our study to derive broader efficiency implications—advancing the understanding of the inter-temporal aspects of the shareholder wealth maximization mandate as a means to an end, rather than as an end in itself.

¹³⁵ Uninformative prices (or Keynesian prices), however, might cyclically occur, as two of us have explained in earlier work. See Cremers & Sepe, *supra* note 18, at 38-42.

¹³⁶ See Michael Jensen, *Value Maximization, Stakeholder Theory and the Corporate Objective Function*, 14 J. APP. CORP. FIN. 8, 17 (2011). More technically, discontinuous prices are “nonmonotonic,” in the sense that they do not follow a consistent informational pattern. The economic mechanisms explaining such inconsistency hinges on Bayesian updating, which identifies the process through which rational investors update their beliefs about firm value. See Paul R. Milgrom, *Good News and Bad News: Representation Theorems and Applications*, 12 BELL J. ECON. 380, 380 (1981). Because investors cannot observe project selection by management (i.e., the moral hazard problem), they may rationally infer that the manager is “bad” upon observing low earnings at the interim stage, although such an outcome may be due to an investment in a long-term project by a “good” manager (i.e., the adverse selection problem). See JEAN TIROLE, *THE THEORY OF CORPORATE FINANCE* 115-19, 241-44 (2006) (discussing basic moral hazard and adverse selection models). In the long term, however, if the manager is good, it is likely that hard information on the long-term project will become available (i.e., the long-term project begins to pay back). Accordingly, the investors will change their belief about the quality of the manager (i.e., from bad to good) and, in turn, the share price will increase. See BRUNNERMEIER, *ASSET PRICING UNDER ASYMMETRIC INFORMATION* 16-20 (2001) (providing an exhaustive discussion of the relationship between asset pricing and asymmetric information).

¹³⁷ See, e.g., Sanjai Bhagat & Roberta Romano, *Reforming Executive Compensation: Focusing and Committing to the Long-Term*, 26 YALE J. ON REG. 359, 359 (2009); COLIN MAYER, *FIRM COMMITMENT: WHY THE CORPORATION IS FAILING US AND HOW TO RESTORE TRUST IN IT* 246-47 (2013); 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, 7 (2010). But see Jessie Fried, *The Uneasy Case for Favoring Long-Term Shareholders*, 124 YALE L. J. 1554, 1560 (2015).

¹³⁸ See Jill Fisch, *Measuring Efficiency in Corporate Law: The Role of Shareholder Primacy*, J. CORP. LAW 637, 674 (2006)

B. E-Index Provisions and Data Description

Turning to our empirical analysis of corporate governance, we begin by briefly reviewing the specific institutional mechanisms that, according to BCF, would explain why each of the six E-Index provisions causes entrenchment. Understanding those institutional mechanisms is important as they underlie the broader policy implications BCF derive from the results obtained for the E-Index. After that, we present the data for our empirical investigation of those provisions.

1. E-Index Provisions

(a) Staggered Boards. Unlike in a unitary board,¹³⁹ where directors serve a one-year term, in a staggered board directors are grouped into different classes (usually three),¹⁴⁰ with each class standing for reelection in successive years. When the staggering provision is in the charter, as is typical, this requires challengers in a proxy contest to win at least two election cycles to gain a board majority.¹⁴¹ The costs this delay raises for the challenger would explain why staggered boards have come to be regarded as a “powerful defense against removal” of incumbents.¹⁴²

(c) Supermajority requirements. Similar to staggered boards, supermajority requirements would limit the ability of shareholders to use voting rights “to have their way” in corporate affairs.¹⁴³ In particular, supermajority requirements to amend the bylaws (“supermajority bylaws”) could considerably strengthen the effectiveness of a target’s defenses, preventing challengers from removing defenses that incumbents previously placed in the bylaws.¹⁴⁴ Supermajority requirement to amend the charter (“supermajority charter”) and supermajority requirements for mergers (“supermajority mergers”) are instead described by BCF as providing “a second line of defense” against takeovers by allowing insiders with a control block to defeat charter amendments or mergers even if they have lost control of the board.¹⁴⁵

(b) Poison Pills. A poison pill consists of stock purchase rights, which are granted to existing shareholders in the event a corporate rider accumulates more than a certain threshold of outstanding stock and which entitle the shareholders (but not the rider) to acquire newly issued stock at a substantial discount from the market price.¹⁴⁶

¹³⁹ A unitary board structure is the default in all states, except for Massachusetts, Indiana, and Iowa, where the default is reversed. *See, e.g.*, MASS. GEN. LAWS. ANN. ch. 156D, § 8.06 (b)-(g) (West 2005 & Supp. 2011); IND. CODE. ANN. § 23-1-33-6(c) (LexisNexis 2010); IOWA CODE § 490.806A (Supp. 2011).

¹⁴⁰ *See* Richard H. Koppes et al., *Corporate Governace Out of Focus: The Debate Over Classified Boards*, 54 BUS. LAW. 1023, 1029 fn. 29.

¹⁴¹ Dismantling a staggered board established in the charter, rather than the bylaws, involves the coordinated action of the board and the shareholders, as charter amendments can only be initiated by the board and require shareholder approval. *See, e.g.*, DEL. CODE ANN. tit.8, § 242(b) (2010); MODEL BUS. CORP. ACT § 10.03 (1999).

¹⁴² *See* Bebchuk et al., *supra* note 12, at 791.

¹⁴³ *See id.*

¹⁴⁴ *See id.*, at 792.

¹⁴⁵ *See id.*

¹⁴⁶ *See* Wachtell, Lipton, Rosen & Katz, *The Share Purchase Rights Plans*, in RONALD J. GILSON

Hence, by significantly diluting a bidder's economic rights, a poison pill prevents hostile bidders from being successful unless the bidder can have the pill redeemed by a majority of newly appointed directors. However, if the target also has a staggered board in place, a bidder is required to wait through two annual elections before being able to do so. This would explain why poison pills are generally regarded as having "considerably strengthened the protection against replacement that incumbents have."¹⁴⁷

(d) Golden Parachutes. A golden parachute is an executive pay component that entitles its beneficiaries to substantial payments following a change in control of their company, "sweetening" the adverse effects such a change imposes on management.¹⁴⁸ While recognizing the existence of several explanations for the adoption of golden parachutes,¹⁴⁹ BCF state that they "might have an adverse effect by increasing slack on the part of managers as a result of being less subject to discipline by the market for corporate control."¹⁵⁰

2. *Data Description*

Our data for examining the E-Index provisions comes from several sources, with the overall data sample covering 2,186 large publicly traded U.S. firms for the time period 1978-2008. In particular, we obtain data for *Poison Pill*, *SM Charter*, *SM Bylaws*, *SM Merger*, and *Parachutes* (all indicator variables for the presence of the respective governance provision)¹⁵¹ from two main sources. For the time period 1990-2008, we use the corporate governance dataset maintained by Risk Metrics, which acquired the former Investor Responsibility Research Center (IRRC).¹⁵² For the time period 1978-1989, 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 for the period 1990-2008, including the five provisions of interest.¹⁵³ For *Staggered Board* (an indicator variable for the presence of a staggered board), we instead obtain data for the entire 1978-2008 period from the dataset used in the Cremers-Sepe study.¹⁵⁴ As in the BCF study, in employing these provisions to construct the E-Index, we give equal weight to all provisions, attributing one point for each provision a firm has.

Since our main focus is on the value relevance of corporate governance, the main dependent variable in our analysis is firm value. Consistent with many prior studies

& BERNARD S. BLACK, *THE LAW AND FINANCE OF CORPORATE ACQUISITIONS* 4-12 (2d ed. Supp. 1998) (setting forth the terms of a standard poison pill).

¹⁴⁷ See Bebchuk et al., *supra* note 12, at 792.

¹⁴⁸ See Simone M. Sepe & Charles Whitehead, *Chutes and Ladders: Management Incentives and Takeovers*, 96 B.U. L. REV. (forthcoming 2015) (on file with authors) (providing an exhaustive description of golden parachutes' terms and practice).

¹⁴⁹ See Bebchuk et al., *supra* note 12, at 792.

¹⁵⁰ See *id.* at 793.

¹⁵¹ Variables are briefly explained in Appendix Table A and descriptive statistics are provided in Appendix Table B.

¹⁵² BCF also use data from IRRC for the period 1990-2002. See Bebchuk et al., *supra* note 12, at 796-97.

¹⁵³ See Cremers & Ferrell, *supra* note 129, at 1168.

¹⁵⁴ See Cremers & Sepe, *supra* note 18, at 23.

investigating the relationship between governance arrangements and firm value, including the BCF study, we measure firm value using Tobin's Q (Q),¹⁵⁵ retrieving data from Compustat.

Finally, to control for factors other than the adoption of the six provisions included in the E-Index that could have an impact on firm value, we always include 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 EBITDA over the book value of total assets (*ROA*), the ratio of capital expenditures over the book value of total assets (*CAPX*), the ratio of research and development expenditures over sales (*R&D*), and, finally, a proxy of M&A activity at the industry level (*Industry M&A Volume*).¹⁵⁶

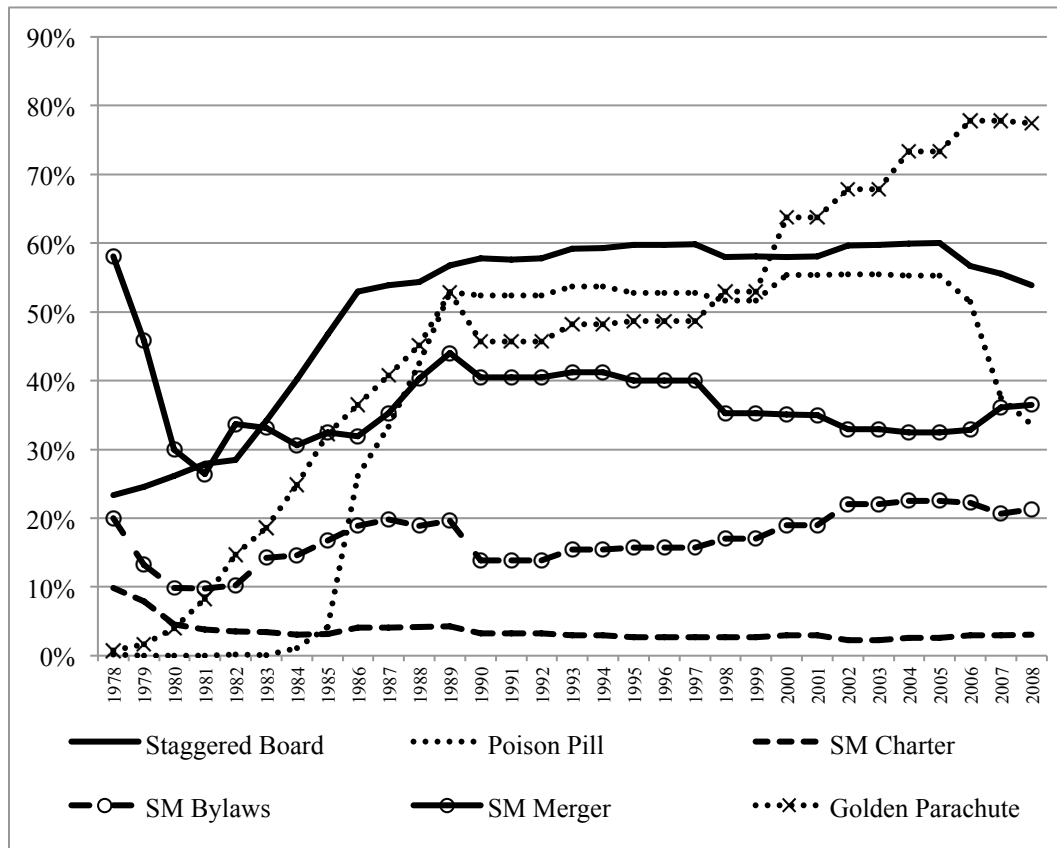
C. Incidence of the E-Index Provisions

We begin our reexamination of the E-Index by documenting the incidence of each of its six components in our sample of firms in Figure 1 below.

¹⁵⁵ Tobin's Q is 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). Tobin's Q has become a commonly recognized proxy for market valuation. See, e.g., Larry H. P. Lang & René Stulz, *Tobin's Q, Corporate Diversification, and Firm Performance*, 102 J. POL. ECON. 1248, 1249-50 (1994); Randal Morck et al., *Management Ownership and Market Valuation: An Empirical Analysis*, 20 J. FIN. ECON. 293, 294 (1988); David Yermack, *Higher Market Valuation of Companies with a Small Board of Directors*, 40 J. FIN. ECON. 185, 186 (1996).

¹⁵⁶ In the cross-sectional analysis, we also include a control for whether the firm is incorporated in Delaware. See *infra* Table 1. In the time-series analysis, we omit this control, as it is absorbed by the control for firm fixed effects, i.e., the inclusion of a dummy variable for each firm. See *id.* Further, as standard in the literature, we also exclude firms with a dual class structure, as concentrated ownership tends to insulate managers and renders other protective features relatively unimportant. See Bebchuk et al., *supra* note 12, at 797. We also exclude financial firms, as the corporate governance of such firms differs due to heavy federal regulation. While we keep real estate investment trusts (REITS) (i.e., firms with a SIC Code of 6798) in our data, running our regressions on a subset excluding REITS yields similar results throughout. This excludes that REITS' special governance features may drive our results.

FIGURE 1. INCIDENCE OF THE E-INDEX PROVISIONS



We observe that since the mid-1980s, staggered boards, poison pills, and golden parachutes have been the most largely used among the E-Index provisions. In particular, staggered boards and poison pills are characterized by a similar pattern. They both exhibit a slow trend from 1978 to 1984, which rapidly accelerates starting in 1985 and lasts until the early 1990s. This seems not coincidental as the Delaware courts first made clear that the use of the pill was legitimate in the 1985 decision of *Moran v. Household International, Inc.*¹⁵⁷ With that legitimacy, the combined use of a staggered board and a poison pill acquired new force as a powerful antitakeover defense.¹⁵⁸ Both staggered boards and poison pills then stabilized in the 2000s, hovering at rates around 60% and 55% respectively. After 2006, they both begin to decline. For poison pills, however, this data needs to be interpreted with caution, as a board of directors can unilaterally adopt a

¹⁵⁷ 500 A.2d 1346 (Del 1985). Under *Moran*, Delaware directors were 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. See *Unocal Corp. v. Mesa Petroleum Co.*, 493 A.2d 946 (Del. 1985). That constraint, however, disappeared in the 1989 decision of *Paramount v. Time*, which substantially gave directors the right to maintain a poison pill indefinitely, essentially providing them with the ability to “just say no” to unsolicited bid acquisitions. See *Paramount v. Time*, 571 A.2d 1140, 1154 (Del 1989).

¹⁵⁸ 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) (suggesting that “[i]t was largely for this reason that the pill was invented.”)

pill at any time, so that it has become common in the literature to refer to the existence of “shadow” poison pills.¹⁵⁹ Hence, the fact that after 2006 fewer firms in our samples have a poison pill cannot be unequivocally interpreted as indicating a declining use of such provisions. At best, one can infer a decline in the use of “visible” poison pills.

Concerning golden parachutes, we first observe a steady increase during the period 1978-1989—from virtually no firms in our sample having a golden parachute in 1978 to about 52% of the firms in our sample having such a provision in 1989. As the period 1978-1989 roughly coincides with the takeover era, the observed pattern would seem to lend support to the BCF’s hypothesis that golden parachutes serve as an anti-takeover defense.¹⁶⁰ From 1989 to 1997, the ratio of firms with a golden parachute slightly declines, while it begins to increase again starting in 1998 (although with a more discontinuous pattern than that observed during the 1978-1989 period), reaching 77% in 2008. The more recent rise in the use of golden parachutes seems more difficult to reconcile with BCF’s anti-takeover hypothesis. An alternative explanation for this rise, as suggested by one of us elsewhere, is increased competition among firms, which may justify the attribution of a parachute to managers even in firms that are less exposed to the risk of a change in control.¹⁶¹ We observe, however, that this explanation does not *per se* detract from BCF’s claim that golden parachutes entrench incumbents, as the production of that effect could be independent of the motivation behind the adoption of parachutes.

