# Speeding Up the Crawl to the Top

#### Michael Abramowicz<sup>†</sup>

The literature on competition in corporate law has debated whether competition is a "race to the bottom" or a "race to the top." This Article endorses the increasing scholarly consensus that competition improves corporate law but argues that the pace of innovation in corporate law is likely to be slow. Because benefits of corporate law innovation are not internalized, neither states nor firms will have sufficient incentives to innovate. That competitive federalism is "to the top" suggests that the model could be applied beyond the corporate charter context, for example to areas such as bankruptcy, but that benefits from such competition would accrue only gradually. This Article concludes by considering several means of stimulating competition in corporate law, including allowing firms to select different states for different aspects of corporate law and permitting private provision of law. Perhaps the most promising of these possibilities is the use of intellectual property law to protect corporate law innovations. Although recent decisions allowing patents for business methods make this approach feasible, the fit with existing patent law is imperfect. The scarcity in corporate law that leads to innovation is not a lack of ideas, but a lack of firms and states willing to accept the risks of being the first to innovate.

Introduction	140
I. Underinnovation in Corporate Law	145
A. Why Innovation Is Good for Shareholders	147
1. Informational Externalities	148
2. Portfolio Diversification	151
B. Why Firms Won't Innovate Enough	153
C. Why States Won't Innovate Enough	157
II. Paradigms of Corporate Law Innovation	159
A. The Race to the Bottom	160
B. The Race to the Top	161
C. The Race to Nowhere in Particular	166

<sup>†</sup> Assistant Professor of Law, George Mason University School of Law, J.D., Yale Law School; B.A., Amherst College. For research support, I thank the Law and Economics Center at George Mason. For excellent comments and suggestions, I am grateful to Steven Calabresi, Henry Hansmann, F. Scott Kieff, Bruce Kobayashi, Kimberly Moore, and Henry Smith. Any remaining errors will be corrected in due time.

D. The Crawl to the Top	168
III. Constructing Crawls to the Top in Corporate Law	170
A. Corporate Charters	
B. Exchange Regulation	
C. Securities Law	
D. Bankruptcy	
IV. Speeding up the Crawls to the Top	
A. Controlling Competition	
1. Increasing Areas of Competition	184
2. Allowing for Private Provision of Law	
3. Imposing Caps on Firms per State	
B. Subsidization	
1. Paying Out Direct Federal Subsidies	
2. Holding Public Good Auctions	
C. The Intellectual Property Alternative	
1. The Case for an Intellectual Property Regime	
2. Evolution of Intellectual Property Protection	
from Patent Law	200
Conclusion	

#### Introduction

The corporate law literature tells a story of progress, slow but sure. The path of corporate law, the literature promises, is not a "race to the bottom" but a "race to the top." And although we may not be at the "top" yet, we can rest assured that competition will bring us there, at least someday. Consider, for example, Frank Easterbrook and Daniel Fischel's confident account:

[S]elf-interested entrepreneurs and managers, just like other investors, are driven to find the devices most likely to maximize net profits. If they do not, they pay for their mistakes because they receive lower prices for corporate paper. Any one firm may deviate from the optimal measures. Over tens of years and thousands of firms, though, tendencies emerge.

<sup>1</sup> The classic statement of the theory that corporate law is a "race to the bottom" is William L. Cary, Federalism and Corporate Law: Reflections upon Delaware, 83 YALE L.J. 663, 666, 705 (1974). In an alternate phrasing that proved to have less staying power, Cary claimed that corporate law moves "toward the least common denominator." Id. at 663.

The rebuttal to Cary, stating the thesis that corporate law is in fact a "race to the top," is Ralph Winter, State Law, Shareholder Protection, and the Theory of the Corporation, 6 J. LEGAL STUD. 251 (1977).

The firms and managers that make the choices investors prefer will prosper relative to others.<sup>3</sup>

In the long run, Easterbrook and Fischel assure us, we will have efficient corporate law. But "[i]n the long run," as Keynes famously warned, "we are all dead."

In a commentary in the *Harvard Law Review* five years ago, Mark Roe took the first step towards challenging the rhetoric of progress.<sup>5</sup> By analogizing corporate evolution to biological evolution,<sup>6</sup> Roe undercuts the standard story.<sup>7</sup> The diversity of national regulatory apparatuses for corporate law suggests that existing forms are a product of "path dependence" and that existing corporate structures may be locally optimal given the starting point of the path, but not necessarily globally optimal. Thus, "[t]he United States has strong managers and weak financiers; Germany and Japan have had stronger financiers." And although there may be signs of slight convergence, <sup>10</sup> avoiding a suboptimal endpoint might require conscious regulatory action.<sup>11</sup> In the absence of such action, Roe elaborated in a later article with Lucian Bebchuk, differences in

<sup>3</sup> FRANK H. EASTERBROOK & DANIEL R. FISCHEL, THE ECONOMIC STRUCTURE OF CORPORATE LAW 6 (1991).

JOHN MAYNARD KEYNES, A TRACT ON MONETARY REFORM 88 (1923).

<sup>5</sup> See Mark J. Roe, Chaos and Evolution in Law and Economics, 109 HARV. L. REV. 641 (1996).

The process of biological evolution, Roe notes, does not result in a steady improvement in a species but in long periods of little change followed by a short period of intense struggle and rapid change. See id. at 646 n.8, 663-65 (citing Stephen Jay Gould, Is a New and General Theory of Evolution Emerging?, 6 PALEOBIOLOGY 119, 125 (1980) (introducing the theory of punctuated equilibrium)).

<sup>7</sup> In the standard story, states, like firms, compete in a race to the top: "States compete by producing efficient law. States that fail to provide efficient law get less of the regulated activity. Inefficient rules are challenged because the challengers find it profitable to do so." *Id.* at 642.

<sup>8</sup> E.g., id. at 643. Along with Lucian Bebchuk, Roe has recently elaborated the sources of path dependence, arguing that both initial ownership structures and corporate rules can produce path dependence. See Lucian Arye Bebchuk & Mark J. Roe, A Theory of Path Dependence in Corporate Ownership and Governance, 52 STAN. L. REV. 127 (1999). Though they note that "players that enjoy rents under them might have both the incentive and power to impede changes in these [ownership] structures," id. at 153, they do not explore the problem of underinnovation in corporate law more generally.

<sup>9</sup> Roe, *supra* note 5, at 647.

<sup>10</sup> See id. at 658-59 (discussing changes in the United States and in Germany). Roe admitted, "I know of no confirming Japanese anecdotes yet." Id. at 658. The recent economic crisis in Asia, however, may provide them. See David E. Sanger, Greenspan Sees Asian Crisis Moving World to Western Capitalism, N.Y. TIMES, Feb. 13, 1998, at D1.

See Roe, supra note 5, at 665-66. The possibility of consciously changing the corporate law environment thus distinguishes corporate evolution from biological evolution. See id. at 665 ("Genes are Darwinian, but civilization is Lamarckian."). In this respect, of course, biological evolution may become more like corporate evolution. See President's Comm'n for the Study of Ethical Problems in Med. & Biomed. & Behavior Research, Splicing Life: The Social and Ethical Issues of Genetic Engineering with Human Beings 68-69 (1982) (noting that genetic engineering may enable humans to control their own evolutionary path), reprinted in SOURCE BOOK IN BIOETHICS: A DOCUMENTARY HISTORY 299, 305-06 (Albert R. Jonsen et al. eds., 1998).

historical corporate structures and rules may prevent convergence over long periods of time. 12

Ultimately, though, Roe draws a sharp distinction between competition among firms within a national system and competition among national systems, finding the possibility of a suboptimal result only in the latter.<sup>13</sup> In this Article, I challenge this distinction. Competition among firms may lead toward a locally optimal endpoint, but this process of evolution is likely to be as erratic as the broader process of natural selection among nations.<sup>14</sup> The reason is quite simple. Firms do not compete directly for corporate law structures but for goods and services. Although corporate law structures will surely impact firms' success in selling goods and services, they will do so primarily at the margins.<sup>15</sup> Thus, the incentives that firms have to innovate in corporate law structures are not as high-powered as those encouraging innovation in goods and services, and the evolution of corporate structures may proceed as much as a result of accident as on account of deliberate progress.<sup>16</sup>

This Article's tasks are both descriptive and normative. Its descriptive tasks are to explain why the amount of innovation in corporate law is likely to be suboptimal and to develop a new metaphor for describing the path of corporate law. The metaphor it urges is that corporate law is a "crawl to the top," much as Easterbrook and Fischel's references to "tens

<sup>12</sup> See Bebchuk & Roe, supra note 8.

<sup>13</sup> See Roe, supra note 5, at 666 ("Competition among business units—the type usually subject to evolutionary metaphors—best fits a natural selection paradigm. Competition among national units might better fit a punctuated equilibrium metaphor . . . .").