Concerning supermajority requirements, *SM Charter* registers a very low incidence throughout our entire sample period, hovering at a rate between 3% and 9%.¹⁶² *SM Bylaws* also remain relatively stable, in the 15-20% range, throughout our entire 1978-2008 period (except for three years, from 1980 to 1982, where they fall below 10%).¹⁶³ *SM Merger*, instead, exhibits a different pattern. Until the mid-1980s, *SM Merger* accounted for the most widely used E-Index provision, whose incidence largely surpassed that of any other index provisions, including staggered boards. After 1978, however, the incidence of *SM Merger* begins to decline, stabilizing at a rate around 40% in the 1990s and further declining in the 2000s.

These patterns seem to suggest that staggered boards and poison pills have progressively come to dominate supermajority requirements, and especially *SM Merger*, as defensive measures. Before the pill’s development in the 1980s, the deterrent effect of a staggered board is regarded as having been limited,¹⁶⁴ because its adoption could not prevent a bidder from acquiring a large block of shares; it could only delay a bidder’s

¹⁵⁹ See *id.* at 289 (arguing that since the endorsement of the pill by Delaware courts, “all Delaware firms ... have had a shadow pill in place, witting or not.”)

¹⁶⁰ See *supra* note 151 and accompanying text.

¹⁶¹ See Sepe & Whitehead, *supra* note 149, at 24 (suggesting that in a market in which most boards are willing to offer a chute to executives, failure to do so may reduce a firm’s competitiveness in targeting the best hires).

¹⁶² BCF also document a low incidence of supermajority requirements for charter in their sample. See Bebchuk et al., *supra* note 12, at 798.

¹⁶³ See Coates, *supra* note 159, at 323.

¹⁶⁴ See ROBERT CLARK, CORPORATE LAW 576 (1986); Ronald J. Gilson, *The Case Against Shark Repellent Amendments: Structural Limitations on the Enabling Concept*, 34 STAN. L. REV. 775, 793 (1982).

ability to exercise voting control.¹⁶⁵ This tactical weakness increased the defensive value of supermajority requirements.¹⁶⁶ After the introduction of the pill, however, supermajority requirements lost much of their defensive value, as a pill on its own could now deter any bid that such requirements would deter.¹⁶⁷ Some scholars have thus argued that after the pill, the presence or absence of supermajority requirements has become irrelevant, with the results that most of these measures have disappeared.¹⁶⁸ Yet, while we find that the incidence of *SM Merger* declines after the introduction of the pill, these provisions seem far from disappearing. Moreover, this account seems also unable to explain the stable pattern we observe in our sample for *SM Bylaws*.

D. Corporate Governance and Firm Value

Moving to the core of our empirical analysis, in this Section we estimate the impact of the E-Index and each of its constituent provisions on firm value, presenting results for both cross-sectional and time-series analyses. As discussed earlier, both analyses are directed at verifying whether the E-Index's theoretical proposition—that incumbents protection from removal epitomizes bad governance—holds over a much longer sample period. However, the use of a time-series analysis is better suited to mitigate possible endogeneity concerns as it incorporates firm fixed effects.¹⁶⁹

1. Cross-sectional Results

Table 1 presents our results for the cross-section of firms, including control for both industry and year fixed effects. Column (1) present results for the association between the E-Index and firm value (i.e., Q). Columns (2) through (7), instead, present results for the association between the single index provisions and firm value, to explore the possibility that not all of the index provisions contribute—or contribute analogously—to the aggregate index's relation to firm value.¹⁷⁰ For added robustness, in Column (8) we also verify the impact on Q of each E-Index provision while controlling for the other index provisions.

We also note that in this table and Table 2 that follows, we show the absolute value of the t-statistics of all coefficients¹⁷¹ based on both robust standard errors that (i) are not clustered, as in BCF, and (ii) that are clustered, as it has become standard in more recent empirical studies. Indeed, the use of clustered standard errors is important because

¹⁶⁵ See Lucian A. Bebchuk et al., *The Powerful Antitakeover Force of Staggered Boards: Theory, Evidence, and Policy*, 54 STAN. L. REV. 887, 903-4 (2002).

¹⁶⁶ In particular, Coates suggests that supermajority mergers provided a valuable defense against coercive two-tiered tender offers—involving a higher initial offer for a number of shares sufficient to acquire control, followed by a lower offer for the remaining outstanding shares. See Coates, *supra* note 159, at 321.

¹⁶⁷ See *id.* at 322-23.

¹⁶⁸ See *id.* at 324-25.

¹⁶⁹ See *supra* note 126 and accompanying text.

¹⁷⁰ See Bebchuk et al., *supra* note 12, at 805-06.

¹⁷¹ T-statistics conventionally indicate significance at the 1%, 5%, and 10% levels. This means that the null hypothesis (the hypothesis that an independent variable has no impact on a dependent variable) cannot be rejected with a probability of 1%, 5%, and 10%, respectively. In statistics, when the significance level is above 10%, it is standard to consider the result to be statistically insignificant or uninformative.

it addresses within-firm dependence, or correlations between observations of the same firm across years.¹⁷²

TABLE 1. FIRM VALUE AND E-INDEX PROVISIONS: CROSS-SECTIONAL ANALYSIS

In this table, we present the cross-sectional association between firm value and the level of the E-Index or its six constituent provisions, using pooled panel regressions of Q on the E-Index or its provisions with year and industry fixed effects (4-digit SIC) plus a set of standard controls: *Assets*, *Delaware Incorporation*, *ROA*, *CAPX*, *R&D*, and *Industry M&A Volume*. All columns use the full time period of 1978-2008, except Columns (2) and (3), which use data for 1978-2011. Coefficients on standard controls are not shown to save space. Variables are defined in Appendix Table A. Statistical significance of the coefficients is indicated at the 1%, 5%, and 10% levels by ***, **, and *, respectively. We provide two t-statistics below each regression coefficient, namely first the t-statistic based on robust standard errors that are not clustered and, second, the t-statistics based on robust standard errors that are clustered by firm. The statistical significance indicated by ***, **, and *, refers to the first coefficient in parenthesis (i.e., robust standard error that are not clustered).

Dep. Variable: Q								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Indep. Variables</i>								
<i>E-Index</i>	-0.0453*** (-11.45) (-5.57)							
<i>Staggered Board</i>		-0.0405*** (-4.47) (-2.14)						-0.0234** (-2.06) (-1.03)
<i>Poison Pill</i>			-0.0964*** (-9.54) (-4.72)					-0.0722*** (-6.20) (-3.25)
<i>SM Charter</i>				-0.00604 (-0.23) (-0.11)				0.0216 (0.77) (0.39)
<i>SM Bylaws</i>					-0.0391*** (-3.00) (-1.57)			-0.0256* (-1.84) (-0.99)
<i>SM Merger</i>						-0.0207** (-1.99) (-0.95)		-0.0139 (-1.27) (-0.61)
<i>Parachutes</i>							-0.113*** (-10.87) (-5.46)	-0.0918*** (-8.10) (-4.24)
Fixed Effects:								
		Year + Industry						
N	21,414	28,281	27,818	21,455	21,555	21,840	24,348	21,414
R-sq	0.512	0.496	0.501	0.509	0.508	0.510	0.512	0.513

Consistent with BCF, in Column 1 we document that the cross-sectional

¹⁷² See Mitchell A. Petersen, *Estimating Standard Errors in Finance Panel Data Set: Comparing Approaches*, 22 REV. FIN. STUD. 435, 435 (2009).

coefficient on *E-Index* is negative and statistically significant—suggesting that firms with more entrenchment experience a reduction in value as compared to firms with less entrenchment.¹⁷³

As shown in Column (2) through (7), the cross-sectional coefficients of the single index provisions are likewise negative. The coefficients are also statistically significant for all provisions except *SM Charter*, which could be explained by the low incidence of such provision throughout our sample.¹⁷⁴ However, when we use robust standard errors clustered at firm level, both the coefficients of *SM Merger* and *SM Bylaws* become insignificant.¹⁷⁵ The statistical significance of the cross-sectional coefficients of the single provisions is reduced even more when we control for the other E-Index provisions (shown in Column (8)). In particular, both the coefficients of *SM Merger* and *SM Charter* become insignificant. With clustering, the effect is even more evident, with all the coefficients becoming insignificant, but for those on *Poison Pill* and *Parachutes*. This seems to suggest that these two provisions largely drive the negative cross-sectional association of the E-Index with firm value.¹⁷⁶

2. Time-Series Results

Table 2 presents results for regressions that replace industry fixed effects with firm fixed effects, examining the association between firm value and changes that firms made in the E-Index provisions during the 1978-2008 period. Column (1) presents results for the association between *E-Index* and firm value, Columns (2) through (7) present results for the association between each of the E-Index provisions and firm value, and Column (8) simultaneously considers all six E-Index provisions.

¹⁷³ Economically, firms with an *E-Index* that is a standard deviation higher than the mean tend to have a level of *Q* that is 4.4% lower relative to firms with an *E-Index* and *Q* that are at the mean. We calculate this economic significance as follows. First, we multiply the *E-Index* coefficient of -0.0453 times the standard deviation of *E-Index* of 1.37, and then divide this by 1.69, which is the average *Q* in the sample. We also observe that the coefficient's estimate on *E-Index* remains statistically significant based on using robust standard errors clustered at firm level, although the t-statistic decreases from 11.45 to 5.57.

¹⁷⁴ See *supra* text accompanying note 162.

¹⁷⁵ The t-statistics statistics based on robust standard errors that are clustered by firm of -0.95 for *SM Merger* and -1.57 for *SM Bylaws* are less significant than 10% confidence level and, in turn, are considered statistically insignificant. See *supra* note 171.

¹⁷⁶ Given the effect of clustering standard errors by firm on our cross-sectional results, a note on its use seems worthwhile. Using standard errors that are clustered by firm accounts for the tendency of governance provisions to be quite stable across time, whereas using standard errors that are not clustered amounts to assuming that observations for a given firm are independent across time. This independence assumption, however, has come to be recognized as inappropriate today, as it ignores a strong dependency of governance provisions across time for individual firms. See Petersen, *supra* note 172, at 405. This means that using more conservative robust standard errors that are clustered by firm is more reflective of the actual confidence we can have in reported estimates. Accordingly, the fact that all cross-sectional coefficients—except *Poison Pill* and *Parachutes*—become insignificant upon clustering standard errors by firm (and controlling for the use of other E-Index provisions) seems to deliver a different picture of incumbent protection from removal than that described by BCF.

TABLE 2. FIRM VALUE AND THE E-INDEX PROVISIONS: TIME-SERIES ANALYSIS

In this table, we present the time series association between firm value and the level of the E-Index and its six constituent governance provisions, using pooled panel regressions of Q on the E-Index or its provision(s) with year and firm fixed effects plus a set of standard controls: *Assets*, *ROA*, *CAPX*, *R&D*, and *Industry M&A Volume*. All columns use the full time period of 1978-2008, except Columns (2) and (3), which use data for 1978-2011. Coefficients on standard controls are not shown to save space. Variables are defined in Appendix Table A. Statistical significance of the coefficients is indicated at the 1%, 5%, and 10% levels by ***, **, and *, respectively. We provide two t-statistics below each regression coefficient, namely first the t-statistic based on robust standard errors that are not clustered and, second, the t-statistics based on robust standard errors that are clustered by firm. The statistical significance indicated by ***, **, and *, refers to the first coefficient in parenthesis (*i.e.*, robust standard error that are not clustered).

	<i>Dep. Variable: Q</i>							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Indep. Variables</i>								
<i>E-Index</i>	-0.0137** (-2.13) (-1.07)							
<i>Staggered Board</i>		0.0706*** (5.06) (2.30)						0.120*** (6.14) (2.96)
<i>Poison Pill</i>			-0.0340*** (-3.00) (-1.58)					-0.0377*** (-2.80) (-1.58)
<i>SM Charter</i>				0.0748** (2.21) (1.21)				0.0743** (2.04) (1.15)
<i>SM Bylaws</i>					-0.0382* (-1.88) (-1.04)			-0.0630*** (-2.99) (-1.66)
<i>SM Merger</i>						0.0269* (1.69) (0.82)		0.0117 (0.70) (0.35)
<i>Parachutes</i>							-0.0497*** (-4.23) (-2.37)	-0.0608*** (-4.62) (-2.67)
Fixed Effects:					Year + Firm			
N	21,414	28,281	27,818	21,455	21,555	21,840	24,348	21,414
R-sq	0.743	0.734	0.735	0.743	0.743	0.743	0.740	0.744

As shown by Table 2, in the firm fixed effect regressions, the coefficient of *E-*

Index remains negative, but becomes statistically insignificant based on using robust standard errors clustered at firm level.¹⁷⁷ This suggests that once correlations between observations of the same firm across years is taken into account,¹⁷⁸ there is no statistically significant evidence that firm value increases as the level of the E-Index decreases (nor, correspondently, that firm value decreases as the level of the E-Index increases).

Columns (2) through (7) document our most striking results. Consistent with the Cremers-Sepe study documenting a positive role of staggered boards, Column (2) shows a statistically significant positive time series association between *Staggered Board* and *Q*.¹⁷⁹ The economic magnitude of this positive association is also considerable, suggesting that the adoption of a staggered board is associated with an increase in firm value of 4.2%.¹⁸⁰ The coefficient of *Staggered Board* remains statistically strongly significant even using robust standard errors clustered at firm level. Similarly, Columns (4) and (6) show a positive coefficient on *SM Charter* and *SM Merger*, although both coefficients become statistically insignificant when we use clustering by firm.¹⁸¹

Conversely, the coefficients on *Poison Pill*, *SM Bylaws*, and *Parachutes* remain negative. The economic magnitude of these negative associations is also considerable, especially for *Poison Pill* and *Parachutes*. Indeed, the adoption of a poison pill is associated with a decrease in firm value of 2.0%,¹⁸² which remains marginally statistically significant when we use robust standard errors clustered at firm level.¹⁸³ The adoption of a golden parachute is associated with a similar decrease in firm value of 2%,¹⁸⁴ which remains statistically significant when we used robust standard errors clustered at firm level.

Importantly, the results for both the E-index provisions exhibiting a positive impact and a negative impact on firm value are confirmed in Column (8), where we simultaneously consider the time series association with firm value for all six E-Index provisions—with most coefficients becoming considerably stronger. The exception is *SM Merger*, whose coefficient decreases (from 0.0269 in Column (2) to 0.0117 in Column (8)). This suggests that the adoption of supermajority mergers serves a function

¹⁷⁷ The t-statistics based on robust standard errors that are clustered by firm of -1.07 for *E-Index* is less significant than 10% confidence level and then considered statistically insignificant. *See supra* note 172.

¹⁷⁸ *See supra* note 176.

¹⁷⁹ *See* Cremers & Sepe, *supra* note 18, at 29, Table 1.

¹⁸⁰ The economic significance of the time series impact of *Staggered Board* on *Q* is obtained by dividing the regression coefficient of 0.0706 by the sample average *Q* during 1978-2008 of 1.69.

¹⁸¹ The t-statistics statistics based on robust standard errors that are clustered by firm of 1.21 for *SM Charter* and of 0.82 for *SM Merger* are less significant than 10% confidence level and then considered statistically insignificant. *See supra* note 172.

¹⁸² The economic significance of the time series impact of *Poison Pill* on *Q* is obtained by dividing the regression coefficient of - 0.034 by the sample average *Q* during 1978-2008 of 1.69.

¹⁸³ The t-statistics statistics based on robust standard errors that are clustered by firm of -1.58 for *Poison Pill* is close but marginally lower than being significant at 10% confidence level.

¹⁸⁴ The economic significance of the time series impact of *Parachutes* on *Q* is obtained by dividing the regression coefficient of - 0.0497 by the sample average *Q* during 1978-2008 of 1.69.

to some extent independent of the adoption of a staggered board, in contrast to what argued by some corporate law scholars.¹⁸⁵

Empirically, the conflicting signs of the cross-sectional versus the time series results for *Staggered Boards*, *SM Charter*, and *SM Merger* seem to suggest that the cross-sectional results for these provisions may be due to reverse causality. In other words, a relatively low firm value would induce firms to adopt such provisions, rather than the other way around.¹⁸⁶ Most importantly, from an institutional perspective, our time-series evidence challenges BCF's postulate that any form of protection from removal is a logical antecedent to managerial moral hazard, documenting that half of the E-Index provisions are associated with an increase, rather than a decrease, in firm value. Thus, as we explain in the following Section, the problem seems not to lie with incumbent protection from removal *per se*, but rather in the form this protection takes.

3. "Dictatorial" and "Republican" Protection Arrangements

Shareholder advocates, starting with Gompers, Ishii, and Metrick, have consistently portrayed the shareholder-centric model as an efficient form of direct corporate democracy, while portraying the board-centric model as an inefficient corporate dictatorship, where incumbents can arbitrarily secure their protection from removal at the expense of shareholders.¹⁸⁷ This stylized representation of incumbent protection, however, is ill suited to capture all the governance arrangements included in the E-Index. Indeed, it fails to consider that some of these arrangements are premised on prior shareholder agreement, consistent with republican organizational principles, under which any form of power is bilateral and only vested in the elected representatives with the prior agreement of voters.

This more nuanced representation of incumbent protection from removal is well suited to capture the difference between E-Index provisions with a negative and positive time series association with firm value, respectively. Poison pills, golden parachutes, and supermajority bylaws all share the features of unilateral—and thus "dictatorial"—governance provisions. The board of directors can unilaterally adopt poison pills and golden parachutes, even against shareholder opposition.¹⁸⁸ Similarly, in most companies, the initial charter tends to grant directors a unilateral right to amend the bylaws.¹⁸⁹ Although this practice cannot divest shareholders of their own unilateral right

¹⁸⁵ See *supra* text accompanying notes 168.

¹⁸⁶ The evidence documented by the Cremers-Sepe study that reverse causality is the most likely explanation for the conflict between the cross-sectional and time series analysis of the value impact of staggered boards adds to the hypothesis that reverse causality might likewise explain our results for *Staggered Boards*, *SM Charter*, and *SM Merger*. See Cremer & Sepe, *supra* note 18, at 30-31 (quoting K.J. Martijn Cremers et al., *Staggered Boards and Firm Value, Revisited* (July 2014) (working paper), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2364165).

¹⁸⁷ See *supra* text accompanying notes 75-76.

¹⁸⁸ See Bebchuk, *supra* note 12, at 809; see also Coates, *supra* note 159, at 287 n. 62 ("Technically, pill adoption is a dividend of rights to purchase stock. Dividends . . . are within the authority of the board and do not require shareholder approval.")

¹⁸⁹ See, e.g., DEL. CODE ANN. tit.8, § 109(a).

to amend the bylaws (which, under Delaware law, is the default),¹⁹⁰ the power attributed to directors becomes virtually exclusive when the exercise of the concurrent shareholders' right is subject to a supermajority requirement.¹⁹¹ Indeed, under these combined governance arrangements, if the directors decide to amend the bylaws—for example to add a provision that delays a bidder's ability to replace a majority of the board—¹⁹² it becomes much more difficult for the shareholders to reverse that decision. This is especially true considering that the size of supermajority requirements is often very high, up to 90-95 percent.

Conversely, staggered boards, supermajority charter, and supermajority mergers embody bilateral—and thus “republican”—governance provisions as they are all premised on shareholder consent. In virtually all U.S. states, shareholder approval is required to adopt a staggered board.¹⁹³ Further, while the board retains exclusive power to initiate a charter amendment, shareholder approval is required.¹⁹⁴ Accordingly, rules for charter amendments are described as being characterized by a bilateral veto, i.e., neither the shareholders nor the board can amend the charter alone.¹⁹⁵ The same logic of granting shareholders a veto right over fundamental corporate transactions explains the requirement of shareholder approval for mergers.¹⁹⁶

Distinguishing between unilateral and bilateral protection arrangements explain our time-series results. On the one hand, unilateral protection arrangements that can be adopted without any dialectical confrontation with the shareholders are more likely to be motivated by managerial moral hazard—consistent with the negative association with firm value that we document. On the other hand, bilateral protection arrangements that require the prior agreement of shareholders seem to serve a constructive governance role—as we document that their adoption has a strongly positive association with firm value.

We argue that this positive role is mitigating the limited commitment problem. Such a problem, as discussed earlier, is the result of the inability of public shareholders vested with strong exit rights and faced with discontinuous market prices to credibly commit to longer-term projects and stable stakeholder relationships, at the expense of firm profitability and, ultimately, their own interests.¹⁹⁷ Staggered boards help mitigate the limited commitment problem by serving as a unique commitment device that makes it

¹⁹⁰ *See id.*

¹⁹¹ *See, e.g.*, DEL. CODE ANN. tit.8, § 242(b)(4).

¹⁹² *See* John C. Coates IV, *Explaining Variation in Takeover Defenses: Blame the Lawyers*, 89 CAL. L. REV. 1301, 1346 (2001) (discussing limitations to shareholder powers).

¹⁹³ *See, e.g.*, DEL. CODE ANN. tit. 8, § 141(d) (2010). The notable exception is Maryland, where the board has the unilateral power to adopt a staggered board. *See* MD. CORP. & ASSOC. CODE § 3-803 (1999 & Supp. 2001).

¹⁹⁴ *See supra* note 141.

¹⁹⁵ *See* Marcel Kahan & Edward Rock, *Corporate Constitutionalism: Anti-takeover Charter Provisions as Pre-commitment*, 152 U. PENN. L. REV. 473, 517 fn. 75 (2003).

¹⁹⁶ *See id.*

¹⁹⁷ *See supra* text accompanying notes 115-16.

more difficult for shareholders to renege on prior long-term engagements and interfere with directorial and management decisions in the short-term.¹⁹⁸

Along the same lines, supermajority charter and supermajority mergers provisions add to a firm's commitment to the longer term by introducing a bias in favor of institutional stability.¹⁹⁹ Indeed, requiring that changes to basic institutional rules (such as those included in a firm's charter or regulating the approval of mergers) receive both board support and overwhelming shareholder consensus helps promote the organizational conservatism²⁰⁰ that is necessary to strengthen a firm's commitment towards longer-term stakeholder relationship and value creation.

IV. THE VALUE OF COMMITMENT

Our analysis of the E-Index, which expands the original analysis carried out by BCF over thirty years of corporate governance, challenges the proposition that any form of incumbent protection from removal is detrimental to shareholder value. Contrary to this proposition, our time series results suggest that only unilateral protection arrangements, which the board can adopt without the need for shareholder approval, result in value-decreasing entrenchment, or bad governance.²⁰¹ Instead, bilateral protection arrangements, which require the mutual agreement of the board and the shareholders, promote beneficial commitment to longer-term value creation and stronger stakeholder relationships, or good governance.²⁰²

In this Part, we put our novel account of what matters in corporate governance to further empirical testing. First, we decompose the E-Index into two separate sub-indices: a *commitment index* (or, more briefly, C-Index), only including the E-Index's three bilateral provisions, and an *incumbent index* (or, more briefly, I-Index), only including the E-Index's three unilateral provisions. If our account of corporate governance is correct, we expect to find that increased scores on the C-Index (i.e., more commitment) are associated with increases in firm value. Conversely, increased scores on the I-Index (i.e., more entrenchment) should be associated with decreases in firm value. Second, we verify whether the use of bilateral protection arrangements is more valuable in firms where the limited commitment problem appears to be more severe, as predicted by our theory. As discussed below, for both inquiries, we find results that strongly support our novel account of incumbent protection from removal.

¹⁹⁸ See *id.*

¹⁹⁹ This is a classic argument in political science for the adoption of supermajority requirements. See MELISSA SCHWARTZBERG, COUNTING THE MANY: THE ORIGINS AND THE LIMITS OF SUPERMAJORITY RULE 7-9, 125-33 (2014) (stating that modern supermajority rules are primarily regarded as a remedy against the "instability" of majority rules).

²⁰⁰ Cf. *id.* at 127 ("Stable institutions afford us the security of expectations By protecting the institutions that "constitute" our political arrangements, we can enable ordinary political life ... without constantly renegotiating the "rules of the game.")

²⁰¹ See *supra* text accompanying notes 188-92.

²⁰² See *supra* text accompanying notes 193-96.

A. The Commitment Index and the Incumbent Index

In this Section we test the value associations of two sub-indices of the E-Index: the commitment index (C-Index), which is meant to capture the level of shareholder commitment to the long-term, and the incumbent index (I-Index), which is meant to capture a firm's level of entrenchment.

Table 3 presents our results. Columns (1) through (3) present results for our full period, 1978-2008. After that, we perform sub-sample analyses to establish the robustness of our results across different sample periods. Specifically, Columns (4) through (6) present results for the first part of our sample, 1978-1993, while Columns (7) through (9) present results for the second part of our sample, 1994-2008. For all columns of this table, we include year and fixed effects and provide the t-statistics based on robust standard errors that are clustered at firm level.

TABLE 3. FIRM VALUE, THE C-INDEX, AND THE I-INDEX

In this table, we present the time series association between firm value and the level of the C-Index and the I-Index, using pooled panel regressions of Q on each index with year and firm fixed effects plus a set of standard controls: *Assets*, *ROA*, *CAPX*, *R&D*, and *Industry M&A Volume*. The first three columns use the full time period of 1978-2008, Columns (4) – (6) use data for 1978-1993, and Columns (7) – (9) for 1994-2008. Coefficients on standard controls are not shown to save space. 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 that are clustered by firm.

	<i>Dep. Variable: Q</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Time Period: 1978 - 2008			Time Period: 1978 - 1993			Time Period: 1994 - 2008		
<i>Indep. Variables</i>									
<i>C-Index</i>	0.0508** (2.04)		0.0610** (2.45)	0.0164 (0.75)		0.0141 (0.63)	0.0952** (2.18)		0.101** (2.34)
<i>I-Index</i>		-0.0432*** (-2.81)	-0.0496*** (-3.19)		0.0108 (0.59)	0.0109 (0.57)		-0.0328 (-1.58)	-0.0372* (-1.80)
Fixed Effects:	Year + Firm								
N	21,438	21,555	21,414	6,663	6,780	6,639	14,775	14,775	14,775
R-sq	0.743	0.743	0.743	0.828	0.825	0.828	0.765	0.765	0.765

Consistent with our commitment theory of bilateral protection arrangements, in Column (1), which shows results for our full sample, we document a statistically significant positive time series association between *C-Index* and Q . The economic magnitude of this positive association is also considerable, suggesting that a unit increase in *C-Index* is associated with an increase in firm value of 3%.²⁰³ Correspondently, in Column (2), which shows the time series relation between firm value and *I-Index* for our full sample, we document a statistically significant negative time series association between *I-Index* and Q . The economic magnitude of this negative association is also

²⁰³ The economic significance of the impact of *C-Index* on Q is obtained by dividing the regression coefficient of 0.0508 by the sample average Q during 1978-2008 of 1.69.

considerable, suggesting that a unit increase in *I-Index* is associated with a decrease in firm value of 2.6%.²⁰⁴ These results are confirmed by Column (3), where we simultaneously consider both indices, finding that the C-Index continues to have a statistically significant positive time series association with *Q*, while the I-Index continues to have a statistically significant negative time series association with *Q*.²⁰⁵

Results for the sub-period 1978-1993, shown in Columns (4) through (6), are considerably different. Indeed, all the C-Index and the I-Index coefficients—whether used singularly or simultaneously—become economically smaller and statistically insignificant. Conversely, results for the sub-period 1994-2008 are even stronger than the results we obtain for the full 1978-2008 period. As shown in Column (7), the coefficient of *C-Index* is positive and statistically significant, and almost twice the coefficient of *C-Index* for our full time period. Economically, this means that a unit increase in *C-Index* is associated with an increase in firm value of 5.2% during the 1994-2008 time period.²⁰⁶ Concerning the coefficient of *I-Index*, as shown in Column (8), it remains negative, although is only marginally significant. This could potentially be explained by more limited within-firm variation in the I-Index over this time period. Finally, as shown in Column (9), where we verify the contemporaneous impact of the two indices during 1994-2008, we similarly find that the coefficient of *C-Index* is positive and statistically significant and that the coefficient of *I-Index* is negative and statistically significant.

Overall, the results of Table 3 suggest that the divide between good and bad governance practices—as embodied by bilateral protection arrangements and unilateral protection arrangements, respectively—has only emerged in the past two decades. Conversely, before the mid-1990s, firms' governance quality seems best understood as context-specific, where heterogeneity in governance arrangements may have reflected firms' idiosyncratic features. Indeed, the insignificance of the results using the 1978-1993 period is not just of a statistical nature, but also economical, as shown by the small (in absolute value) coefficients. This raises the question of what caused corporate governance to transition from a system in which best practices exhibited highly customized features to one in which bilateral protection arrangements seem to represent an appropriate set of best practices for most firms—and, conversely, unilateral protection

²⁰⁴ The economic significance of the impact of *I-Index* on *Q* is obtained by dividing the regression coefficient of -0.0432 by the sample average *Q* during 1978-2008 of 1.69.

²⁰⁵ As we show in Appendix Table C, the results in Table 3 are not all driven by time variation in *Staggered Board*, *Poison Pill* and *Parachutes*, even if those three provisions have the most time variation (as shown in Figure 1) and have the strongest time series association with firm value (as documented in Table 2). Columns (1) and (3) of Appendix Table C shows that adoption of *SM Charter* is associated with an increase in *Q*, but primarily for firms without a staggered board. Columns (2) and (3) show a similar result for *SM Merger*, albeit with lower economic significance and without statistical significance. In Columns (4) and (6), we find a strong negative association between adopting *SM Bylaw* and *Q*, but only for firms that also have adopted a poison pill, suggesting a strong complementarity. Finally, as shown in Columns (5) and (6) of Appendix Table C, golden parachutes and poison pills appear to be substitutes, as we find that the adoption of *Parachutes* is strongly negatively related to *Q*, but only for firms that have not adopted a poison pill

²⁰⁶ The economic significance of the impact of *C-Index* on *Q* is obtained by dividing the regression coefficient of 0.0952 by the sample average *Q* during 1994-2008 of 1.82.

arrangements seem to represent universally bad practices. We turn to that question next.

B. The Dynamics of Incumbent Protection

The erosion of the traditional board-centric model due to the rise of shareholder power—which started in the mid-1990s with the emergence of institutional investor ownership²⁰⁷—seems to provide a plausible answer to the question of what caused bilateral protection arrangements to progressively gain systematic value as best practices. With its strong focus on board authority and the central discretionary function of management over capital (i.e., shareholders), the traditional, managerialist model of U.S. corporations was well suited to constrain the distortions arising from the limited commitment problem.²⁰⁸ Indeed, under these organizational principles, directors were naturally empowered to resist short-term shareholder and market pressure.²⁰⁹ This, in turn, could explain why the benefits arising from the adoption of bilateral protection arrangements do not exhibit a systematic nature under that model. In the shareholder empowerment era, however, U.S. corporate boards have grown increasingly disempowered vis-à-vis shareholders.²¹⁰ As a result, the limited commitment problem emerges as much more severe today. This could explain why the adoption of governance arrangements fostering commitment to the long-term has become systematically valuable in more recent times. In other words, bilateral protection arrangements would have emerged as a means to re-empower boards—with the agreement and in the longer-term interest of shareholders—to constrain the distortions arising from the limited commitment problem.