Indeed Roe might have predicted as much from following through on his analogy to chaos theory, which predicts that similar patterns will emerge on macro and micro levels of any dynamic system. See PETER COVENEY & ROGER HIGHFIELD, THE ARROW OF TIME: A VOYAGE THROUGH SCIENCE TO SOLVE TIME'S GREATEST MYSTERY 204 (1990) (describing the property of "self-similarity"); JAMES GLEICK, CHAOS: MAKING A NEW SCIENCE 103 (1988) ("Self-similarity is symmetry across scale. It implies recursion, pattern inside of pattern."); see also Frank I. Michelman, Property, Federalism, and Jurisprudence: A Comment on Lucas and Judicial Conservatism, 35 WM. & MARY L. REV. 301, 349–51 (1993) (discussing chaos in law).

<sup>15</sup> Cf. Oliver E. Williamson, Corporate Control and the Theory of the Firm, in ECONOMIC POLICY AND THE REGULATION OF CORPORATE SECURITIES 281, 294–95 (Henry G. Manne ed., 1969) (noting that management will be less constrained when there is less competition in markets for goods and services).

<sup>16</sup> Indeed, the role of accident emerges in Roe's telling of the standard account of the evolution of corporate law structures adopted by firms:

The success of the more efficient practice or law allows it to prosper, while its less efficient competitors wither and die. Entrepreneurs without a clear understanding of what they are doing can stumble on an efficient practice. They make money and their firms grow at the expense of firms that failed through bad luck or poor skill to adopt the efficient practice.

Roe, supra note 5, at 641-42.

Although no prior commentators to my knowledge have focused on the speed of corporate law innovation, Ralph Winter, in the concluding paragraph of a comment on a portion of an article by Melvin Eisenberg, commented that "the history of state antitakeover statutes may support the view that the race to the top is a leisurely walk," as "Delaware waited until its principal competitors had passed such legislation and then enacted a relatively mild statute." Ralph K. Winter, The "Race for

of years" suggests. 18 This is both an optimistic and a pessimistic vision, optimistic because it suggests that corporate law is likely to improve over time, and pessimistic because it suggests that the rate of improvement will be quite slow.

Of the Article's normative tasks, one is responsive particularly to the optimistic vision; and the other, to the pessimistic vision. The optimistic vision suggests that state competition for corporate law, as well as competition among firms at a microcosmic level, will lead to more innovation in corporate law than monopolistic, exclusively federal regulation. This suggests that transplanting the model of corporate federalism that has emerged in charter competition onto other areas of corporate law might be beneficial. The pessimistic vision, however, suggests that the existence of state competition is not enough to guarantee an optimal level of innovation. The Article's second normative task, and its principal contribution, is to consider mechanisms that might spur additional innovation. Most of this analysis is admittedly fanciful, providing a thought experiment assessing different possible solutions while ignoring the near certainty that they would not be adopted. In this vein, the Article will argue that the creation of an intellectual property regime for corporate law innovation would provide the best answer to the problem. This proposal, like the others that I address, is extraordinarily unlikely to be implemented in the foreseeable future, but it is plausible under current doctrine that entrepreneurs could adapt the existing patent law system to achieve much of the benefit of such a proposal.

The Article is structured in four parts, one for each of its descriptive and normative tasks. Part I explains in detail why diversified shareholders are likely to benefit from innovations in corporate law structures by some corporations within their portfolios, and why neither firms nor states can be expected to provide the optimal amount of innovation. Innovation is generally desirable because it provides informational benefits and promotes diversification. The existence of agency problems, <sup>19</sup> however, means that individual firms' owners and managers will resist providing such innovation, and states' incentives are to give such owners and managers what they want.

Part II explores four paradigms of corporate law innovation, the "race to the bottom," the "race to the top," the "race to nowhere in particular," and this Article's contribution: the "crawl to the top." This Part examines

the Top" Revisited: A Comment on Eisenberg, 89 COLUM. L. REV. 1526, 1530 (1989).

<sup>18</sup> See supra text accompanying note 3.

<sup>19</sup> See generally ADOLPH A. BERLE & GARDINER C. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY (1932) (providing a seminal account of the relationship between ownership and control of corporations); Michael C. Jensen & William H. Meckling, Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, 3 J. Fin. 305 (1976) (describing the existence of agency costs in principal-agent relationships on account of divergence of interests).

each of the paradigms by considering firms' and states' incentives to innovate and concludes that only the last one accurately captures the path of innovation. The analysis in this Part is quite abstract, dealing not with the empirics of charter competition, but with theory about how competition among firms and states in any area of corporate law might be expected to proceed.<sup>20</sup> The model of a "crawl to the top" that I develop anticipates empirical observations, made in papers that are currently in preliminary drafts, of state law competition. Marcel Kahan and Ehud Kamar note that no state has systematically attempted to challenge Delaware's lead in corporate law, and they label state competition a "myth." Robert Daines, meanwhile, observes that firms choosing a state of incorporation almost always choose either Delaware or their home state.<sup>22</sup> A consideration of the incentives of states to innovate makes these results intuitive, though perhaps also making the word "myth" too strong.

Part III begins by comparing the theoretical predictions of Part II with the actual experience of corporate charter competition. Because such competition has probably led to more innovation than monopolistic federal regulation would have produced, it then considers expanding state competition to other areas. Although other commentators have suggested the possibility of expanding state competition to securities law, and although a form of competition exists for exchange regulation, this Article is the first to imagine extending state competition to bankruptcy.

Part IV asks what regulatory changes might spur faster innovation, in corporate charter competition or in one of the other possible areas of competition sketched in Part III. Among possibilities considered are breaking up individual areas of competition into multiple areas in which firms could choose different states to regulate them, allowing for private provision of corporate regulation in some area, imposing caps on the number of firms in a state to prevent the stasis that may occur when one state has emerged as a leader, providing for a federal administrative agency to subsidize innovating firms or states, accomplishing subsidization through a demand-revealing preferences scheme, and offering intellectual-property-like protection to innovators. Private provision of law has more potential than might appear at first glance, because only one state would need to act to make such a development possible. The last of these possibilities is probably the strongest, however, both in cohering with existing regulatory schemes and in addressing the

<sup>20</sup> Cf. Donald E. Schwartz, Federalism and Corporate Governance, 45 OHIO ST. L.J. 545, 546 (1984) ("Corporate governance is not coextensive with corporation law—a broader subject.").

<sup>21</sup> Marcel Kahan & Ehud Kamar, *The Myth of State Competition in Corporate Law*, 55 STAN. L. REV. (forthcoming 2002).

<sup>22</sup> Robert Daines, How IPO Firms Choose Corporate Law Rules: Some Evidence on Law, Lawyers, and the Market for IPO Charters (2002) (unpublished manuscript, on file with author).

problem. None of these proposals is perfect, however, and certainly none can be expected to be enacted soon, but they are offered as first sketches of regulatory regimes that might respond to the problem of underinnovation in corporate law and speed up the crawl to the top.

## I. Underinnovation in Corporate Law

This Part explains why we should expect shareholders to favor innovation in corporate law and why we should not expect either firms or incorporating states to give it to them. First, however, we must make clear of which shareholders we are speaking, and what it is that we seek to maximize for them. The assumption of this Section is that the relevant shareholders are fairly well diversified across a wide variety of public companies, investing either directly in those companies or through mutual funds.<sup>23</sup> Such investors are assumed to be risk-averse, but this risk aversion applies to their stock portfolios as a whole, not solely to individual companies within these portfolios. The ideal amount of innovation is the level that would maximize these shareholders' utility, taking into account both the expected value of shareholders' portfolios in the future and the variance in expected values.

Focusing on well-diversified investors achieves a compromise between two visions of what goal corporate law shall seek.<sup>24</sup> On the one hand, corporate law scholarship traditionally embraces the goal of maximization of shareholder wealth with respect to particular companies. A corporation must do, in this view, that which will maximize the present discounted value of its profits. On the other hand, the maximand of law-and-economics scholarship generally is social welfare and thus answers to corporate law questions must ultimately serve this goal. Of course, those who seek to maximize shareholder wealth do so because they believe that this is, at least generally, consistent with social welfare maximization.<sup>25</sup>

<sup>23</sup> For the seminal work on portfolio diversification, see Harry Markowitz, *Portfolio Selection*, 8 J. Fin. 77 (1952).

For a discussion of the difference between these two views, see Jeffrey N. Gordon, Shareholder Initiative: A Social Choice and Game Theoretic Approach to Corporate Law, 60 U. CIN. L. REV. 347, 375 (1991). For useful critiques of the concept of shareholder wealth maximization, see Henry T.C. Hu, Buffett, Corporate Objectives, and the Nature of Sheep, 19 CARDOZO L. REV. 379, 397–406 (1997), which focuses on the uncertain connection between share values and inherent firm value, and Joseph Biancalana, Defining the Proper Corporate Constituency: Asking the Wrong Question, 59 U. CIN. L. REV. 425, 461 (1990), which notes that the concept of maximization of shareholder wealth becomes problematic in the takeover context, where bidders and targets both have shareholders.