As to unilateral protection arrangements, such as poison pills and golden parachutes, one possible explanation for their emergence after 1993 as seemingly universally bad practices relates to changes in takeover activity. During the takeover era, it was more likely that the need to address an actual takeover threat motivated the adoption of a poison pill. To the extent that such a threat could jeopardize a firm's commitment to long-term value creation, a poison pill could provide incumbents with an exceptional remedy—to be added on top of already empowered boards—to force investors to be “patient.”²¹¹ With the end of the hostile takeover era in the mid-1990s, however, similar threats have become much less frequent, making it more likely that the adoption of a poison pill may be motivated by managerial moral hazard.

²⁰⁷ See *supra* notes 55-58 and accompanying text.

²⁰⁸ See *supra* notes 39-46 and accompanying text.

²⁰⁹ As observed by Delaware Justice Jack Jacobs, in the management corporation directors could force investors to “patiently ‘sit still’” for the time required to “to innovate new products, to bring those products to market, and to plan for the long-term”. Jacobs, *supra* note 59, at 1646-49.

²¹⁰ See *supra* text accompanying notes 59-61.

²¹¹ In the Delaware Court of Chancery's ruling of the *Paramount v. Time* takeover case (later affirmed by the Delaware Supreme Court), Chancellor Allen provided a similar motivation. See *In re Time Incorporated Shareholder Litigation*, Del.Ch., C.A. No. 10670, Allen, C., 1989 WL 79880 (July 14, 1989). Framing the case as hinging on whether Time's directors were allowed to accept less current value today in the hope of greater value in the future, Chancellor Allen ruled in favor of the board's use of the pill as a manifestation of the board's willingness to manage the corporation for the long-term profit. See *id.*

It is important to emphasize, however, that so far, for simplicity and empirical tractability, we have assumed that a firm is to adopt only good or bad governance arrangements. In actuality, however, it will often be the case that a firm has some good arrangements and some bad ones. For example, a firm might have adopted—as often happens in practice—both a staggered board and a poison pill. How should one interpret this organizational variant under our account of corporate governance? Our analysis of the results obtained for the I-Index suggests that evaluation of this variant should turn on whether any actual takeover threat justifies the adoption of a pill to strengthen the long-term commitment device provided by a staggered board. A recent case on point is the use by takeover target Airgas of a poison pill to defeat AirProduct’s attempt to win over the company.²¹² After a battle that drew massive investor attention, Airgas was able to successfully fend off AirProduct’s offer following a ruling by the Delaware’ Chancery Court that upheld the company’s use of the pill as consistent with the objective of long-term value creation.²¹³ Tellingly, in the months after the ruling, Airgas’ stock price rose steadily, validating the view of the Airgas staggered board that the use of the pill was necessary to defend the company’s “commitment to creating shareholder value through the disciplined execution of core business strategies.”²¹⁴

Finally, concerning the use of golden parachutes, we emphasize that the 2010 introduction by the Dodd-Frank Act of “Say-on-Golden-Parachute” rules has weakened the unilateral nature of these provisions. Pursuant to Section 951 of the Act, all U.S. public companies are now required to conduct a non-binding shareholder advisory vote on parachute payouts in connection with mergers and other significant corporate transactions that are presented to the shareholders for approval.²¹⁵ Our account of corporate governance suggests that by introducing an element of dialectical confrontation with the shareholders, this legal change could potentially serve to mitigate the likelihood that golden parachutes be primarily motivated by managerial moral hazard. Consistent with this hypothesis, one of us has argued elsewhere—with the support of empirical evidence for the period 2007-2012—that golden parachutes have grown into a governance arrangement designed to ensure managers will benefit from the

²¹² See Steven M. Davidoff, *A Case Study: Air Products v. Airgas and the Value of Strategic Judicial Decision-Making*, 2012 COL. BUS. L. REV. 502, 507-34 (2012) (providing an exhaustive account of the Airgas-Airproduct battle).

²¹³ The Delaware Chancery Court initially upheld a shareholder-initiated bylaw amendment that accelerated the date of Airgas’ next annual shareholder meeting—substantially shortening the two-annual-meeting delay forced on AirProduct by Airgas’ staggered board. See *Airgas, Inc. v. Air Prods. & Chems., Inc.*, C.A. No. 5817-CC, 2010 WL 3960599, at *1 (Del. Ch. Oct. 8, 2010). About a 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 *Air Prods. & Chems., Inc. v. Airgas, Inc.*, 16 A.3d 48 (Del. Ch. 2011). *Airgas, Inc. v. Air Prods. & Chems., Inc.*, C.A. No. 5817-CC, 2010 WL 3960599, at *1 (Del. Ch. Oct. 8, 2010).

²¹⁴ AIRGAS, THE HISTORY OF AIRGAS — IT’S ALL ABOUT VALUE, <http://airgas.com/company/history/airgas-history-commitment-to-excellence-all-about-value.html> (last visited Aug. 8., 2015).

²¹⁵ See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 11-203, § 951(a)(1), 124 Stat. 1376, 1899 (2010) (codified as amended 15 U.S.C. § 78n-1 (2012)).

long-term value of their specific investments, even if their company is later acquired.²¹⁶ As encouraging managers to specifically invest in the firm is essential to creating and sustaining firm value over time, the benefits derived from such assurance would accrue to managers and shareholders alike, which could explain why the use of golden parachutes kept increasing after 2008.²¹⁷

C. Managerial and Stakeholder Engagement

Our results for the C-Index and the I-Index largely downplay the relevance of incumbent protection from removal that is detrimental to shareholder interests. That protection appears to be beneficial to shareholder and societal interests, as long as it takes a republican form—empowering boards to resist short-term market pressure with the prior agreement of shareholders (or even without shareholder agreement if this is justified by exceptional circumstances).

As a further test to our novel account of incumbent protection from removal, in this Section we verify the channels through which the republican board-centric model would add corporate value: the pursuit of long-term projects and firm-specific stakeholder investments. Empirically, if our theoretical account is correct, we would expect to find that the adoption of bilateral protection arrangements is more strongly associated with increases in firm value in firms whose corporate production depends on long-term innovation and the participation of stakeholders, including creditors.

1. Innovation and Stakeholder Participation

Our theoretical account predicts that firms that are more involved in long-term innovation and where stronger firm-specific investments by non-financial stakeholders (such as customers and employees) are likely to be more important should be affected by a more severe limited commitment problem. Indeed, information about investments in innovation tends to be “soft,” that is, mostly limited to firm insiders and hence less accurately captured by market prices in the short term.²¹⁸ This increases the risk that shareholders may misinterpret a short-term drop in profits to be a sign of underperformance when, instead, it reflects the expenses of an attractive investment

²¹⁶ See Sepe & Whitehead, *supra* note 149, at 17 (“[C]hutes serve as insurance against a change in the firm’s investment strategy, and a chute’s payments—similar to specified (or liquidated) damages—reflect the loss to managers of the value resulting from their sunk costs.”)

²¹⁷ See *id.* (empirically documenting that the adoption of a golden parachute was positively associated with firm value for a sample of firms during the time period 2007-2012). According to a coauthored work of another of us, the increase in golden parachutes might have been more significant than it appears according to RiskMetrics data. See Martijn Cremers et al., *Introducing the CFGM Corporate Governance Database: Variable Construction and Comparison to the RiskMetrics and IRRG Governance Databases*, working paper, September 2015 (on file with authors). Indeed, in hand-checking RiskMetrics data, this work finds that RiskMetrics appears to have underreported the levels of golden parachutes for the period starting in 2008.

²¹⁸ See TIROLE, *supra* note 136, at 250 (defining soft information as information that cannot be easily verified even when it is disclosed); Alex Edmans et al., *The Real Cost of Financial Efficiency when Some Information is Soft 2*, (ECGI - Finance Working Paper No. 380/2013, Nov. 7, 2014), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2316194 (describing information on intangible assets as a classic example of soft information that cannot be credibly disclosed to outsiders).

whose value will not be realized until later.²¹⁹

Similarly, firms where the nature of the business requires more commitment between the corporation and one or more of its stakeholders should be more penalized by short-term shareholder pressure directed at seeking a change in investment policy or a change in control. While a shareholder advocate could argue that the contract is a sufficient instrument to address the higher risk of stakeholder expropriation arising in such firms, this view overvalues the ability of the contractual instrument to contain this risk.²²⁰ Preventing stakeholder expropriation by contract can be impossibly difficult, as the long-term nature of most stakeholder contracts and the complex and uncertain process of corporate production necessarily makes such contracts highly incomplete.²²¹

Our working hypothesis is thus that firms with more long-term innovation and those that require stronger firm-specific investments by stakeholders should both benefit more from the adoption of the bilateral protection arrangements included in the C-Index. In order to capture these features of corporate production, we use the following variables: *R&D*, *Labor Productivity*, and *Large Customer*. *R&D* is a standard measure of innovation,²²² which we use as a proxy for the importance of long-term research and development projects.²²³ *Labor Productivity* identifies industries with a higher marginal product of labor and, hence, we use it as proxy for the level of firm-specific investments by the employees.²²⁴ Finally, *Large Customer* is an indicator variable set equal to one if the firm has at least one customer accounting for 10% or more of its sales, which we use as a proxy for the importance of (long-term) firm customers in creating financial value.²²⁵

Table 4 shows the results of pooled panel *Q* regressions on the E-Index, the C-Index, and the I-Index with and without the interactions with the above proxies (plus our standard controls, whose coefficients are not shown to save space). For all columns of this table, as well as of Table 5 below, we include year and fixed effects and provide the t-statistics based on robust standard errors clustered at firm level.

TABLE 4. INDICES AND FIRM VALUE: COMMITMENT PROXIES INTERACTIONS

In this table, we present the time series association between firm value and three governance indices (the E-Index, C-Index and I-Index) and their interactions with three proxies of the importance of longer-term commitments: *R&D*, *Labor Productivity*, and *Large Customer*, using pooled panel regressions of *Q* with

²¹⁹ See *supra* text accompanying notes 110-12.

²²⁰ For a long time now, this has been shareholder advocates' standard response to the risk of stakeholder expropriation by shareholders. See e.g., Jonathan R. Macey, *An Economic Analysis of the Various Rationales for Making Shareholders the Exclusive Beneficiaries of Corporate Fiduciary Duties*, 21 STETSON L. REV. 23, 25 (1991) (arguing that the contracting problems facing "[o]ther constituencies . . . can be solved at far less cost than those confronting shareholders").

²²¹ See Cremers & Sepe, *supra* note 18, at 45-46.

²²² See Edwin Mansfield, *R&D and Innovation: Some Empirical Findings*, in NAT'L BUR. ECON. RES. R&D, PATENT, AND PRODUCTIVITY 127, 127-129 (1984), available at <http://www.nber.org/chapters/c1004>.

²²³ Data for *R&D* is from Compustat.

²²⁴ Data for *Labor Prod.* is at industry level and comes from the U.S. Bureau of Labor Statistics (using the four digit SIC code). This data is available for only a subset of firms.

²²⁵ Data for *Large Customer* comes from the historic Compustat Segment tapes for 1986-2007. About a quarter of firms in our sample have a *Large Customer*.

year and firm fixed effects plus a set of standard controls: *Assets*, *ROA*, *CAPX*, *R&D*, and *Industry M&A Volume*. All columns use the full time period of 1978-2008. Coefficients on standard controls are not shown to save space. Variables are defined in Appendix Table A. Statistical significance of the coefficients is indicated at the 1%, 5%, and 10% levels by ***, **, and *, respectively. We provide the t-statistics below each regression coefficient based on robust standard errors that are clustered by firm.

	<i>Dep. Variable: Q</i>					
<i>Indep. Variables</i>	(1)	(2)	(3)	(4)	(5)	(6)
<i>E-Index</i>	-0.0155 (-1.14)		-0.0622*** (-3.56)		-0.0173 (-1.30)	
<i>C-Index</i>		0.0301 (1.17)		0.0382 (1.03)		0.0536*** (4.44)
<i>I-Index</i>		-0.0398** (-2.26)		-0.0921*** (-4.06)		-0.0505*** (-5.70)
<i>E-Index</i> × <i>R&D</i>	-0.0489 (-0.16)					
<i>C-Index</i> × <i>R&D</i>		1.272* (1.70)				
<i>I-Index</i> × <i>R&D</i>		-0.325 (-1.01)				
<i>E-Index</i> × <i>Labor Productivity</i>			0.0392*** (4.37)			
<i>C-Index</i> × <i>Labor Productivity</i>				0.0441*** (3.27)		
<i>I-Index</i> × <i>Labor Productivity</i>				0.0333*** (2.67)		
<i>E-Index</i> × <i>Large Customer</i>					0.0156 (1.11)	
<i>C-Index</i> × <i>Large Customer</i>						0.0356** (2.22)
<i>I-Index</i> × <i>Large Customer</i>						0.00467 (0.39)
<i>R&D</i>	-0.587 (-0.62)	-1.181 (-1.18)	0.999* (1.76)	1.003* (1.77)	1.429** (2.53)	1.447*** (4.00)
<i>Labor Productivity</i>			-0.219*** (-6.25)	-0.211*** (-6.02)		
<i>Large Customer</i>					-0.0893** (-2.02)	-0.0920*** (-3.41)
Fixed Effects:	Year + Firm					
N	22,053	22,053	18,414	18,414	21,414	21,414
R-sq	0.718	0.719	0.748	0.749	0.743	0.744

As shown by Columns (1) and (2), when interacting with *R&D*, *E-Index* has a negative but statistically insignificant time series association with *Q*, *C-Index* has a positive and statistically significant time series association with *Q*, and *I-Index* has a negative but statistically insignificant time series association with *Q*. Consistent with our commitment theory of bilateral protection arrangements, this seems to suggest that such arrangements are considerably more strongly related to changes in firm value for firms

with more *R&D* investments. Specifically, a one point increase in *C-Index* during 1978-2008 is associated with a 4.5% larger increase in firm value for firms whose *R&D* is one standard deviation higher than the mean relative to firms whose *R&D* is at the mean.²²⁶

Our most striking results are those on labor productivity. As shown by Columns (3) and (4), the interaction of *Labor Productivity* with each of the three governance indices has a coefficient that is positive and statistically significant. Economically, these effects are meaningful. A one point increase in *C-Index* during 1978-2008 is associated with a 1.8%²²⁷ larger increase in firm value for firms whose *Labor Productivity* is a standard deviation above the average relative to firms with average *Labor Productivity*. The economic magnitude of the *I-Index* interaction is similar. This suggests that in firms where employee contributions are relatively more important for value creation, committing shareholders to a more stable relationship with employees is so relevant that benefits accrue even when unilateral provisions are used to protect managers. In other words, in these cases the positive effects stemming from incentivizing employee firm-specific investments outweigh the detrimental effects generally displayed by such provisions in terms of increased managerial moral hazard.

Finally, results on the three governance indices when interacting with *Large Customer* are similar. As shown by Columns (5) and (6), when interacting with *Large Customer*, *E-Index* has a negative but statistically insignificant coefficient; *C-Index* has a positive and statistically significant coefficient; and *I-Index* has a negative but statistically insignificant coefficient. Similar to *R&D* investments, this suggests that changes to the governance provisions included in the *C-Index* are considerably more strongly related to changes in firm value for firms with a *Large Customer*. Economically, Column (6) shows that a unit increase in the *C-Index* is associated with a 2.1%²²⁸ larger increase in *Q* for firms with a large customer. In results that we do not report (due to brevity concerns), we also find that the larger the percentage of a firm's sales accounted for by a *Large Customer*, the greater the positive impact of *C-Index* on firm value (meaning that if a firm's customer accounts for more than 10% of the firm's sales, the impact of *C-Index* on firm value also increases).

Overall, these results strongly support the view that the ability of bilateral protection arrangements to mitigate the limited commitment problem is a primary channel through which these arrangements are positively associated with firm value. The adoption of such arrangements is indeed more strongly related to increases in firm value in firms where ensuring the commitment of shareholders to the longer horizon is more relevant—such as (i) firms that are more engaged in innovation, (ii) firms with large

²²⁶ The economic significance for the interactions presented in Table 4 and 5 is calculated as follows. First, we multiply the interaction coefficient and the standard deviation of the proxy that is interacted with the governance index, and, second, we divide the product by the average firm value in our sample. For *R&D*, that calculation is equal to $1.272 \times 0.06 / 1.69 = 4.5\%$.

²²⁷ The economic significance for the interaction between *C-Index* and *Labor Prod.* is calculated as follows: $0.044 \times 0.7 / 1.69 = 1.8\%$.

²²⁸ The economic significance for the interaction between *C-Index* and *Large Customer* is calculated as follows: $0.0356 \times 1 / 1.69 = 2.1\%$.

long-term customers, and (iii) firms with more firm-specific labor productivity or where employee commitment is more important for value creation.²²⁹

2. *Excessive Risk-Taking*

Creditors are often described as the most important of the firm's stakeholders after shareholders, whose participation in the corporate enterprise is essential to ensuring a corporation's ability to expand and thrive. This has become increasingly the case in the twenty-first century, as radical changes have not only occurred in corporate production, but also in capital structures.²³⁰ Departing from the all-equity (or low leverage) capital structure of the Berle and Means era, today's corporations exhibit capital structures in which non-equity investments have grown into a steady source of capital—in fact, even a primary source of capital in some industrial sectors.²³¹

It is thus unsurprising that creditors, as a group, are regarded by the law as “a useful proxy for the wider non-shareholder social interest in firm success.”²³² Indeed, as fixed claimants, creditors and other stakeholders are exposed to the risk of wealth-transferring actions that enrich shareholders at their expense.²³³ The classic wealth-transfer example is excessive risk-taking, which may penalize various firm stakeholders, but especially creditors, given their position as primary providers of non-equity capital.²³⁴ Economically, this problem arises out of the divergent upside and downside potential exhibited by creditors versus shareholders. As fixed claimants, creditors are largely indifferent to increases in returns from corporate assets, while they are highly sensitive to declines in asset value—thus preferring safer investment strategies. In contrast, as residual corporate claimants, shareholders are highly sensitive to increases in equity returns, while the protection of limited liability makes them comparatively less sensitive to losses. Once a corporation has outstanding debt, this payoff structure induces shareholders—and managers acting on their behalf—to prefer riskier over safer projects. Indeed, if things go well, shareholders expect to capture most of the upside potential of riskier projects. If things turn awry, instead, creditors will bear most losses.

²²⁹ Many firms are likely to present similar features today, due to firm value having grown increasingly dependent on investments in technological know-how and specialized human capital in the modern corporation. See Cremers & Sepe, *supra* note 18, at 44-45. This has been especially so since the mid-1990s, with the emergence of the digital revolution, consistent with our hypothesis that the importance of bilateral protection arrangements for best governance practices—which began around the same time—is best understood as a response to the intensification of the shareholder limited commitment problem. See *supra* text accompanying notes 207-10.

²³⁰ See Simone M. Sepe, *Intruders in the Boardroom: The Case for Constituency Directors*, 91 WASH. U. L. REV. 309, 366.

²³¹ See *id.*

²³² See Edward B. Rock, *Adapting to the New Shareholder-Centric Reality*, 161 U. PA. L. REV. 1908, 1929 (2013).

²³³ See Sepe, *supra* note 230, at 319-20.

²³⁴ In addition to excessive risk-taking (or “asset substitution” or “overinvestment”), other actions that may illegitimately transfer wealth from debtholders to stockholders include the payment of excessively large dividends, the issuance of additional debt, and the rejection of projects with a positive net present value when the benefits from such projects accrue solely to the debtholders. The classic reference on shareholder opportunism toward fixed claimants is Clifford W. Smith, Jr. & Jerold B. Warner, *On Financial Contracting: An Analysis of Bond Covenants*, 7 J. FIN. ECON. 117, 118-19 (1979).

Once one acknowledges the dangers that arise from the shareholders' risk preferences and the possibility that they may be transmitted to managers, logic requires acknowledgment that situating directors and managers at some distance from shareholders might be helpful to constrain excessive risk-taking. On this view, we pose that bilateral protection arrangements may serve as a beneficial commitment device through which shareholders bind themselves ex-ante to limit their future ability to pressure management to undertake riskier projects. This would reduce a corporation's cost of debt, avoiding that creditors may raise interest rates in anticipation of future excessive risk-taking. Empirically, if our interpretation of the relationship between bilateral protection arrangements and excessive risk-taking is correct, we would expect to find that the adoption of such arrangements is more strongly related to increases in firm value in firms that are more exposed to the likelihood of future excessive risk taking.

To test our hypothesis, we employ a widely used proxy for bankruptcy risk, *Z-Score*.²³⁵ By construction, a higher *Z-Score* indicates a firm with low bankruptcy risk, while a lower *Z-Score* indicates a firm with more bankruptcy risk.²³⁶ In running *Z-Score* regressions (i.e., where *Z-Score* rather than *Q* is the dependent variable), which we do not report here to save space,²³⁷ we find that a higher *C-Index* score is associated with a higher *Z-Score* (i.e., less bankruptcy risk). Conversely, a higher *I-Index* score, as well as a higher *E-Index* score, are associated with a lower *Z-Score* (i.e., more bankruptcy risk).

These results show that the adoption of bilateral protection arrangements benefit creditors by reducing a debtor's risk of default, consistent with our theory that such arrangements strengthen a firm's long-term relationship with the various stakeholders. Instead, unilateral protection arrangements are detrimental to creditors, as they increase a debtor's risk of default. This also seems consistent with our interpretation of unilateral protection arrangements. Indeed, when managerial protection from removal is implemented without explicit shareholder agreement, it is, in general, more likely to have the exclusive purpose of advancing manager self-interest at the expense not only of shareholders, but also creditors.²³⁸

²³⁵ Data for *Z-Score* is from Compustat.

²³⁶ Specifically, firms with a high *Z-Score* are firms with more liquid assets, higher historical and current profitability, better growth opportunities or market valuations of current assets, and higher asset turnover (and vice versa for firms with a low *Z-Score*).

²³⁷ We report these results in Appendix Table D.

²³⁸ In the case of golden parachutes, the detrimental effect that such provisions produce on creditors is rather straightforward. Indeed, the substantial payment that a golden parachute may trigger in favor of managers upon a change in control can be regarded as a form of claim dilution, which reduces the expected future cash flows on which creditors can count for the repayment of debt. See Smith & Warner, *supra* note ---, at 118. In the case of the poison pill, the detrimental effect produced on creditors also follows from claim dilution. Having a visible pill (rather than only a "shadow pill") suggests that management is particularly set against *any* acquisition attempts from outsiders, regardless of whether that attempt constitutes a threat to a firm's commitment to the long-term horizon or a value-increasing replacement of underperforming management. Firms with a visible pill may also be more apt to employ additional leverage as a second line of defense against a potential takeover, as adding leverage increases a bidder's prospective costs. Sudip Datta & Mai Iskandar-Datta, *Takeover Defenses and Wealth Effects on Securityholders: The Case of Poison Pill Adoption*, 20 J. BANK. & FIN. 1231, 1232-33 (1995). Alternatively, if a bidder is able to acquire the target (i.e., by having the pill removed), the financing of the

Z-Score regressions, however, are not informative of the relation between a firm's risk exposure and firm value (i.e., shareholder value). However, our conjecture is that a lower level of risk (i.e., a higher *Z-Score*), as promoted by the adoption of bilateral protection arrangements, should result in higher firm value in the long-term, benefiting creditors and shareholders alike. In order to verify whether the association between firm value and risk taking is influenced by specific governance arrangements, we hence run *Q* regressions on the governance indices interacted with *Z-Score*. Table 5 below shows our results.

TABLE 5. FIRM VALUE, BANKRUPTCY RISK, AND GOVERNANCE INDICES

In this table, we present the time series association between firm value and *Z-Score*, a proxy of bankruptcy risk, as interacted with three governance indices (the E-Index, C-Index and I-Index) using pooled panel *Q* regressions with year and firm fixed effects plus a set of controls: *CAPX*, *R&D*, and *Industry M&A Volume*.²³⁹ All columns use the full time period of 1978-2008. Coefficients on standard controls are not shown to save space. Variables are defined in Appendix Table A. Statistical significance of the coefficients is indicated at the 1%, 5%, and 10% levels by ***, **, and *, respectively. We provide the t-statistics below each regression coefficient based on robust standard errors that are clustered by firm.

<i>Index. Variables</i>	<i>Dep. Variable: Q</i>	
	(1)	(2)
<i>E-Index</i>	0.00171 (0.10)	
<i>E-Index</i> × <i>Z-Score</i>	-0.00327 (-0.81)	
<i>C-Index</i>		-0.00236 (-0.08)
<i>C-Index</i> × <i>Z-Score</i>		0.0116 (1.51)
<i>I-Index</i>		0.0142 (0.64)
<i>I-Index</i> × <i>Z-Score</i>		-0.0132** (-2.37)
<i>Z-Score</i>	0.101*** (9.35)	0.0985*** (9.01)
Fixed Effects:	Year + Firm	
N	18,939	18,939
R-sq	0.725	0.726

takeover generally leads to additional leverage as well (especially if the change of control is implemented through a leveraged buyout). *See id.* In both cases, the claim of existing creditors to corporate assets emerges as diluted by the addition of new, unanticipated debt, increasing the risk to which existing creditors are exposed.

²³⁹ In Table 5, we do not control for *Assets* and *ROA*, as these variables capture similar firm characteristics as those embedded in *Z-Score*. If we add *Assets* and *ROA* as controls to Column (2), the coefficient and t-statistic for the interaction of *Z-Score* and *C-Index* remain unchanged, but the coefficient of the interactions of *Z-Score* and *I-Index* goes down to -0.0072 with a t-statistic of 1.37, indicating lower statistical significance with an associated p-value of 17% (i.e., above typical levels of statistical significance used in the literature).

Consistent with our conjecture, Table 5 shows that a higher *Z-Score* has a positive coefficient equal to 0.101 (with a t-statistic of 9.35). This suggests that firms with a *Z-Score* that is a standard deviation higher than the mean experience a 14.6% higher firm value relative to firms with a *Z-Score* that is at the mean.²⁴⁰ Combined with the results we obtain in *Z-Score* regressions—that increases in the *C-Index* are associated with increases in the *Z-Score*, strengthening firm stability and thus creditor prospects—this result supports the view that bilateral protection arrangements benefit both creditors and shareholders.

This interpretation of the relationship between governance arrangements, risk, and firm value is further supported by the results we obtain for the *Q* regressions on *C-Index* when interacting with *Z-Score*. As shown by Column (2), the interaction coefficient is positive and equal to 0.0116,²⁴¹ implying that a one point increase in *C-Index* is associated with a 1.7% larger increase in firm value for firms with a high *Z-Score* relative to firms with a low *Z-Score*.²⁴² This suggests that bilateral protection arrangements are more strongly associated with increases in firm value in firms that currently have a relatively low bankruptcy risk and hence may have more potential to engage in future excessive risk (as their level of risk is not excessive already).

In contrast to the coefficient of the *C-Index*, the coefficient of the *I-Index* is negative and statistically significant, equal to -0.0132 (shown in Column (2)). This suggests that a one point increase in *I-Index* is associated with a 1.9% larger decrease in firm value for firms with a high *Z-Score* relative to firms with a low *Z-Score*.²⁴³ The adoption of the provisions included in the *I-Index* thus seems more detrimental to firms that are more likely to engage in future excessive risk, consistent with our interpretation of unilateral protection arrangements as likely to have, in general, an opportunistic motivation, to the detriment of both shareholder and creditor interests.

²⁴⁰ We calculate the economic significance as follows. We multiply the coefficient of 0.101 for *Z-Score* by the standard deviation of *Z-Score* (2.44), and divide the result by the average *Q* in the sample (1.69).

²⁴¹ The statistical significance of the interaction of *Z-Score* and *C-Index* has a t-stat of 1.51, which has an associated p-value of 13%. This means that it is just above the typical level of marginal statistical significance used in the literature, but in our interpretation suggests that the interaction is relevant, though should warrant a more cautious interpretation than coefficients that are strongly statistically significant.

²⁴² We calculate the economic magnitude of the effect as follows. We multiply the coefficient of 0.0116 by the standard deviation of *Z-Score* (2.44), and divide by the average *Q* in the sample (1.69). As a result, the difference between ‘high’ and ‘low’ *Z-Score* here is assumed to be one sample standard deviation in *Z-Score*, equal to 2.44.

²⁴³ Similar to *C-Index*, also here we multiply the coefficient of -0.0132 by the standard deviation of *Z-Score* (2.44), and divide by the average *Q* in the sample (1.69). As a result, the difference between ‘high’ and ‘low’ *Z-Score* here is assumed to be one sample standard deviation in *Z-Score*, equal to 2.44.

IV. BOARD AUTHORITY, MANAGERIAL ACCOUNTABILITY, AND STAKEHOLDER INTERESTS

Our analysis of the E-Index challenges the view that reducing entrenchment is what matters the most in corporate governance—suggesting that promoting a firm’s commitment to the long-term matters as well, and potentially much more. The implications of this analysis are significant for debates concerning both the means and ends of corporate governance. Theoretically, it shows that when the shareholder wealth maximization mandate is rightly understood as focusing on the long-term horizon,²⁴⁴ the republican version of the board centric model emerges as better suited to pursue that mandate than a direct shareholder democracy model. By protecting directors from short-term removal with the ex-ante agreement of shareholders, the republican model preserves a board’s ability to put in place a commitment to the long-term—which shareholders themselves are unable to provide due to their limited commitment problem.²⁴⁵ Empirically, this conclusion is corroborated by the evidence that the republican corporate model is strongly associated with increases in long-term firm value, especially in firms where the limited commitment problem is likely to be more significant.²⁴⁶

Our account of corporate governance, however, has still not addressed the major criticism raised by shareholder advocates against the board-centric model: that enhanced board authority necessarily comes at the expense of reduced managerial accountability. Because under that model directors and managers are removed (even if only temporarily so) from the judgment of shareholders, it is argued that there no longer is a mechanism through which they are held accountable for their actions—with the result that in the end the only wealth that is maximized is that of directors and managers themselves.²⁴⁷ The clearest implication of this account of board authority concerns the consideration of stakeholder interests. When directors and managers are empowered to consider such interests, so the argument goes, they can more easily camouflage opportunities for managerial moral hazard as being beneficial to stakeholders, at the expense of corporate profitability.²⁴⁸

Yet, this Article’s evidence that the republican board-centric model is strongly associated with increased firm value suggests that something is missing in current analyses of the relationships among board authority, managerial accountability, and stakeholder interests. In this Part, we draw on the economic theory of soft and hard

²⁴⁴ See *supra* Part III.A.2.

²⁴⁵ See *supra* text accompanying notes 115-17.