See, e.g., EASTERBROOK & FISCHEL, supra note 3, at 38 (noting that "maximizing profits for equity investors assists the other 'constituencies' automatically"). Of course, society may wish to impose fines on corporations for engaging in certain activities, but as long as such fines are optimally set, the maximization by corporations of their own wealth will generally maximize social wealth as well. See, e.g., id. at 37–39.

The first question of corporate law thus must be the level of generality at which analysis should proceed: at the level of wealth maximization for particular corporations or at the level of social welfare. Corporate law scholarship has settled on the former<sup>26</sup> because of a moreor-less reasonable assumption that it is a good proxy for the latter<sup>27</sup> and because analysis of shareholder wealth maximization is more tractable than analysis of social welfare.<sup>28</sup> Of course, the equation of shareholder wealth with social welfare cannot be an unquestioned truism, because there are other groups besides shareholders—for example, labor and consumers—who benefit from shareholder wealth maximization only indirectly.<sup>29</sup> In this Article, however, I am not particularly interested in this aspect of the possible divergence between the shareholder wealth maximization and social utility views.

This Article aims instead at another source of divergence, occasionally remarked upon but rarely affecting analysis of what the optimal legal structure is for creating corporate law. This source of divergence is the difference between a shareholder as an owner of a particular company and a shareholder as an owner of a portfolio of different companies. That is, an investor with all her eggs in one basket may have different interests from an investor with eggs in a variety of baskets, even if that investor is not also a manager of the company. The difference has been noted most prominently in analysis of conglomerate acquisitions.<sup>30</sup> There is little reason, the logic goes, for corporations to

See Henry T.C. Hu, New Financial Products, the Modern Process of Financial Innovation, and the Puzzle of Shareholder Welfare, 69 TEX. L. REV. 1273, 1282-83 (1991) ("Most academics now believe that shareholder wealth maximization is the basic pecuniary objective of the modern publicly held corporation.").

<sup>27</sup> See, e.g., Jeffrey N. Gordon & Lewis A. Kornhauser, Takeover Defense Tactics: A Comment on Two Models, 96 YALE L.J. 295, 295 (1986) ("[S]hareholder wealth maximization is seen as the best available proxy for social wealth maximization.").

The problem of conducting social welfare analysis is of course a general one. See Eric Kades, The Laws of Complexity and the Complexity of Laws: The Implications of Computational Complexity Theory for the Law, 49 RUTGERS L. REV. 403, 481 (1997) ("While there is, at least according to grand economic theory, some set of policy choices that maximize social welfare (broadly defined), we would never trust a judge to issue an injunction setting forth every facet of social policy.").

See, e.g., Jeffrey N. Gordon, The Mandatory Structure of Corporate Law, 89 COLUM. L. REV. 1549, 1574 n.79 ("True private wealth maximization should, of course, attend to parties to the corporate contract other than shareholders and managers, such as bondholders and employees."). See generally Lewis D. Solomon, Symposium: Defining the Corporate Constituency, 59 U. CIN. L. REV. 321 (1990) (considering whether interests of parties other than shareholders should be relevant in corporate law); Wai Shun Wilson Leung, The Inadequacy of Shareholder Primacy: A Proposed Corporate Regime That Recognizes Non-Shareholder Interests, 30 COLUM. J.L. & SOC. PROBS. 587 (1997) (explaining how corporate law might take into account interests of parties other than shareholders).

<sup>30</sup> See, e.g., RONALD J. GILSON, THE LAW AND FINANCE OF CORPORATE ACQUISITIONS 341–60 (1986); Yakov Amihud & Baruch Lev, Risk Reduction as a Managerial Motive for Conglomerate Mergers, 12 BELL J. ECON. 605 (1981); Note, The Conflict Between Managers and Shareholders in Diversifying Acquisitions: A Portfolio Theory Approach, 88 YALE L.J. 1238 (1974).

reduce risk through such acquisitions when shareholders can diversify risk much more cheaply by holding a balanced portfolio.<sup>31</sup> Yet in the context of determining how corporate law should be constructed, as opposed to what individual corporations should do, analysts have not applied this insight.

This Section seeks to remedy this deficiency by focusing on the interests of well-diversified shareholders. It does not evaluate social welfare directly because the analysis, which would then need to take into account groups other than shareholders, would be quite difficult. Because most investors are well-diversified, however, analysis seeking to maximize their wealth is likely to come closer to maximizing social welfare than the customary shareholder maximization approach that does not consider shareholders' portfolio diversification.

#### A. Why Innovation Is Good for Shareholders

An investor in a number of different companies would generally prefer some innovation in corporate law to no innovation for two different reasons: informational externalities, under which I include both learning and network effects, and portfolio diversification. I will consider these reasons, the first of which I estimate to be by far the more important, in turn. First, however, I should explain what I mean by "innovation in corporate law." An innovation is a change in the structure of a corporation or in the legal rules governing the corporation's affairs or its interactions with other corporations, so that the corporation operates or is constrained in a way different from other corporations.<sup>32</sup> If there were no innovation, all corporations would have exactly the same structure and face the same legal rules. Thus, my definition of "innovation" is not so broad as to encompass innovation in the goods or services that a firm produces and sells to its customers. Patent law, after all, provides firms with incentives to innovate in that area; and even if it is imperfect, the problem is better dealt with there than by corporate law scholars.<sup>33</sup> My definition, however, is broader than some might expect, because I include not just classic decisions of governance—such as how many directors to have on a board<sup>34</sup>—but also any legal rules affecting the corporation's operations.

<sup>31 &</sup>quot;[C]orporate diversification is generally not beneficial for well-diversified shareholders. Shareholders do not need corporations to diversify for them. They can easily obtain diversification themselves simply by purchasing shares of different corporations or the shares of a diversified mutual fund." Henry T.C. Hu, *Risk, Time, and Fiduciary Principles in Corporate Investment*, 38 UCLA L. REV. 277, 324 (1990).

<sup>32 &</sup>quot;Innovation" is generally defined as "[t]he act of introducing something new." AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE 931 (3d ed. 1992).

<sup>33</sup> Scholarship addressing imperfections in patent law's attempt to protect innovation includes Douglas Gary Lichtman, *The Economics of Innovation: Protecting Unpatentable Goods*, 81 MINN. L. REV. 693 (1997).

<sup>34</sup> See, e.g., Dennis J. Block et al., Proxy Contests and Institutional Investors, 704

Thus, while I will sometimes refer to "governance structures" as a convenient shorthand for the area in which investors will seek innovation, my analysis applies to corporate law writ large, a point I will elaborate later.

#### 1. Informational Externalities

Adoption of a new governance structure by one company or a group of companies will provide information to other companies that do not initially adopt the innovation. Because the innovator does not capture these informational benefits, the amount of innovation will be suboptimal from the perspective of the fairly well-diversified investor. An investor holding stock in just one company might prefer to free-ride off the experiments of others. But a well-diversified stockholder could benefit considerably if one or two companies in his [or her] portfolio innovated. If the adoption of an innovation by one company proved efficient, then other companies could copy that innovation. For an investor with an interest in an S&P 500 index fund, for example, the risk of any one company's innovation may be negligible, but the benefits to the other companies in the fund will be considerable.

The informational benefit externality will generally be a "learning externality," but could also be a "network externality." An innovation will entail a "learning externality" when other firms benefit from the innovation when they decide whether to innovate in the future.<sup>37</sup> An

PLI/CORP. 161, 287 (1990) (discussing the question of optimal board size).

<sup>35</sup> Cf. Upinder Dhillon & Herb Johnson, Changes in the Standard and Poor's 500 List, 64 J. BUS. 75 (1991) (providing empirical evidence that index funds are sound investment vehicles).

For a useful discussion of network and learning externalities in the context of corporate contracts, see Michael Klausner, Corporations, Corporate Law, and Networks of Contracts, 81 VA. L. REV. 757, 774–89 (1995). Other works on network and learning externalities include W. Brian Arthur, Competing Technologies, Increasing Returns, and Lock-In by Historical Events, 99 ECON. J. 116 (1989); William E. Cohen, Competition and Foreclosure in the Context of Installed Base and Compatibility Effects, 64 ANTITRUST L.J. 535 (1996); Joseph Farrell & Garth Saloner, Installed Base and Compatibility: Innovation, Product Preannouncements, and Predation, 76 AM. ECON. REV. 940 (1986); Joseph Farrell & Garth Saloner, Standardization, Compatibility, and Innovation, 16 RAND J. ECON. 70 (1985); Michael L. Katz & Carl Shapiro, Network Externalities, Competition, and Compatibility, 75 AM. ECON. REV. 424 (1985); Michael L. Katz & Carl Shapiro, Product Compatibility Choice in a Market with Technological Progress, 38 OXFORD ECON. PAPERS 146 (1986); Michael L. Katz & Carl Shapiro, Systems Competition and Network Effects, 8 J. ECON. PERSP. 93 (1994); Paul Klemperer, The Competitiveness of Markets with Switching Costs, 18 RAND J. ECON. 138 (1987); and S.J. Liebowitz & Stephen E. Margolis, Network Externality: An Uncommon Tragedy, 8 J. ECON. PERSP. 133 (1994).

<sup>37</sup> This definition of "learning externality" is somewhat broader than Klausner's, who focuses not on the decision whether to adopt a practice but on the informational advantages from the first user's experience that flow to those who will decide in the future to adopt a practice. See Klausner, supra note 36, at 786. Of course, a first user's experience may also produce benefits for those who decide in the future not to adopt a practice on the basis of that experience. Indeed, this might explain the disappearance of event risk covenants, which Klausner and Marcel Kahan have examined in further investigation of network externalities. See Marcel Kahan & Michael Klausner,

innovation will entail a "network externality" when other firms simultaneously making the innovation benefit from a firm's making it. 38 Such externalities may result in "a competitive equilibrium with a suboptimal diversity of products" or a market that has "lock[ed] into" a product and "lock[ed] out socially desirable innovations." In the corporate law context, a firm may not innovate even though such innovation would be socially desirable because of benefits to other firms. 40

Diversified shareholders may benefit ex ante even from innovations that they expect to fail. Suppose, for example, that shareholders expect a certain innovation to lower a firm's discounted stream of future profits by one percent, but, because of lack of experience with that innovation, the shareholders are quite uncertain about that number. Perhaps the innovation will lower profits by three percent, or perhaps it will raise them by one percent. The shareholders' expectations of the possible outcomes might fit onto a bell curve, with the most likely outcome being a one percent loss and other outcomes progressively less likely the further they are from this midpoint. An investor with a completely undiversified portfolio would certainly oppose such an innovation, both because it lowers the company's expected return and because it raises the variability of the company's returns. A more diversified investor, however, might well favor such an

Standardization and Innovation in Corporate Contracting (or "The Economics of Boilerplate"), 83 VA. L. REV. 713 (1997).

<sup>38</sup> There are several reasons this might be the case. Klausner notes: [The value of a contract term] depends on the present value of (a) periodic judicial rulings that will be issued in the future, (b) common practices that will develop among firms that implement the term, (c) legal services that will be available to a firm that must interpret or implement the term, and (d) the effect the term has on the marketability of the firm's securities.

Klausner, supra note 36, at 774.

Id. at 789. To be sure, government interference could lead to too much innovation. If the government subsidized many different corporate innovations, see infra Section IV.B, it could prevent firms from taking advantage of network externalities. An analogy to the telephone market may be useful. If a market is locked into using a particular convention for transmitting telephone signals, then it might be useful for the government to subsidize an innovation that no party or company would have an incentive to develop or implement unilaterally. The experience of the innovation might lead to informational benefits to others considering adopting the technology, and it would provide an installed base that might make it profitable for later users to adopt it. But if the government oversubsidized lots of different telephone innovations, then many different technological standards would exist, and no one would be able to communicate. In the corporate law context, the substantial degree of uniformity suggests that some encouragement of innovation would be beneficial, although the government should be aware that, past a certain point, the marginal benefits of subsidized innovation are less than the marginal cost.

<sup>40</sup> In the corporate charter context, see infra Section III.A, "[e]ven if a state were to offer a product with greater inherent benefits and even if Delaware were to fail to meet the competition, uncertainty and delay attending other firms' incorporation and reincorporation decisions could leave Delaware's market share unchanged." Klausner, supra note 36, at 850. In addition, "[t]here may be groups of firms that would benefit from a law that differs from Delaware's. Network externalities, however, may lead states to copy Delaware law rather than attempting to serve such firms." Id.

innovation. If the innovation turns out to be successful, all of the other companies in that investor's portfolio can adopt it and reap the benefits.

Of course, a company's adoption of an innovation will not necessarily produce a clear answer about the effects of that innovation. Moreover, the effect of an innovation cannot be measured by an event study, because such studies assess only the market's ex ante prediction about the innovation's effect.<sup>41</sup> Ultimately, innovations are useful to other firms when they are assessed statistically ex post, and such analysis is easiest when there are a number of companies that have adopted the innovation (and a number that have not). Nonetheless, even a single company's experimentation with an innovation is likely to provide anecdotal evidence about the innovation's effect.<sup>42</sup> With each experiment, the bell curve indicating the possible outcomes of the innovation will both become thinner and move to the left or right depending on whether preliminary indications suggest that it is a failure or a success.

In considering innovations, it is useful to separate small ones from large ones. With a small innovation, such as a minor change in voting procedures, one company's experience is likely to provide only a small amount of evidence about the advisability of the innovation. At the same time, however, such an innovation is unlikely to lead to large changes in the returns a firm can expect to earn. Thus, with respect to such innovations, shareholders would in general prefer that a number of firms adopt the innovation, at least initially. Such adoption would provide a useful experiment in allowing other firms to determine whether to adopt it as well, without imposing grave costs on the firms adopting it.

Other innovations might be considerably more radical. For example, imagine a company in which every significant corporate investment decision required shareholder ratification via votes over the Internet. Such a governance option would, of course, represent a significant departure from existing corporate practice. Even if a shareholder expects such an experiment to be a failure, the shareholder might well favor the experiment. The reason is that a single company's experience may provide

<sup>41</sup> See Jill E. Fisch, Picking a Winner, 20 J. CORP. L. 451, 467-68 (1995) (review essay) (noting deficiencies of event studies). See generally Glenn Henderson, Problems and Solutions in Conducting Event Studies, 57 J. RISK & INS. 282 (1990) (describing the event study methodology). An additional limitation of event studies is that they may reflect the market's reaction not to a particular corporate decision "but rather to other developments that coincide with, or even were signaled by, the decision." Lucian Ayre Bebchuk, Federalism and the Corporation: The Desirable Limits on State Competition in Corporate Law, 105 HARV. L. REV. 1435, 1449 (1992).

<sup>42</sup> See, e.g., Peter Z. Grossman, The Market for Shares of Companies with Unlimited Liability: The Case of American Express, 24 J. LEGAL STUD. 63 (1995) (examining the implications of a case study).

<sup>43</sup> For a somewhat less radical proposal, see John C. Wilcox, Electronic Communication and Proxy Voting: The Governance Implications of Shareholders in Cyberspace, INSIGHTS, Mar. 1997, at 8.

valuable information on the advisability of such a governance scheme. Even if the experiment failed on the whole, the innovation might produce some benefits that other companies could adopt with more minor reforms. And if the experiment succeeded, other firms could follow suit, with gradually more firms adopting the innovation as more evidence accumulated about its benefits.

To be sure, shareholders will not favor every corporate law innovation. Some may seem so foolhardy that the chance it might actually work would not justify the risk. But shareholders are likely to favor at least most innovations that they believe are likely to have a positive effect on a company's value. The failure of an innovation would impose only small costs on a well-diversified shareholder, while a success could bring large benefits if other firms copy it.

#### 2. Portfolio Diversification

An investor would ideally like to invest in companies with diversified governance structures for the same reason the investor benefits from other types of diversification. The reason to invest in a number of different companies, after all, is that if one company performs poorly, the others may still perform well. The more different the companies, the better; a mutual fund investing in hundreds of high-tech companies but no other companies may be a poorly diversified investment because poor performance by one such company is likely to correlate with poor performance by the others. Likewise, if one corporate governance strategy turns out to be unsuccessful, other strategies may succeed, and corporations with different governance structures are likely to have less correlated performance than corporations with the same governance structure.

At first blush, this type of diversification may seem to be relatively unimportant, and indeed I do not wish to exaggerate its importance. After all, a company will succeed or fail primarily based on the success of the products or services that it offers. Corporate governance is likely to affect performance only at the margins. Thus, while a technology company and an agriculture company are likely to have relatively uncorrelated performances, two technology companies with differently structured boards of directors are still likely to have relatively correlated

For an accessible introduction to portfolio theory, see Harvey E. Bines, *Modern Portfolio Theory and Investment Management Law: Refinement of Legal Doctrine*, 76 COLUM. L. REV. 721, 734–50 (1976).