²⁴⁶ See *supra* Parts III and IV. Of course, changes in the six constituent provisions in the E-Index are endogenous, and partly under the firm’s control. As typical of corporate governance studies, we do not have clear exogenous variation in firm-level changes to these provisions. Rather, our identification is indirect and comes from two sources. First, our alternative account of what really matters in corporate governance predicts the opposite sign (i.e., positive rather than negative) for the association with firm value of bilateral protection arrangements as compared to unilateral arrangements. Second, our alternative governance account identifies firms where the limited commitment problem is more severe as those where bilateral protection arrangements are likely to be more positively associated with firm value. In our empirical work, we test these two sets of predictions and find strong support for both in the data.

²⁴⁷ See Bainbridge, *supra* note 59, at 565-66 (summarizing this argument).

²⁴⁸ See *id.* at 581.

budget constraints to shed light on those relationships, and explain how criticism of the board-centric model has been misdirected due to the wrong assumption that board authority and accountability are antithetical.

A. Soft and Hard Budget Constraints

The criticism that a board-centric model is lacking in managerial accountability can be framed as a “soft budget constraint” problem. Originally formulated by economist Janos Kornai,²⁴⁹ the term soft budget constraint is used to describe an economic environment in which the occurrence of “failure”—poor performance as benchmarked against objective metrics, such as those captured by prices—triggers inefficient support rather than being “punished” (for example through the liquidation of the failing entity).²⁵⁰ The classic example is that of firms in planned economies.²⁵¹ Conversely, economists refer to a “hard budget constraint” when failure leads to efficient ex-post settling up, as generally happens in the context of market economies.¹

The intuition for why a market framework is more likely to hold to a hard budget constraint is that decentralized decision-making mitigates the likelihood that private interests may arise motivating rescue in cases where it would be efficient to reduce or cease an activity. In contrast, when the decision process is centralized, such as in planned economies or within the boundaries of the firm, decision-makers are more likely to exhibit private interests that motivate them to “meddle” with failure.²⁵²

By making it more credible that decision-makers will hold to a hard budget constraint, decentralization thus provides a better remedy against the risk of agents’ moral hazard. When an agent expects failure to be punished ex-post by the decision-maker, with punishment being costly to the agent, she will have stronger incentives to expend costly effort. On the contrary, when the agent expects failure to be tolerated by the decision-maker, the agent’s incentives for effort are weakened, as expending effort may be more costly to the agent than the consequences of failure.²⁵³ It is then easy to see why the soft budget constraint literature seems to support the desirability of a direct democracy model of the corporation with stronger shareholder rights, i.e., market discipline. When authority is vested in financial markets (i.e., shareholders) rather than the board, the firm’s budget constraint naturally hardens, as markets can more credibly commit to punish low firm outcomes than directors, whose incentives may deviate according to their private interest in compensation and job retention.

²⁴⁹ See J. Kornai, *Resource-Constrained versus Demand-Constrained Systems*, 47 *ECONOMETRICA* 801, 801 (1979).

²⁵⁰ See *id.* at 806-08; see also Kornai et al., *Understanding the Soft Budget Constraint*, 41 *J. ECON. LIT.* 1095, 1097 (2003).

²⁵¹ See Kornai et al., *supra* note 250, at 1096.

²⁵² See *id.*, at 1098-1100.

²⁵³ See Mathias Dewatripont & Eric Maskin, *Credit and Efficiency in Centralized and Decentralized Economies*, 62 *REV. ECON. STUD.* 541, 541-42 (1995) (formalizing the soft budget constraint problem as a financial commitment problem).

Yet, as straightforward as this account of corporate relationships may appear, it oversimplifies the conceptual apparatus of the soft/hard budget constraint. It does so by downplaying the risk that informational inefficiencies and other market imperfections may make performance benchmarks potentially inaccurate. Indeed, with discontinuous prices, the market may be unable to fully capture fundamental values in the short-term and therefore to accurately gauge whether “failure” has occurred.²⁵⁴ Under these circumstances, holding the corporation to a hard budget constraint may lead to undesirable effects,²⁵⁵ as shareholders may end up punishing corporate insiders in the short-term when efficiency would require them to commit to the long-term.

Within this analytical framework, neither a pure hard budget constraint model of the corporation (i.e., a shareholder democracy) nor a pure soft budget constraint model (i.e., unilateral incumbent protection) is desirable, as they both provide corner solutions.²⁵⁶ The former model minimizes moral hazard at expense of the distortions arising from the limited commitment problem, and vice versa. Optimal corporate governance should instead provide an “interior solution”²⁵⁷ (or a “hybrid”), which holds the corporation to a soft budget constraint in the short-term, so as to mitigate the distortions arising from the limited commitment problem, and a hard budget constraint in the long-term, so as to reduce the risk of managerial moral hazard. A republican corporate model is the governance system that better approximates this interior solution.

On the one hand, unlike the shareholder democracy model, the republican model grants directors the ability to soften the budget constraint in the short-term—toward the beginning of a director’s tenure, when it is more likely that directors may have an informational advantage over financial markets and, hence, that prices may fail to fully reflect the implications of a given investment policy. Softening the budget through bilateral protection arrangements emerges thus as necessary to empower directors to take actions that tolerate, rather than punish, what may appear to the market as “early failure” (e.g., low short term earnings), when short-term tolerance is required to foster innovation and other long-term projects, as well as to promote stronger stakeholder relationships.²⁵⁸

On the other hand, the republican model departs from the dictatorial model that shareholder advocates seem to have in mind when criticizing any form of directorial protection from removal. In contrast to this account, protecting directors from removal does not emerge as antithetical to board accountability, as long as it is the result of the mutual agreement of the board and shareholders (or, if board protection from removal has

²⁵⁴ See *supra* note 136 and accompanying text.

²⁵⁵ Economists Mathias Dewatripont and Eric Maskin formally showed that the disciplinary effects of a decentralized credit model (i.e., a hard budget constraint) may foster an over-emphasis on short-term results if the realization of the firm’s project only occurs in the long-term and, at the interim stage, good projects are hardly distinguishable from bad projects. See Dewatripont & Maskin, *supra* note 253, at 542.

²⁵⁶ See MICHAEL CARTER, FOUNDATIONS OF MATHEMATICAL ECONOMICS 502 (2001) (defining a *boundary*, i.e., *corner*, solution as the one that “lies on the boundary of the feasible set” of solutions to an optimization problem).

²⁵⁷ See *id.*

²⁵⁸ Cf. Gustavo Manso, *Motivating innovation*, 66 J. FIN. 1823, 1824 (2011) (defending compensation schemes that exhibit more “tolerance” for early failure and reward long-term performance as efficient).

a unilateral nature, it is limited in time). Indeed, only by assuming that directors and managers that experience chronic losses are punished rather than rescued—*being held to a hard, rather than soft, budget constraint in the long-term*—can one explain the positive association we document between adopting bilateral protection arrangements and increases in firm value over time.²⁵⁹

This suggests that the republican model of the corporation does not jeopardize market-based accountability mechanisms, but rather ensures that those mechanisms operate in the time frame in which they are more likely to be effective. As time progresses and a director's tenure matures, the implications of directorial decisions begin to show up in cash flows. As a result, market prices become more likely to incorporate the real value of past corporate policies and convey accurate information as to how well or poorly a firm has been managed. Viewed through this lens, bilateral protection arrangements ensure that shareholders hold incumbents accountable in the long-term, when the former are likely to be better positioned to evaluate directorial and managerial actions.

For example, in spite of the oft-repeated remark by shareholder advocates that a staggered board insulates directors from market discipline, the usual three-year term served by directors in a staggered board does not permanently remove them from the judgment of the market. Instead, that longer term provides a time frame for directorial evaluation by the shareholders that is less likely to be biased by informational inefficiency. Similarly, supermajority requirements to amend the charter and to approve mergers do not reduce long-term directorial accountability, but constructively strengthen board authority in the short-term. The logic is the same as the logic that underlies proposals—also advanced by shareholder advocates—that managers should be compensated for good performance only after a time frame that allows for adequate evaluation of managerial actions.²⁶⁰ In the same way, managers should be punished, if that is appropriate, only after sufficient time has passed to gauge the full implications of their allegedly bad actions.

B. Demystifying the Stakeholder Interests Problem

Viewing the republican corporate model as a unique organizational solution that holds directors to a soft budget constraint in the short-term and a hard budget constraint in the long-term demystifies much of the criticism levied against the consideration of stakeholder interests in corporate governance. One classic criticism is that consideration of such interests is designed to pursue social goals unrelated to corporate profitability.²⁶¹ On this view, the board's commitment to stronger shareholder relationships would come

²⁵⁹ See *supra* Tables 2 and 3.

²⁶⁰ See, e.g., BEBCHUK & FRIED, *supra* note 54, 191 (arguing for limits on managers' "freedom to unwind the equity-based incentives created by their compensation plans"). As remarked by Delaware Supreme Court Chief Justice Leo E. Strine, Jr., this position seems difficult to reconcile with "Bebchuk's career-long obsession" for shareholder democracy, sounding like an admission on Bebchuk's "part that increasing demands on corporations to manage to immediate stock market pressures might not be good for stockholders or society generally." Strine, *supra* note 108, at 467.

²⁶¹ See, e.g., Bainbridge, *supra* note 59, at 549 (summarizing this argument).

at the expenses of shareholder profits, empowering directors with the ability to reallocate wealth from shareholders to stakeholders. This view of shareholder-stakeholder relationships, however, is lacking both empirically and theoretically.

Empirically, we have shown that protecting board authority to secure a firm's commitment to long-term stakeholder relationships seems to benefit stakeholders and shareholders alike, especially in firms where specific stakeholder investments are likely to matter the most. The remarkable economic success of the management corporation is also consistent with our empirical results. As discussed earlier, bilateral protection arrangements seem to have emerged as a corrective to the erosion of board authority brought about by the rise of shareholder power.²⁶² Accordingly, if the above criticism of shareholder advocates was correct, shareholders should be better off today than they have historically been under the management corporation model. For that model granted directors discretion to consider a wide range of corporate interests, as long as this was instrumental to promote corporate growth.²⁶³ Instead, the management corporation “generated wealth in a stable, steep-curved way”²⁶⁴ during the so-called golden age of American capitalism.²⁶⁵

Theoretically, the above criticism both underestimates the value to shareholders of securing optimal stakeholder investments and erroneously seems to treat shareholder wealth maximization as an end in itself. As a result of the radical changes that have occurred in both corporate production and capital structures, promoting firm-specific stakeholder investments—such as investments by specialized employees or long-term relationships with creditors or large customers—has become increasingly essential to the pursuit of corporate profitability.²⁶⁶ Further, short-term transfers of wealth from shareholders to stakeholders may be instrumental in increasing long-term shareholder *and* firm value in the context of asset pricing inefficiency. Indeed, with discontinuous market prices, directors are likely to have superior information regarding whether a course of action deviating from short-term shareholder wealth maximization will enhance long-term firm value. Hence, as long as a transfer of wealth from shareholders to stakeholders

²⁶² See *supra* text accompanying notes 207-10.

²⁶³ See *supra* notes 39-40 and accompanying text.

²⁶⁴ See Jacobs, *supra* note 59, at 1646.

²⁶⁵ One study reports that from 1933 until 1976 (i.e., roughly speaking, the era of managerial capitalism), the total real compound annual return on the stocks of the S&P 500 was 7.6 percent. See Roger Martin, *The Age of Customer Capitalism*, 2010 HARV. BUS. L. REV., available at <https://hbr.org/2010/01/the-age-of-customer-capitalism>. From 1976 until 2011, during which period board authority has increasingly been weakened by empowered shareholders, the comparable return has been 5.9% percent. See *id.*

²⁶⁶ See *supra* note 229. A concrete example is offered by the value that the outstanding skills of Google engineers deliver to the company. This might explain why “googlers” enjoy an extremely high level of perks—including, among others, free food and shuttle services, travel insurance, on-site physicians and nurses, generous maternity/paternity leaves, low-cost legal advice, and death benefits. GOOGLE, *Careers, Benefits*, <https://www.google.it/about/careers/lifeatgoogle/benefits/>. Whereas the classic account of stakeholder-shareholder relationships portrays the improvement of employees' social conditions as necessarily antithetical to shareholder profits, the Google's example speaks to the contrary. Google's perks might raise expenses to Google's shareholders. Yet, they are likely to deliver them benefits that largely outweigh those expenses by helping to retain key employees and—as stated on the company's website—by removing barriers that could prevent googlers from optimally focusing on their work. See *id.*

is going to pay off in the long run, such a transfer should be deemed beneficial, rather than detrimental, to shareholder interests.²⁶⁷

Another classic criticism raised against the consideration of stakeholder interests in corporate governance is that it would exacerbate managerial moral hazard, necessarily leading to abandonment of the goal of shareholder wealth maximization and, hence, to indeterminate results.²⁶⁸ As we have shown, however, the republican model does not discard the shareholder wealth maximization mandate; rather it ensures that such a mandate efficiently operates in the long-term. In practice, this means that while directors and managers are free to assess the inter-temporal tradeoffs that must be made among competing corporate constituencies—exploiting their informational advantage on the long-term value to shareholders of stakeholder participation—they remain accountable for those tradeoffs against the benchmark of long-term shareholder value. This mitigates the risk that directors and manager may opportunistically exploit stakeholder interests to pursue their personal interests, as the possibility of long-term shareholder retribution continues to ensure the existence of effective accountability mechanisms.²⁶⁹

²⁶⁷ Consider the classic example of directors faced with the decision of whether closing an obsolete plant. In the standard narrative, this example is used to illustrate the inefficiency to which allowing directors to consider stakeholder interests may lead. Increased directorial discretion—so the argument goes—enhances directors’ ability to camouflage their own interests as concern for stakeholder interests, making it easier for the directors to keep the plant open even when it would be efficient to close it. See Bainbridge, *supra* note 59, at 581-82. Yet, this narrative takes for granted that any attempt to rescue the plant is value destroying, while also assuming that this is public information. In actuality, however, directors are likely to have competitive private information on the future value of an apparently obsolete plant, as well as on the gains to be made by strengthening a firm’s commitment to non-shareholder constituencies, such as local communities. Allowing directors to take actions that take into account similar inter-temporal tradeoffs will benefit shareholders and stakeholders alike in the long-term. Yet, a shareholder advocate could argue that a relaxation of directors’ focus on shareholder wealth maximization might allow them to justify a decision to keep the plant open even when there are no future gains to be made. This argument, however, can only be sustained if one assumes a static context (i.e., a one-shot game), in which allowing directors to deviate from the shareholder wealth maximization mandate in the short term is equivalent to abandoning that mandate altogether. However, in a dynamic context, in which directors are held accountable for the decision to keep the plant open based on long-term outcomes and share value, they are unlikely to do so unless they expect substantial future gains from this course of action.

²⁶⁸ See *id.* at 581 (referring to this criticism as the “too many masters” argument).

²⁶⁹ Our account of the relationship between board authority, stakeholder interests, and managerial accountability also helps bridge the gap between the two most prominent board-centric models of the corporation—the “team production model” developed by Professors Margaret Blair and Lynn Stout and the “director primacy model” developed by Professor Steven Bainbridge. See Blair & Stout, *supra* note 59; Bainbridge, *supra* note 59. For Blair and Stout, protecting board authority vis-à-vis shareholders is instrumental to promote optimal firm-specific investments by all the corporate participants, avoiding that shareholders might use their corporate power to opportunistically expropriate other stakeholders. See Blair & Stout, *supra*, at 251-54. They accordingly argue that directors are charged with maximizing the joint welfare of all constituents who make firm-specific investments. See *id.* For Bainbridge, instead, board authority is the response to shareholders’ informational and collective action problems, but needs to exclusively focus on the end of maximizing shareholder value. See Bainbridge, *supra*, at 557-59, 574. The alleged differences between these models, however, are much reduced when one conceives of enhanced board authority as a response to the limited commitment problem and the distortions arising from a static approach to shareholder wealth maximization. On the one hand, our theoretical framework reconceptualizes suboptimal stakeholder investments as a major cost arising from the inability of shareholders with strong exit rights to commit not to predate the board’s informational advantage over time—reconciling the theoretical foundations of the two models. On the other hand, it rationalizes short-

V. POLICY CONSIDERATIONS

The conclusion of our analysis of the relationship between corporate governance and firm value is that incumbent protection from removal benefits shareholder and societal interests as long as it is result of the mutual agreement of the board and the shareholders (or, if this protection has a unilateral nature, it is limited in time). It does so by committing shareholders to preservation of a board's ability to optimally pursue long-term value maximization strategies, without jeopardizing board exposure to shareholder discipline in the longer-term. This conclusion not only is at odds with the findings of the literature on governance indices. It also has fundamental implications both for the providers of commercial governance indices and for regulators, which have largely adhered to the misguided proposition that stronger shareholder rights are an all-purpose remedy in corporate governance.