<sup>45</sup> See, e.g., Wallace Wen Yeu Wang, Corporate Versus Contractual Mutual Funds: An Evaluation of Structure and Governance, 69 WASH. L. REV. 927, 936 (1994) ("[T]he riskiness of a portfolio depends on the co-variance (the extent to which asset prices move together) of its holding, not on the average of the risks associated with its individual investments.").

performance. The claim that governance structure can have only marginal diversification benefits, however, may stem from a limited view of the relevance of governance structure. Whether elections of directors are held every year or two is not likely to make a big difference, <sup>46</sup> and diversifying across firms that take different approaches to such a question may do little. But governance decisions can potentially have great consequences. Imagine two firms, one of which has a higher percentage of outside directors than the other. <sup>47</sup> The different incentives of outside directors may lead to different corporate approaches regardless of the firm's industry. For example, the outside directors may be less likely to adopt a poison pill. <sup>48</sup>

Such a decision could have significant implications. On one hand, adoption of a poison pill might aggravate agency costs by entrenching management and thus lead to stagnation;<sup>49</sup> on the other hand, refusal to adopt a poison pill might cause alienation and disenchantment among management, leading to lower performance.<sup>50</sup> This is, of course, not a debate that we need to resolve now. The important point is that we may recognize governance decisions as potentially critical yet not be sure which is the best approach. In such a situation, we may well expect firms that make the same decision to have relatively correlated returns, just as we expect firms in different industries to have correlated returns. Thus, an investor who is already well-diversified with respect to industry groups may benefit from diversifying within each industry group with respect to governance structure.<sup>51</sup>

<sup>46</sup> But see Martin Lipton & Steven A. Rosenblum, A New System of Corporate Governance: The Quinquennial Election of Directors, 58 U. CHI. L. REV. 187 (1991); D. Gordon Smith, Corporate Governance and Managerial Incompetence: Lessons from Kmart, 74 N.C. L. REV. 1037, 1135–36 (1996) (arguing that frequent elections of directors may make boards less representative).

<sup>47</sup> See generally Laura Lin, The Effectiveness of Outside Directors as a Corporate Governance Mechanism: Theories and Evidence, 90 Nw. U. L. REV. 898 (1996) (assessing the impact and significance of outside directors' representation on boards).

<sup>48</sup> See, e.g., Paul Mallette & Karen L. Fowler, Effects of Board Composition and Stock Ownership on the Adoption of "Poison Pills," 35 ACAD. MGMT. 1010 (1992).

<sup>49</sup> Cf. Frank H. Easterbrook & Daniel R. Fischel, The Proper Role of a Target's Management in Responding to a Tender Offer, 94 HARV. L. REV. 1161 (1981) (urging manager passivity).

<sup>50</sup> See, e.g., Barry D. Baysinger & Henry N. Butler, Antitakeover-Amendments, Managerial Entrenchment, and the Contractual Theory of the Corporation, 71 VA. L. REV. 1257, 1292–93 (1985) (discussing the benefits of antitakeover charter provisions).

In addition, less dramatic governance decisions could also have large effects, even in unanticipated ways. Indeed, in the example I have provided, the companies' boards might have been formed before the poison pill question ever arose. The decision about how many independent directors to have might not have seemed particularly critical but had implications later. Moreover, differences in board composition could arise from differences in the devices used to select board members. Such structural differences in corporate governance may initially seem trivial, but they ultimately can have a large effect on how companies are run. Because these effects can be unpredictable, an investor is best off diversifying across governance structures, even where it is not immediately obvious how the governance structures will lead to different business decisions.

#### B. Why Firms Won't Innovate Enough

It might at first seem that firms will give investors what they want. If corporate law innovation is desirable, then as long as a state's law consists of default provisions that a corporation can override, either in its charter or through some other mechanism, a corporation will have incentives to provide the innovation that its shareholders desire.<sup>52</sup> Indeed, under Delaware's business trust law, a firm can adopt a wide variety of nontraditional structures.<sup>53</sup> And if shareholders benefit from corporate law innovation, they will be willing to pay for it. Corporations that seek to maximize the funds that they receive in the capital markets will thus innovate to receive more funds from investors.

There are five primary problems with this optimistic view. First, many provisions of corporate law are mandatory provisions rather than defaults that a corporation can override.<sup>54</sup> To be sure, a corporate law will often tolerate small and even medium-size changes in the mechanics of governance. But the relative uniformity of existing corporations may entrench certain basic features of corporate structure into corporate codes. For example, a state law might provide that all power shall reside in a board of directors, not recognizing that it might be possible to construct a corporate law structure without such a board (or with two boards, in a nod to bicameralism). More importantly, there are many provisions of federal law that a corporation cannot override, for example, federal securities laws.<sup>55</sup>

<sup>52</sup> See Roberta Romano, Answering the Wrong Question: The Tenuous Case for Mandatory Corporate Laws, 89 COLUM. L. REV. 1599 (1989). But see Ian Ayres, Making a Difference: The Contractual Contributions of Easterbrook and Fischel, 59 U. CHI. L REV. 1391, 1418 (1992) ("[A]n appreciation of the constraints on private ex ante contracting undermines the causal theory that competition among states will cause legislatures to pass efficient default rules.").

<sup>53</sup> See DEL. CODE. ANN. tit. 12, §§ 3801–3820 (1995 & Supp. 1996); Wendell Fenton & Eric A. Mazie, Delaware Business Trusts, in 2 THE DELAWARE LAW OF CORPORATIONS AND BUSINESS ORGANIZATIONS §§ 25.1–25.12 (R. Franklin Babott & Jesse A. Finkelstein eds., Supp. 1997).

<sup>54.</sup> See, e.g., EASTERBROOK & FISCHEL, supra note 3, at 3 ("Any theory of corporate law must account for the mandatory as well as the enabling features, and must account for the pattern of regulation . . . ."). In listing "things [that] are off-limits," Easterbrook and Fischel note:

States almost uniformly forbid perpetual directorships (persons who cannot be displaced by holders of a majority of the voting power). They set quorum rules (on critical decisions, a third of the board and sometimes half of the investors must participate) and require 'major' transactions to be presented to the board (occasionally shareholders too) rather than stand approved by managers or a committee. States also forbid the sale of votes divorced from the investment interest and the accumulation of votes in a corporate treasury....

Id.; Cf. Schwartz, supra note 20, at 558 ("[A] substantial federal overlay on the prevailing state law system already exists. While no single federal statute deals with the governance of corporations generally, numerous statutes affect corporate governance.").

<sup>55</sup> See Joel Seligman, The New Corporate Law, 59 BROOK. L. REV. 1, 1 (1993) ("In the twentieth century, state corporate law norms for the large publicly held corporation have been progressively supplanted by federal standards, particularly those originating in federal securities

Second, important decisions about whether to innovate structurally are often made by a firm's management, or at least management plays an important role. 56 Unlike well-diversified shareholders, managers (and, to a lesser but still significant extent, directors<sup>57</sup>) have all their eggs in one basket.<sup>58</sup> Thus, on one hand, they will not directly benefit from the portfolio diversification and informational externality benefits that the firm's innovation might provide to its well-diversified shareholders.<sup>59</sup> They may benefit indirectly, to be sure, because shareholders may appreciate the courage of a manager or a director who recognizes that innovation will help shareholders and thus innovates. In theory, managers who innovate and thereby benefit their shareholders might be rewarded with higher salaries or with better job security.<sup>60</sup> In practice, however, innovation is likely to greatly reduce their job security. If a corporate law innovation fails, the manager may well be blamed, even if the decision to undertake the innovation was ex ante beneficial. Moreover, a corporate law innovation may increase the probability that the company itself will fail, further harming the manager. Finally, managers themselves often have significant shareholdings in the companies they run, 61 and their portfolios are thus not likely to be as well diversified as those of more typical investors. Therefore, as owners, managers will be less able to tolerate the risks that corporate law innovation entails.

Although shareholders will be willing to pay a premium for the diversification benefits that they receive from innovation by some firms,

law."); see also Larry E. Ribstein, Efficiency, Regulation and Competition: A Comment on Easterbrook and Fischel's Economic Structure of Corporate Law, 87 NW. U. L. REV. 254, 270 (1991) (book review) ("Note that federal baselines played an important role in shaping even those corporate terms that have long been regarded as controlled by permissive state statutes.").

<sup>56</sup> See Bernard S. Black, Shareholder Passivity Reexamined, 89 MICH. L. REV. 520, 591–95 (1990) (discussing the importance of management agenda control); see also Lynne L. Dallas, The Control and Conflict of Interest Voting Systems, 71 N.C. L. REV. 1, 1 (1992) (arguing that "current laws fall short of providing shareholders the right to vote on fundamental organic changes when the economic, operational, control, and legal structures of a corporation are considered").

<sup>57</sup> See Charles M. Elson, The Duty of Care, Compensation, and Stock Ownership, 63 U. CIN. L. REV. 649, 698–99 (1995) (discussing the problem of risk aversion among directors and the need to induce risk-positive behavior).