A. Are Commercial Indices Reliable?

As discussed, proxy advisors' indices share the basic assumption of academic governance indices like the G-Index and the E-Index, namely that stronger shareholder rights unequivocally equate to best governance practices.²⁷⁰ From a theoretical perspective, then, commercial indices are exposed to criticisms analogous to those affecting academic indices. However, the former bear much more significant practical implications, given the direct, and huge, influence they exert on corporate practices at many U.S. corporations, as well as on the corporate governance strategies of most American institutional investors.

Under our analysis of corporate governance, the strong emphasis placed by proxy advisors on shareholder rights emerges as pushing U.S. corporations in directions that are likely to be counter-productive, and, potentially, accountable for the increased short-termism observed in U.S. markets. This result is even more problematic if one considers the conflicts of interests that may affect the actions of proxy advisors. Importantly, we are not just referring to the conflict arising out of the additional role many of them serve as governance advisors. This dual role raises the concern that these firms' voting recommendations to investors may be influenced by whether or not the subject company has also purchased any governance advice from such firms.²⁷¹ Our concern is much

term transfers of wealth from shareholders to stakeholders as a means to maximize long-term shareholder *and* firm value—also reconciling the team production model and the director primacy model along the end axis of corporate governance.

²⁷⁰ See *supra* text accompanying notes 89-97.

²⁷¹ See, e.g., U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-07-765, CORPORATE SHAREHOLDER MEETINGS: ISSUES RELATING TO FIRMS THAT ADVISE INSTITUTIONAL INVESTORS ON PROXY VOTING 4 (2007) (arguing that the dual role served by proxy advisors as investors and companies' consultants could "lead corporations to feel obligated to retain ISS's consulting services in order to obtain favorable proxy vote recommendations."); Rose, *supra* note 89, at 906-07 (comparing the potential conflict affecting proxy advisors to the conflict affecting accounting firms that acted as both auditors and advisers before the Sarbanes-Oxley's reform). ISS has historically dismissed similar concerns arguing that it discloses information about potential conflicts, while its proxy advisory and corporate consulting businesses operate through a system of "Chinese walls," with separate staff, separate buildings, and segregated office equipment and information databases. See Proxy Advisory Firms Roundtable 110-11 (Dec. 5, 2013)

broader and arises by a simpler consideration. The case for stronger shareholder rights inherently promotes shareholder empowerment and thus increased shareholder activism, resulting in more intense voting advisory activity and hence increased revenues for proxy advisors. Therefore, while shareholder empowerment may or may not benefit shareholder and societal interest in the long-term, it definitely advances the private interests of proxy advisors.²⁷²

The potential for this conflict raises the question of why investors continue to rely on indices that have the potential to push corporations toward bad, rather than good, corporate governance. Simply concluding that proxy advisors have manipulated the investors purchasing their services does not seem plausible, given the sophisticated nature of all involved parties.²⁷³ Three alternative explanations seem more plausible. First, second-guessing the voting recommendations of proxy advisors, as well as the construction of commercial indices, would substantially require investors to turn into governance specialists—which seems incompatible with a cost-effective division of corporate roles. Second, the intellectual support provided by academic governance indices to the use of commercial governance indices might have reinforced investors' belief that there was, after all, no urgent need to second-guess the recommendations of proxy advisors. When one considers the additional endorsement that the case for stronger shareholder rights has received by recent regulatory reforms,²⁷⁴ that need becomes even less urgent. Third, at least as concerns hedge funds and some institutional investors, one cannot exclude that these corporate actors may have had their own reasons to endorse voting recommendations that supported enhanced shareholder power and, hence, facilitated the exercise of short-term speculative options.²⁷⁵

For all the above reasons, the fact that firms selling governance ratings are commercially successful cannot be interpreted as evidence that governance ratings are unequivocally useful to investors. On the contrary, the results of our study raise severe challenges for investors' use of commercial governance indices, calling into question the

[hereinafter Proxy Roundtable], available at <http://www.sec.gov/spotlight/proxy-advisory-services/proxy-advisory-services-transcript.txt> (citing remarks of Gary Retelny, President, Institutional Shareholder Services, Inc.). Nonetheless, in June 2014, the Securities and Exchange Commission's Divisions of Investment Management and Corporation Finance issued new regulatory guidelines concerning the activity of proxy advisors. Among other issues, the new SEC's guidelines requires specific, non-generic disclosure to be made of the nature and scope of significant relationships or material interests in the matter that is the subject of a voting recommendation (either publicly or directly to the client), while rejecting the practice of "boilerplate language" about potential conflicts as insufficient. See U.S. SECURITIES AND EXCHANGE COMMISSION, PROXY VOTING: PROXY VOTING RESPONSIBILITIES OF INVESTMENT ADVISERS AND AVAILABILITY OF EXEMPTIONS FROM THE PROXY RULES FOR PROXY ADVISORY FIRMS, STAFF LEGAL BULLETIN NO. 20 (IM/CF), Jun. 30, 2014, available at <http://www.sec.gov/interps/legal/cfslb20.htm>.

²⁷² We are not the first to acknowledge similar concerns. Former SEC Commissioner Daniel Gallagher has voiced similar concerns in several speeches and commentaries. See, e.g., Daniel Gallagher, *Outsized Power & Influence: The Role of Proxy Advisors*, THE HARVARD L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Sept. 5, 2014), <http://corpgov.law.harvard.edu/2014/09/05/outsized-power-influence-the-role-of-proxy-advisers> (arguing that a central problem with investment advisers is making sure that they vote in the investor's best interest rather than their own).

²⁷³ See Bhagat et al., *supra* note 14, at 1859.

²⁷⁴ See *infra* Part VI.B.

²⁷⁵ See *supra* notes 106-09 and accompanying text.

indices' main proposition—that stronger shareholder rights are an all-purpose remedy in corporate governance. In response a shareholder advocate could argue that we produce no direct evidence on the association between commercial governance indices and firm value and, hence, cannot derive implications on the reliability of such indices in identifying good governance practices. Yet this position seems to overlook the following three facts. First, the index adopted by the second most widely used proxy advisory firm, Glass Lewis & Company, almost exactly replicates the E-Index.²⁷⁶ Second, while the ISS's Corporate Governance Quotient notably includes many variables that are not captured by the E-Index (or other academic indices),²⁷⁷ the ISS notably opposes governance arrangements that protect directors from shareholder removal²⁷⁸ or otherwise weakens shareholder rights.²⁷⁹ Third, other recent empirical studies support the conclusion that commercial governance indices are not reliable predictors of good governance practices²⁸⁰ and may even “have the unintended economic consequence that boards of directors are induced to make choices that decrease shareholder value.”²⁸¹

Hence, the possibility that self-interest might explain the uniform defense of stronger shareholder rights by proxy advisors cannot be easily dismissed. Instead, action by the SEC would be desirable to exclude with certainty that some among the most influential corporate players are acting to primarily advance their own interests, rather than that of the investors for which they serve as fiduciaries. To this end, we share the call for an intervention of the Commission to require proxy advisory firms to disclose the proprietary, quantitative algorithms they use in the construction of commercial indices.²⁸² Of course, it might be that these algorithms can better capture the relationship between governance choices and firm performance than our study—for example, because they are constructed to more accurately take into account market trends or because they can rely on more comprehensive data sources.²⁸³ Nevertheless, our study—covering thirty years of corporate governance choices—strengthens the case for requiring that the proprietary information of proxy advisors be made available to the

²⁷⁶ See *supra* note 93.

²⁷⁷ See Daines et al., *supra* note 91, at 441.

²⁷⁸ See ISS GUIDELINES, *supra* note 92, at 10.

²⁷⁹ See *id.* at 3.

²⁸⁰ See Daines et al., *supra* note 91, at 460 (concluding that commercial indices “have either limited or no success in predicting firm performance or other outcomes of interest to shareholders”).

²⁸¹ See David F. Larcker et al., *Outsourcing Shareholder Voting to Proxy Advisory Firms*, 58 J. LAW & ECON. 173, 174 (2015) (examining the consequences of proxy advisory firms recommendations during the 2011 proxy season and finding that a negative stock market reaction to compensation changes adopted in accordance with such recommendations).

²⁸² See, e.g., Nasdaq OMX - Edward S. Knight, Petition Related to Proxy Advisory Firms 3, 6-7, Oct. 8, 2013, available at <http://www.sec.gov/rules/petitions/2013/petn4-666.pdf> (urging public disclosure of proxy advisors' proprietary information); CTR. ON EXEC. COMP., A CALL FOR CHANGE IN THE PROXY ADVISORY INDUSTRY STATUS QUO: THE CASE FOR GREATER ACCOUNTABILITY AND OVERSIGHT 55 (2011), available at http://www.execcomp.org/docs/c11-07a%20Proxy%20Advisory%20White%20Paper%20_FULL%20COLOR_.pdf (pointing to “the general lack of transparency in many of the methodologies, metrics and decision processes” of proxy advisory firms as a major issue affecting the activity of such firms).

²⁸³ See Daines et al., *supra* note 91, at 441 (arguing that commercial governance indices might provide better measures of governance quality than academic indices).

Commission. More generally, our analysis also raises the question of whether governance ratings should not be administered by a public or non-profit independent agency.²⁸⁴ This solution would have the benefit of minimizing the risk of potential conflict of interests. To be sure, more extensive investigation into the feasibility and the costs of such a proposal would be necessary, but a discussion of the potential for public governance ratings seems worthwhile to pursue under the challenges this Article has raised for commercial governance indices.

B. The Shareholder Direction of Federal Regulation

A further important implication of our analysis involves the appropriate form of governance regulation. In the recent past, the view that shareholder empowerment embodies that form has made substantial gains. Among others, these gains have included (1) the introduction of amendments to proxy filing requirements facilitating the use of shareholder precatory proposals;²⁸⁵ (2) changes to the Delaware General Corporation Law enabling majority voting—rather than the traditional plurality voting²⁸⁶—in the election of directors, as well as greater shareholder access to the ballot box;²⁸⁷ and (3) the Dodd-Frank Act’s introduction of say-on-pay shareholder votes and further expansion of the scope of shareholder proposals.²⁸⁸

Shareholder advocates have praised these reform interventions as consistent with the assumption that “statistics provided by academic research provide objective evidence that is valuable for policymaking.”²⁸⁹ While we share that assumption, we challenge the contention that available empirical evidence supports the case for shareholder empowerment. Contrary to that contention, our comprehensive analysis of corporate governance has showed that there is value in limiting shareholder rights to interfere with board decision-making in the short-term, *if* such limits involve a bilateral commitment of both shareholders and directors to corporate stability, longer-term investment strategies, and stronger stakeholder relationships. Unless shareholder advocates can expose flaws in our research and counter it with research that avoids these flaws, the evidence produced

²⁸⁴ Regulators already use “public governance ratings” for banks, namely the CAMELS ratings. *See* FED. DEPOSIT INS. CORP., RISK MANAGEMENT MANUAL OF EXAMINATION POLICIES § 1.1 (2012). (CAMELS stands for Capital adequacy, Asset quality, Management, Earnings, Liquidity, and Sensitivity to market risk).

²⁸⁵ *See* Marcel Kahan & Edward Rock, *Embattled CEOs*, 88 TEX. L. REV. 987, 1013-15, 1017-22 (providing a thorough discussion of the changes occurred in proxy rules in the past twenty years).

²⁸⁶ For being elected to the board under a majority voting system, a director is required to win the votes of a majority of the shares voting. In 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.

²⁸⁷ *See* DEL. CODE ANN. tit. 8, § 112 (2009) (giving shareholders the right to nominate dissident slates of directors); DEL. CODE ANN. tit. 8, § 113 (2009) (allowing shareholders to adopt bylaws that reimburse “expenses incurred by a stockholder in soliciting proxies in connection with an election of directors”).

²⁸⁸ *See* Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 11-203, § 951(a)(1), 124 Stat. 1376, 1899 (2010) (codified as amended at 15 U.S.C. § 78n-1).

²⁸⁹ *See* Bebchuk, *supra* note 13, at 1667.

by this Article should be regarded as changing the relevant empirical facts to be considered by regulators and policymakers.

In particular, that evidence challenges the introduction of amendments to proxy rules, as well as more recent amendments expanding the scope of shareholder proposals. As a result of these reforms, it has today become possible—and increasingly common—for shareholders to solicit (i) opposition to a management proposal, including merger proposals, (ii) the withholding of votes in directors elections, and (iii) support for shareholder precatory proposals under Rule 14a-8 of the Security Exchange Act, including proposals to destagger the boards.²⁹⁰ All of these changes go in the direction of enabling increased shareholder empowerment at the expense of weakened board authority, which our empirical and theoretical analysis has showed can produce detrimental effects. In keeping with that analysis' conclusion that efficient governance requires short-term incumbent protection from removal without jeopardizing long-term accountability mechanisms, we suggest that current proxy rules should be amended so to restrict increased shareholder activism to the long-term. This means, in practice, that the above shareholders proposals should be banned for the first three years since the inception of a new director's tenure, for two reasons. First, a three-year term is the standard for directors serving on a staggered board,²⁹¹ whose adoption our empirical results (consistent with the Cremers-Sepe study) show to be associated with an increase in firm value.²⁹² Second, considering that the average CEO's tenure is seven years,²⁹³ identifying the short-term with a horizon of less than three years seems reasonable.

This Article's evidence similarly exposes recent changes enabling majority voting in the election of directors as potentially detrimental. In recent years, 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 withholding campaigns against incumbents so to obtain desired governance changes—including the removal of bilateral protection arrangements.²⁹⁴ This weakens the commitment value of such arrangements, as what makes a commitment credible is the level of difficulty encountered in attempting to renege on the commitment, ex-post.²⁹⁵ Accordingly, our analysis raises the question of whether majority voting should be repealed from state laws governing the election of directors.

Say-on-pay shareholder votes, instead, are a potentially beneficial reform, as they increase the scope for constructive dialectical confrontation between boards and

²⁹⁰ See Kahan & Rock, *supra* note 285, at 1014. Under Rule 14a-8, shareholder can use precatory proposals to request the board of directors to take a certain action without mandating the action. See 17 C.F.R. § 240.14a-8 (2008).

²⁹¹ See *supra* note 140.

²⁹² See *supra* Table 2.

²⁹³ See N. Kaplan & Bernadette A. Minton, *How Has CEO Turnover Changed?*, 12 INT. REV. FIN. 57, 58 (2012) (documenting that, from 1992 to 2007, for a sample of large U.S. companies, the average CEO turnover was about seven years).

²⁹⁴ See Cremers & Sepe, *supra* note 18, at 57-58; Leo. E. Strine, *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, 8-9, 11-12 (2007).