<sup>58</sup> See, e.g., John C. Coffee, Jr., Shareholders Versus Managers: The Strain in the Corporate Web, 85 MICH. L. REV. 1, 19 (1986) ("Because the manager cannot spread his risks, or escape them safely in the event of insolvency, he is economically wedded to his firm. ... [M]anagers will be more risk averse than their shareholders."). See generally Susan Rose-Ackerman, Risk-Taking and Ruin: Bankruptcy and Investment Choice, 20 J. LEGAL STUD. 277, 296 (1991) (explaining why managers might be biased towards high-variance projects when insolvency is a danger).

<sup>59</sup> See Hu, supra note 26, at 1281–82 ("[M]odern financial theory suggests that corporations concerned about the well-being of shareholders will generally take more risks than corporations concerned about the entity's own well-being . . . .").

<sup>60</sup> See Coffee, supra note 58, at 82 (discussing the possibility of implicit contracts with "an expectation of an ex post setting-up so that managers who contributed disproportionately to the firm's welfare would be specially rewarded"). Of course, stock options may also align managers' incentives with those of shareholders.

<sup>61</sup> See, e.g., Louis Lowenstein, Management Buyouts, 85 COLUM. L. REV. 730, 737 (1985).

they will free-ride off the informational externalities that corporate law innovation provides. Suppose an investor holds stock in 500 companies. The investor, according to the analysis above, might well be pleased if one company innovated in some way because of diversification and other benefits. Placing aside the diversification benefit, however, once a firm in the shareholder's portfolio innovates, the riskiness of the innovator's stock will rise. Thus, even if the shareholder would vote for the innovation, the value of the security will decrease once the innovation is adopted. An investor receives the informational benefit regardless of who owns the company, but managers and owners of the undiversified company face the full risk of the innovation.

Thus, while the diversification benefit will tend to raise a company's stock price, the informational benefits are externalized. Because innovation does increase the riskiness of firms, in some cases this risk cost will exceed the diversification benefit, even though the risk cost might be less than the sum of the diversification benefit and the informational benefit. This alone does not mean that innovation will be drastically underprovided for, however, since shareholders may have an incentive to vote for an innovation, even though they realize that it will lower the value of the particular corporation's stock. But shareholders do not usually determine directly whether a corporation innovates, and managers are likely to take little solace in the fact that though innovation lowered their company's stock price, it raised the stock prices of other companies within the shareholders' portfolio. After all, if the drop in stock price is significant enough, a takeover firm might be able to profit by acquiring the company and undoing the innovation, 62 even though the shareholders in fact desired the innovation in the first place.

Third, the owners of a firm at the time of an initial public offering are similarly undiversified. They will thus care principally about the returns from the initial public offering, and they will be concerned both about the expected magnitude of the returns and the variance of the expected returns. Thus, even if they suspect that shareholders will be willing to pay more for the company's security because of an innovation in its corporate charter, they may not be sure. They thus face an additional level of uncertainty that investors do not face—uncertainty about whether the portfolio diversification benefits of an innovation to shareholders will exceed the risk costs of the innovation. Because the owners are undiversified, they may be quite risk-averse and unwilling to take a chance. Thus, the owners

The literature, of course, focuses on the agency cost reduction benefits of takeovers. See, e.g., Roberta Romano, A Guide to Takeovers: Theory, Evidence, and Regulation, 9 YALE J. ON REG. 119, 129–31 (1992). But if a firm is producing a costly positive externality, a takeover designed to stop the externality may be socially inefficient.

will often decline to innovate even when ex post such innovation would have been profitable for them.

Fourth, the market may inaccurately perceive a decision to innovate as a signal that something is wrong with a company. 63 When a particular company makes a decision to innovate, investors will wonder why this company did so rather than any other company. One plausible reason for innovating is that existing structures have proven ineffective at addressing the company's needs. To some extent, of course, investors may have already recognized that existing structures are inefficient for a particular company. But investors also may take a decision to innovate as a signal that managers are less optimistic about the company's future than the market, just as the market considers insider sales of securities to be a sign that something is wrong.<sup>64</sup> For example, a decision in an initial public offering to make a company relatively easy to take over might signal to investors that the owners of the company do not have much faith in the managers.65 With established companies, in extreme cases, corporate law innovation might even be seen as a desperate effort by managers to save their own jobs. 66 Thus, because investors may be unable to separate cases in which managers are innovating to maximize shareholders' utility from cases in which they are innovating out of desperation, companies will sometimes decide not to innovate even when they should. This adverse selection problem, moreover, will lead to an unraveling effect; as firms that are marginal candidates for innovation decide not to innovate, the costs to other firms of innovation will rise, and they too may gradually decide not to innovate.<sup>67</sup>

See, e.g., Gordon, supra note 29, at 1569-73 (arguing that there may be less innovation in corporate law because of signaling and concluding that "innovation may be harder in a regime of contractual freedom"). See generally Stephen A. Ross, The Determination of Financial Structure: The Incentive-Signaling Approach, 8 Bell J. Econ. 23 (1977) (describing how investors may perceive actions as signals of other actions).

<sup>64</sup> See, e.g., Jordan Eth & Michael Dicke, Insider Stock Sales in Rule 10b-5 Corporate Disclosure Cases: Separating the Innocent from the Suspicious, 1 STAN. J.L. BUS. & FIN. 97 (1994).

For a summary of other explanations for why firms might include antitakeover provisions in their charters, see Robert Daines & Michael Klausner, *Do IPO Charters Maximize Firm Value?*Antitakeover Protection in IPOs, 17 J.L. ECON. & ORG. 83, 88-89 (2001).

The manager, in an effort to rescue his job, may effectively roll the dice by taking risks that are excessive from shareholders' point of view. *Cf.* Jonathan R. Macey & Geoffrey P. Miller, *Double Liability of Bank Shareholders: A Look at the New Data*, 28 WAKE FOREST L. REV. 933, 933–34 (1993) (discussing the possibility of excess risk-taking by banks).

<sup>67</sup> Unraveling thus may mean that no firms innovate. See generally Steven P. Croley & Jon D. Hanson, What Liability Crisis? An Alternate Explanation for Recent Events in Products Liability, 8 YALE J. ON REG. 1, 28-50 (1991) (discussing the possibility of unraveling of risk pools).

# C. Why States Won't Innovate Enough

Even if firms do not have the incentive to innovate, a federalist system in which states can make certain provisions of corporate law mandatory could fill the gap. On this view, states would have incentives to innovate because the firms that they incorporate would receive the benefits. Moreover, by innovating, a state can attract more firms to the state, increasing any fees that the firms must pay to be controlled by the state's law. With many states innovating in many different ways, investors will receive the benefits of both portfolio diversification (by holding shares in companies taking advantage of different states' innovations) and informational externalities (by learning from the results of state innovation).

This story, however, is also too optimistic, as there are several reasons that states will not want to innovate. First, if a state's goal is to attract new firms, then it will not innovate, because innovation consisting of mandatory terms will in fact deter new firms. If the owners or managers of a firm do not want an innovative corporate law structure, they will not choose a state that provides such a structure. Indeed, some firms that have selected an innovative state might have an incentive to change their initial selection and switch to a noninnovating state. Thus, if a firm would not decide to innovate on its own, it will not want to be in a state that will or might force innovation upon it.

Second, the informational benefits of a state's innovations are largely externalized. If a state innovation proves to be successful, then other states will be able to copy it. Ian Ayres has observed this problem in the context of corporate charters. States might have incentives to innovate if they could be assured of capturing all the benefits of their innovations. Because one state cannot prevent another from copying its corporate law structures, however, states cannot capture these benefits. At the same time, of course, if a state's innovation proves ill-advised, the firms in that state will exclusively bear the cost. While a state will still receive some benefit from being the first innovator if an innovation proves successful—that is, firms in the state will enjoy the benefits of the innovation sooner—these immediate benefits may be only a small portion of total benefits in present discounted value terms.

<sup>68</sup> Cf. Demetrios G. Kaouris, Note, Is Delaware Still a Haven for Incorporation?, 20 DEL. J. CORP. L. 965, 999-1003 (1995) (providing examples of reasons that some firms decide to reincorporate out of Delaware).

<sup>69</sup> See lan Ayres, Supply-Side Inefficiencies in Corporate Charter Competition: Lessons from Patents, Yachting and Bluebooks, 43 U. KAN. L. REV. 541, 545-50 (1995).

<sup>70</sup> See, e.g., id. at 548 (discussing the incentives to being a first-mover).

Third, a state's innovations will typically affect all firms that have chosen the state, unless the state makes the innovation optional. This may provide too much innovation, especially for a leading corporate law state. If investors would like just one firm to try an innovation, then a state that forces an innovation on all firms, or even on just all new firms, would be giving investors more innovation than they wanted. Thus, the risk of the innovation might exceed the portfolio diversification benefits. Moreover, if firms that have chosen that state represent a sizable portion of an investor's portfolio, the imposition of an innovation on all firms within that state might defeat the goal of portfolio diversification. When innovation is forced on a large number of firms, investors might want to diversify by holding shares in firms that have not been subject to the innovation.

Fourth, states may be just as risk-averse as firms.<sup>71</sup> When a state considers an innovation, it will not be sure how successful the innovation will be. If the innovation is successful, the state will attract more firms and thus will benefit, but if the innovation is unsuccessful, firms may exit the state. Even if the potential benefits were greater than the potential costs, the risk of failure may deter states from innovating. While one might expect that a state would be more insulated from risk than individual firms, that may not be true, particularly in states that have balanced budget requirements.<sup>72</sup> In such states, any loss of revenue due to a failed innovation must be made up by spending cuts or tax increases; and voters may react by punishing politicians, even if they do not understand the source of the change. Even in other states, debt may be a salient political issue, and officeholders may not wish to risk having an unexpected deficit.

Fifth, a state may have a relatively short time horizon. According to public choice theory, politicians privilege short-term results over long-term gains, because short-term results are likely to affect elections. Therefore, if the costs of an innovation are felt immediately, while the benefits will not be received until the future, a state may resist innovation even where the present discounted value of benefits exceeds the present discounted value of costs. This is particularly problematic with respect to the positive informational externality, since the fruits of a better

<sup>71</sup> See, e.g., William W. Bratton & Joseph A. McCahery, The New Economics of Jurisdictional Competition: Devolutionary Federalism in a Second-Best World, 86 GEO. L.J. 201, 214 (1997).

<sup>72</sup> See generally David Lubecky, The Proposed Federal Balanced Budget Amendment: The Lesson from State Experience, 55 U. CIN. L. REV. 563 (1986) (assessing the effect of state balanced budget amendments on spending).

<sup>73</sup> See, e.g., DWIGHT R. LEE & RICHARD MCKENZIE, REGULATING GOVERNMENT: A PREFACE TO CONSTITUTIONAL ECONOMICS 127–31 (1987); Philip Jones & John Cullis, Legitimate and Illegitimate Transfers: Dealing with "Political" Cost-Benefit Analysis, 16 INT'L REV. L. & ECON. 207, 252 & n.51 (1996).

understanding of corporate law because of innovation will not materialize immediately.

#### II. Paradigms of Corporate Law Innovation

If firms have insufficient incentives to innovate and states have insufficient incentives to innovate, then we are likely not to have stumbled upon the best corporate law structure imaginable. While it could fortuitously be true that the structure of corporations we have selected is in fact the best structure, and indeed that the structure maximizes shareholder wealth for each corporation, this seems unlikely. After all, some changes in corporate law structure that one would expect to fail might actually succeed. And the differences in the structure of corporate law internationally suggest that our particular arrangement is not the inexorable outcome of a priori logic. To be sure, our corporate law might be better than other countries', and it may even be better as a result of our system of federalism. But the existence of continued debate on all varieties of corporate law questions in legal academia suggests at the least that we cannot be confident that we have arrived at the best possible system.

This Part explores the consequence of firms' inadequate incentives to innovate for the path of corporate law. In particular, it considers four paradigms of corporate law innovation, three already existing and one designed to correct imperfections in each of the other three. The existing paradigms are that corporate law is a "race to the bottom," that it is a "race to the top," and that it is a "race to nowhere in particular." Over the years, conventional wisdom has moved from the first of these paradigms to the second and the third. In this Section, I hope to move conventional wisdom to the fourth paradigm, which envisions corporate law as a "crawl to the top."

My argument in this Part is largely theoretical rather than empirical; this is because the argument is intended to apply to any area of corporate law that could conceivably be constructed through a system of competitive federalism. I will bring in empirical evidence later when I specifically apply the theoretical analysis to states' actual experiences with corporate charter competition. At the same time, of course, the argument will be most applicable to the context of corporate charter competition, and occasionally I may refer to the theory of corporate charter competition explicitly. This is a necessary

<sup>74</sup> See, e.g., ROBERTA ROMANO, THE GENIUS OF AMERICAN CORPORATE LAW 118-47 (1993) (discussing international differences in corporate law); Dan Feino Henderson, Security Markets in the United States and Japan: Distinctive Aspects Molded by Cultural, Social, Economic, and Political Differences, 14 HASTINGS INT'L & COMP. L. REV. 263 (1991) (same).

<sup>75</sup> See infra Section III.A.

concession, because the existing literature on paradigms of corporate law focuses almost exclusively on the corporate charter context. In this Section, however, I do not use "corporate law" necessarily to mean selection of the corporate charter or "reincorporation" to mean a change in the state of a corporation's charter. The framework, rather, is that the states are competing to provide some set of laws or procedures to corporations in exchange for fees or other forms of compensation.

#### A. The Race to the Bottom

The notion that corporate law is a race to the bottom was first propounded in a famous article by William Cary. The basic thesis is simple. Because corporate law is determined by states, the states will compete with each other for corporate franchise fees. To induce firms to locate in their states, legislators will need to provide benefits to managers. States will thus create corporate law structures that expropriate wealth from shareholders to enhance the private benefits of managers. Such expropriation is inefficient, because it imposes deadweight losses, that is, the benefits to managers are smaller than the losses to shareholders. Selection of an incorporation state, under Cary's view, presents a classic agency problem, and the way to overcome this agency problem is effectively to federalize corporate law.

The main problem with Cary's thesis is that shareholders may in fact have ways of overcoming this agency problem even within a system of competitive federalism. The next Section will discuss this criticism and the claim that the race is in fact to the top. There are, however, other problems that become clear when viewed through the lens of this Article's analysis of innovation. First, even if states were solely concerned about benefiting managers, it is not clear that there would necessarily be a race among states in providing such concessions. After all, it might be unclear whether a change in corporate law would in fact benefit managers, and thus risk-averse managers might resist innovation, both by their corporations and by states. Cary's analysis speaks to the location in which corporate law allegedly finds itself (the bottom) and perhaps even the direction in which corporate law is moving (even deeper). It does not, however, speak to the speed of the transformation (i.e., whether it is a race or a crawl).

<sup>76</sup> See Cary, supra note 1. A more recent article arguing that corporate law may in some respects be a race to the bottom is Bebchuk, supra note 41.

<sup>77</sup> See Cary, supra note 1, at 684 ("Perhaps there is no public policy left in Delaware corporate law except the objective of raising revenue.").

<sup>78</sup> See id. at 670-84.

<sup>79</sup> See id. at 698-99.

<sup>80</sup> See id. at 696-705 (arguing for federal minimum standards).

<sup>81</sup> See supra Section I.B.

Second, when innovations in corporate law will clearly be to the benefit of both shareholders and managers, states will adopt them, lest managers incorporate or reincorporate in other states. <sup>82</sup> Much of what is in the interest of managers, after all, is in shareholders' interests too. Managers would like their companies to perform well, because good performance increases their reputation and job security. In addition, managers may in fact care about the corporations they manage, either because they have shareholdings in the firms or simply because they care about the quality of their work and would like to support shareholders. Thus, some of the corporate law structure that develops on account of pleasing managers will benefit shareholders.

Third, even if states do make concessions to managers at the expense of shareholders, this does not necessarily mean that the states are at the bottom relative to where the federal government would be. Indeed, empirical evidence suggests that when a state does innovate in corporate law and that innovation appears to be successful, other states adopt the innovation relatively quickly.83 Such rapid adoption of successful innovations indicates at the least that states are responsive to managers' concerns. The federal government, by contrast, may not be as responsive in passing legislation, given the relatively slow pace of congressional action.84 Thus, assuming that a federal regime and a federalist regime began with the same corporate law, it is not clear that the federal regime would perform better at improving corporate law than the federalist regime over time. Even granting Cary's claim that the states will be overly eager to please managers (and that the federal government by contrast would not be), some of this eagerness will lead to innovations that in fact help shareholders too.

## B. The Race to the Top

Several years after Cary proclaimed a race to the bottom, Ralph Winter challenged Cary's thesis. 85 Not only was corporate law not a race to the bottom, Winter claimed, it was in fact a race to the top. Owners of firms going public will want to maximize revenues from initial public offerings, 86 and managers will be constrained by their need to ensure that

<sup>82</sup> See, e.g., Bebchuk, supra note 41, at 1440-41 ("To be sure, because the interests of managers and shareholders are somewhat aligned, there are many corporate issues with respect to which managers seek, and states in turn have an incentive to provide, rules that enhance shareholder value.").

<sup>83</sup> See Roberta Romano, Law as a Product: Some Pieces of the Incorporation Puzzle, 1 J.L. ECON. & ORG. 225, 233-42 (1985).