²⁹⁵ See Kahan & Rock, *supra* note 285, at 517.

shareholders. However, the way this instrument has been implemented raises concerns under the analysis developed by this article. The Dodd-Frank Act itself does not specify a default rule for the frequency of say-on-pay votes, delegating regulation of the matter to the SEC. Regulation under the SEC, on the one hand, provides that a "a say-on-pay vote is required at least once every three calendar years."²⁹⁶ On the other, however, it provides that, unless a majority of a company's votes is cast in favor of having biennial or triennial say-on-pay votes, companies cannot exclude subsequent shareholder proposals for annual votes.²⁹⁷ Although concededly less than clear, these combined provisions have been commonly interpreted as meaning that, unless another choice is made, companies must give shareholders a subsequent vote on the prospect of having a say-on-pay vote each year.²⁹⁸ This raises concerns, as it transforms say-on-pay votes into an additional bargaining lever that shareholders can exploit to exercise counterproductive short-term pressure on boards. Accordingly, we suggest that the SEC regulation should be amended so to establish a mandatory triennial rule for the frequency of say-on-pay votes.

On the other hand, our analysis suggests that the use of unilateral protection arrangements, such as poison pills and golden parachutes, should be limited in time. The reason is straightforward. As repeated throughout this paper, it is possible that prices in the short term do not fully capture the implications of directorial decisions. In the long term, however, the size of directorial and managerial private information tends to decrease. Accordingly, unilateral protection arrangements may add needed short-term protection to directors and managers pursuing long-term projects. However, in the long run, when those projects materialize, there is no economic rationale to continue to protect firm insiders from shareholder discipline.²⁹⁹

Of course, we are aware of the practical difficulties that each of these outlined proposals is likely to encounter in the current political environment. Nonetheless, a necessary first step toward attempting future reform intervention necessarily involves re-educating 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 hopefully prove useful to that end, providing policymakers

²⁹⁶ See SECURITIES AND EXCHANGE COMMISSION 17 CFR PARTS 229, 240, and 249, SHAREHOLDER APPROVAL OF EXECUTIVE COMPENSATION AND GOLDEN PARACHUTE COMPENSATION 17, available at <https://www.sec.gov/rules/final/2011/33-9178.pdf>.

²⁹⁷ *Id.* at 43.

²⁹⁸ We observe that while annual say-on-pay votes seem to have become, in practice, the default, the SEC's wording is puzzling. On the one hand, the SEC regulation seems to specify a three-year default when it comes to a company's obligation to hold say-on-pay votes; on the other, it grants shareholders a default right to demand say-on-pay votes annually. In other words, there would seem to exist an inconsistency between the default duty of corporations and the default right of shareholders concerning say-on-pay votes.

²⁹⁹ We observe that while proxy advisory firms remain strongly opposed to bilateral protection arrangements, our proposal is consistent with their most recent guidelines on poison pills. Indeed, these firms do not oppose the adoption of a poison pill as long as the pill expires within a term of 12 months or less and is adopted in response to a specific threat. See, e.g., ISS GUIDELINES, *supra* note 92, at 11.

with tangible reasons for reconsidering the current direction of corporate governance policies.

CONCLUSION

The case for shareholder empowerment rests on a very simple proposition: If maximizing shareholder wealth is the mandate on which we can all agree as the best means to achieve overall wealth maximization, shareholders necessarily emerge as the party best placed to provide governance inputs that pursue that end. As a corollary of this proposition, limiting shareholders' ability to provide governance inputs—by removing incumbents from the “hard” judgment of the market—impairs the pursuit of shareholder wealth maximization. Empirical studies employing governance indices have been used to support the case for shareholder empowerment and the value-decreasing effect of incumbent protection from removal.

Relying on these propositions, and empowered by the seemingly objective evidence obtained for governance indices, shareholder advocates have been very successful in advancing the case for stronger shareholder rights in the past two decades. On the other hand, expert lawyers and academics supporting the case for the traditional board-centric model of the corporation have been painted into a corner—being accused by shareholder advocates of defending claims unsupported by “the existing theoretical understanding and the available empirical evidence”.³⁰⁰

This Article shows, theoretically and empirically, that it is time to halt the shareholder empowerment crusade. It does so by examining over thirty years of corporate governance choices (from 1978 to 2008), demonstrating that such a crusade hurts, rather than benefits, U.S. shareholders by placing excessive reliance on market efficiency and jeopardizing the organizational principles that have historically contributed to the success of U.S. corporations. Those principles emphasize the authority of boards of directors over shareholders as a response to market imperfections.³⁰¹ Indeed, when the potential for asset-pricing inefficiency is fully considered, enhanced board authority emerges as a necessary response to the inability of shareholders vested with strong exit rights to credibly commit to long-term value creation.

The proposition—defended by those who constructed prior governance and commercial indices—that incumbent protection from removal is uniformly detrimental to shareholder interests is thus both theoretically and empirically wanting. As shown by this Article's reexamination of the E-Index over a much longer period of time, bilateral protection arrangements that protect incumbents from short-term removal with the agreement of shareholders *are not* a reflection of managerial moral hazard. Rather, they are a means to re-empower U.S. boards with their historical authority to commit shareholders to long-term value creation. At the same time, that protection does not jeopardize market-based accountability mechanisms, because it does not prevent

³⁰⁰ See Bebchuk, *supra* note 14, at 1644, 1687.

³⁰¹ See Cremers & Sepe, *supra* note 18, at 68.

shareholders from exercising their disciplining function in the long-term. Hence, a republican corporate model advances both shareholder *and* societal interests.

This conclusion calls for reform intervention directed at rolling back the gains made by shareholder advocates, both in the real corporate world and among policymakers. To that end, both commercial governance ratings supporting the case for stronger shareholder rights, as well as shareholder-friendly changes that have occurred in the legal landscape, should be put under intense scrutiny.

Along the same lines, future empirical research examining the relationship between governance and performance should abandon the “kitchen sink” approach of the past. Ironically, that same criticism provided the motivation for the construction of the E-Index.³⁰² Our analysis, however, has shown that avoiding a “kitchen sink” approach not only requires identifying “the key provisions that matter,” but also correctly understanding “why” those provisions matter.

³⁰² See Bebchuk et al., *supra* note 12, at 787, 823.

APPENDIX

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:

<i>Q</i>	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). ³⁰³ Source of data is the Compustat annual data file.
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Independent and Interacted Variables:**Governance Indices and Their Constituent Provisions**

<i>E-Index</i>	Sum of 6 governance provision indicators in the corporate charter or bylaws introduced by Bebchuk, Cohen, and Ferrell (2009): <i>Staggered Board</i> + <i>Poison Pill</i> + <i>SM Charter</i> + <i>SM Bylaws</i> + <i>SM Merger</i> + <i>Parachutes</i> . ³⁰⁴
<i>I-Index</i>	Incumbent index, which is the sum of 3 governance provision indicators in the corporate charter or bylaws: <i>Poison Pill</i> + <i>SM Bylaws</i> + <i>Parachutes</i> .
<i>C-Index</i>	Commitment index, which is the sum of 3 governance provision indicators in the corporate charter or bylaws: <i>Staggered Board</i> + <i>SM Charter</i> + <i>SM Merger</i> .
<i>Staggered Board</i>	Indicator variable equal to one (zero otherwise) if the board is staggered. Data is obtained from Cremers and Sepe (2015). ³⁰⁵
<i>Poison Pill</i>	Indicator variables equal to one (zero otherwise) if the firm has a poison pill in place, under which shareholders are typically issued rights to purchase stock in the company (or in the acquiring company) at a steep discount if a hostile bidder acquires a certain percentage of outstanding shares, where the rights of the hostile bidder are void.
<i>SM Charter</i>	Indicator variables equal to one (zero otherwise) if the firm has adopted a charter amendment that restricts shareholders from amending the corporate charter. A typical restriction requires a supermajority shareholder vote.

³⁰³ See Fama & French, *supra* note 156.

³⁰⁴ See Bebchuk et al., *supra* note 12.

³⁰⁵ See Cremers & Sepe, *supra* note 18.

<i>SM Bylaws</i>	Indicator variables equal to one (zero otherwise) if the firm has adopted limits or prohibitions on the rights of shareholders to amend the corporate bylaws. A typical restriction requires a supermajority vote.
<i>SM Merger</i>	Indicator variables equal to one (zero otherwise) if the firm has established shareholder vote requirements that are higher than the minimum levels set by the relevant state laws to approve a merger or other business combination, which typically require a simple majority for approval. A typical higher requirement is 67%, 75% or 80% of votes, but includes firms incorporated in a state with a control share acquisition statute that did not opt out of those.
<i>Parachutes</i>	Indicator variables equal to one (zero otherwise) if the firm has a golden parachute in place, which is a severance agreement providing cash and/or noncash benefits to senior executives if specific events occur after a change in control of the company. Events triggering payments include termination, demotion, or resignation of these executives within some specified period of time after the change of corporate control.
Standard Controls	
<i>Assets</i>	Natural logarithm of the book value of total assets.
<i>Delaware Incorporation</i>	Indicator variable if the company is incorporated in Delaware.
<i>ROA</i>	EBITDA/Total Assets.
<i>CAPX</i>	Capital Expenditures/ (Total Assets).
<i>R&D</i>	R&D expenditures/ Sales.
Interacted Variables	
<i>Large Customer</i>	Indicator variable set equal to one if the firm has at least one customer accounting for 10% or more of its sales, from Compustat Segment data.
<i>Labor Productivity</i>	Industry-level measure of the marginal product of labor, from the U.S. Bureau of Labor Statistics (using the four digit SIC code).
<i>Industry M&A Volume</i>	The ratio of mergers & 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.

Z-Score

Proxy for the risk of bankruptcy as proposed by Altman (1968).³⁰⁶ The Z-Score is calculated as follows: $Z = 1.2 \times T1 + 1.4 \times T2 + 3.3 \times T3 + 0.6 \times T4 + 0.99 \times T5$. Here, T1 = Working Capital / Total Assets, a measure of the liquid assets in relation to the size of the company; T2 = Retained Earnings / Total Assets, a measure of profitability that reflects the company's historical earning power; T3 = Earnings Before Interest and Taxes / Total Assets, measuring current operating efficiency apart from tax and leveraging factors; T4 = Market Value of Equity / Book Value of Total Liabilities, proxy of the market's perception of the efficient use of the firm's assets; T5 = Sales / Total Assets, measure for total asset turnover.

³⁰⁶ See E. Altman, *Financial ratios, Discriminant Analysis, and the Prediction of Corporate Bankruptcy*, 23 J. FIN. 589, 589 (1968).

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 interacted variables, for the main sample for which all provisions of the E-Index are available.

Dependent Variables:	Mean	Median	St. Dev.	Min.	Max.	Obs.
<i>Q</i>	1.69	1.39	0.92	0.72	4.66	21,414
<i>Z-Score</i>	4.13	3.55	2.44	0.87	10.31	18,894
Independent Variables:	Mean	Median	St. Dev.	Min.	Max.	Obs.
<i>E-Index</i>	2.18	2.00	1.37	0	6	21,414
<i>I-Index</i>	0.57	1.00	0.49	0	1	21,414
<i>C-Index</i>	0.50	0.00	0.50	0	1	21,414
<i>Staggered Board</i>	0.03	0.00	0.16	0	1	21,414
<i>Poison Pill</i>	0.17	0.00	0.38	0	1	21,414
<i>SM Charter</i>	0.34	0.00	0.48	0	1	21,414
<i>SM Bylaws</i>	0.56	1.00	0.50	0	1	21,414
<i>SM Merger</i>	0.94	1.00	0.78	0	3	21,414
<i>Parachutes</i>	1.24	1.00	0.93	0	3	21,414
<i>Assets</i>	7.24	7.08	1.52	4.55	11.05	21,414
<i>Delaware Incorporation</i>	0.59	1.00	0.49	0	1	21,414
<i>ROA</i>	0.14	0.14	0.08	-0.05	0.32	21,414
<i>CAPX</i>	0.059	0.047	0.046	0	0.20	21,414
<i>R&D</i>	0.033	0.002	0.060	0	0.23	21,414
<i>Large Customer</i>	0.032	0.013	0.075	0	1.17	21,414
<i>Labor Productivity</i>	1.36	1.04	0.70	0.29	3.67	18,414
<i>Industry M&A Volume</i>	0.28	0.00	0.45	0	1	21,414

APPENDIX TABLE C. C-INDEX AND I-INDEX PROVISIONS: TIME-SERIES ANALYSIS

In this table, we present the time series association between firm value and the level of the three constituent governance provisions in the C-Index in columns (1)–(3) – namely *Staggered Board*, *SM Charter* and *SM Merger* – and of the three constituent governance provisions in the I-Index in columns (4)–(6) – namely *Poison Pill*, *SM Bylaw* and *Parachutes* – using pooled panel regressions of Q on the governance index or its provision(s) with year and firm fixed effects plus a set of standard controls: *Assets*, *ROA*, *CAPX*, *R&D*, and *Industry M&A Volume*. In columns (1) and (3), we also include the interaction between *Staggered Board* and *SM Charter*, in columns (2) and (3) the interaction between *Staggered Board* and *SM Merger*, in columns (4) and (6) the interaction between *Poison Pill* and *SM Bylaw*, and, finally, in columns (5) and (6) the interaction between *Poison Pill* and *Parachutes*. All columns use the full time period of 1978-2008. Coefficients on standard controls are not shown to save space. Variables are defined in Appendix Table A. Statistical significance of the coefficients is indicated at the 1%, 5%, and 10% levels by ***, **, and *, respectively. We provide the t-statistics below each regression coefficient based on robust standard errors that are clustered by firm.

	Dep. Variable: Q					
	(1)	(2)	(3)	(4)	(5)	(6)
Indep. Variables						
<i>Staggered Board</i>	0.102** (2.45)	0.104** (2.30)	0.107** (2.32)			
<i>SM Charter</i>	0.156* (1.84)		0.141 (1.54)			
<i>SM Charter x Staggered Board</i>	-0.108 (-1.24)		-0.0957 (-1.02)			
<i>SM Merger</i>		0.0423 (0.98)	0.0217 (0.48)			
<i>SM Merger x Staggered Board</i>		-0.0365 (-0.71)	-0.0205 (-0.38)			
<i>Poison Pill</i>				-0.0186 (-0.69)	-0.0617* (-1.90)	-0.0583 (-1.64)
<i>SM Bylaw</i>				0.00552 (0.13)		0.00722 (0.17)
<i>SM Bylaw x Poison Pill</i>				- 0.0842* (-1.93)		-0.0858** (-1.98)
<i>Parachutes</i>					-0.0731*** (-2.97)	-0.0924*** (-3.36)
<i>Parachutes x Poison Pill</i>					0.0586* (1.74)	0.0755** (2.13)
Fixed Effects:						
	Year + Firm					
N	21,455	21,840	21,438	21,555	24,348	21,555
R-sq	0.743	0.744	0.743	0.743	0.740	0.743

APPENDIX TABLE D. BANKRUPTCY RISK AND GOVERNANCE INDICES

In this table, we present the time series association between *Z-Score*, a proxy of bankruptcy risk, and three governance indices (i.e., the E-Index, C-Index and I-Index) using pooled panel regressions of *Z-Score* with year and firm fixed effects plus a set of controls: *Assets*, *CAPX*, *R&D*, and *Industry M&A Volume*. All columns use the full time period of 1978-2008. Coefficients on standard controls are not shown to save space. 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 that clustered by firm. We provide the t-statistics below each regression coefficient based on robust standard errors that are clustered by firm.

	Dep. Variable: <i>Z-Score</i>			
	(1)	(2)	(3)	(4)
<i>Indep. Variables</i>				
<i>E-Index</i>	- (-2.71)			
<i>C-Index</i>		0.115* (1.91)		0.161*** (2.65)
<i>I-Index</i>			-0.197*** (-4.46)	-0.217*** (-4.81)
Fixed Effects:		Year + Firm		
N	19,827	19,851	19,962	19,827
R-sq	0.731	0.730	0.732	0.732