<sup>84</sup> See ROMANO, supra note 74, at 49.

<sup>85</sup> See Winter, supra note 2.

<sup>86</sup> See id. at 256 (presenting the argument as a four-step syllogism). Judge Winter also states, "If management is to secure initial capital . . . it must attract investors away from the almost

the company performs successfully in the marketplace.<sup>87</sup> Thus, they will choose the state that is likely to produce the greatest profit for the firm over time. States will recognize that to attract firms, they must worry not about attracting managers but about attracting the owners of firms undergoing initial public offerings. Thus, the states will adopt corporate law structures that maximize shareholder wealth. These structures will also maximize the returns from initial public offerings, because bidders will be willing to pay more for shares in companies with shareholder-maximizing corporate law than for shares in companies that allow managers to expropriate superoptimal private benefits.<sup>88</sup>

Moreover, according to the race-to-the-top story, shareholders may have sufficient power to make already existing public firms reincorporate if doing so is in their best interests.<sup>89</sup> Thus, states both will seek to attract firms by appealing to shareholders with wealth-maximizing rules and will be wary of deferring so much to managers that shareholders will have an incentive to try to fire the managers and reincorporate their firms elsewhere. This aspect of the race-to-the-top story has less theoretical appeal in the abstract than the idea that states will try to attract owners at the time of the initial public offering. With respect to firms making the decision where to incorporate initially, the race-to-the-top story is a priori more convincing than Cary's race to the bottom, because there is no reason that states would make concessions to managers at this time. With respect to firms deciding about whether to reincorporate, however, it is impossible to draw an a priori conclusion. Perhaps shareholders have enough power that they can force firms to reincorporate in states that maximize shareholder value, but perhaps managers have enough power to reincorporate in states that maximize value to them. 90 Thus, as a theoretical matter, the race-to-the-bottom theory could be more accurate than the race-

infinite variety of competing opportunities." *Id.* at 257. *See also* Bebchuk, *supra* note 41, at 1479 ("In a world with only initial incorporations, a state seeking to maximize local incorporations must make its corporate law attractive to those parties who control companies at the time that the companies first go public.").

<sup>87</sup> See Winter, supra note 2, at 257.

In a more recent commentary, Judge Winter noted, "I am far more confident that Professor Cary's argument about the race to the bottom is wrong than I am that my argument that Delaware is leading the race to the top is right." Winter, *supra* note 17, at 1529. He added: "[T]he race to the top may be slow because Delaware is the only state devoted exclusively to maximizing franchise taxes and may need only to offer a code marginally more efficient than other states ...." *Id.* at 1530.

<sup>89</sup> See, e.g., Bernard Black, Is Corporate Law Trivial? A Political and Economic Analysis, 84 Nw. U. L. REV. 542 (1996) (arguing that firms can reincorporate easily, thus making the content of a particular state's corporate law trivial). But cf. ROMANO, supra note 74, at 34–35 (noting that the large costs of reincorporation may deter some firms from reincorporating).

<sup>90</sup> In competition for corporate charters, however, a shareholder vote is generally a prerequisite to reincorporation. See, e.g., DEL. CODE ANN. tit. 8, § 242 (1997); ROBERT C. CLARK, CORPORATE LAW § 10.2.4, at 416–17 (1986). Nonetheless, as Professor Bebchuk stresses, shareholders may be imperfectly informed. See Bebchuk, supra note 41, at 1472–75. In addition, managers may be able to induce reincorporation by tying a vote for reincorporation to some other matter. See id. at 1475.

to-the-top theory if reincorporations were more important than initial incorporation decisions and if managers in fact had more power than shareholders in reincorporation decisions.

Though its inverse, the race-to-the-top theory shares a principal flaw of the race to the bottom: Even if states seek to create rules that appeal to owners at the time of an initial public offering, there is no reason that states will necessarily wish to innovate. As indicated above, owners of firms at the time of an offering are likely to be risk-averse and thus wary of any innovation in corporate law structures that will lead to uncertainty about the returns they can expect. Thus, while a state's initial choice of corporate law is likely to be more favorable to shareholders than under the race-to-the-bottom story, there is no guarantee that corporate law will progress quickly toward the best possible corporate law.

In addition, the race-to-the-top theory is most likely to be valid if the corporate law race is a race worth watching. That is, if fifty states (plus perhaps the District of Columbia<sup>93</sup>) are competing neck and neck, or if there are a fair number of competitors near the front of the race, one might expect states to do whatever they can to win. After all, if there is a large prize and a number of contestants each of whom has only a small percentage chance of winning, then each contestant might be better off taking a bold move than acting conservatively. In a road race, by increasing the variance of one's expected finishing time, a runner with an initially small probability of winning increases that probability. So, with a number of contestants entering a marathon's final mile, it may well make sense for a runner to sprint; even though this may lower the runner's expected finishing time (there is a fair chance the runner will get out of breath and have to walk the rest of the way), it gives the runner a chance of breaking out of the pack.94 And so with states, if there were a number of leading incorporation states, any one state might have an incentive to innovate boldly in hopes of capturing the title.

The race, however, becomes much less exciting when one state is clear out in front.<sup>95</sup> If there is one mile left in a marathon, and one runner

<sup>91</sup> See supra Section I.C.

<sup>92</sup> See supra Section I.B.

<sup>93</sup> Cf. G. Michael Epperson & Joan M. Carny, The Capital Shareholder's Ultimate Calamity: Pierced Corporate Veils and Shareholder Liability in the District of Columbia, Maryland, and Virginia, 37 CATH. U. L. REV. 605, 614–20 (1988) (discussing a unique facet of D.C. corporate law).

<sup>94</sup> See, e.g., London Marathon Has Thrilling Finishes, MILWAUKEE J. SENTINEL, Apr. 14, 1997 (describing sprints to finish leading to two- and one-second finishes in men's and women's marathons).

<sup>95</sup> For a real world example in the context of charter competition, see Keith Paul Bishop, The Delaware of the West: Does Nevada Offer Better Treatment for Directors?, INSIGHTS, Mar. 1993, at 20, which discusses Nevada's attempt to compete with Delaware for corporate charters. See also Cary, supra note 1, at 665 (discussing an earlier attempt by Nevada); cf. id. at 666 n.18 (noting an attempt by Michigan to "out-Delaware Delaware").

knows he has a substantial lead, sprinting risks losing the lead should he falter. Instead, the runner will jog to the finish. Other runners, meanwhile, will also not have an incentive to push their hardest. They cannot win, but assuming they are better off finishing than collapsing, they too are likely to jog the remainder of the race.

In the corporate law context, if one state is already far ahead of the other states, the leading state will not have an incentive to innovate boldly. because that state has nothing to gain and everything to lose. Likewise, trailing states will not have much incentive to try to overtake the leading state. To beat the leading state, a trailing state would need to do more than duplicate the leading state's corporate law structures. Given the real thing, which has proved its mettle over time, and a copy, which may or may not work as well in the long run, a firm will pick the real thing, that is, the leading state, over the copying state. Moreover, as Ehud Kamar has argued, a leading state may design its law to make it more difficult for other states to copy. 96 Thus, a trailing state will need to seek to create a better corporate law than the leading state if it is to take the lead. That is, it will need to innovate boldly. But such bold innovation invites the risk of catastrophic failure; an innovating trailing state might, for example, lose a number of existing firms who choose to reincorporate elsewhere, and a failed innovation may end up lowering the returns of firms that decide not to flee.

Moreover, a trailing firm that innovates boldly may face an additional obstacle: the prospect that the leading firm may copy the innovation and, indeed, may copy the innovation not just when it proves to be successful but immediately. Ian Ayres has raised this possibility by analogizing competition for corporate charters to a yachting race. A yacht racing only against a time clock will always seek to position its sails in the direction that seems likely to best capture the wind. But in a two-yacht race, the trailing yachtsmen might position their sails differently, in the hope that an unexpected gust of wind could propel their yacht forward. The leading yachtsmen, however, might then "cover" the trailing yacht by positioning their sails in the same direction. Use Just as both yachts thus end up moving relatively slowly, a leading state might copy even regressive innovations

<sup>96</sup> See Ehud Kamar, A Regulatory Competition Theory of Indeterminacy in Corporate Law, 98 COLUM. L. REV. 1908 (1998). Kamar argues that Delaware enhances its competitiveness by making its law more indeterminate, thus for example, making it difficult for another state to imitate Delaware law without hiring its judges. See id. at 1927-39. Because the amount of indeterminacy that results is suboptimal from a social welfare perspective, see id. at 1919-23, Delaware makes it more likely that another state will be able to surpass it, but less likely otherwise that other states will come close to or equal it.

<sup>97</sup> See Ayres, supra note 69, at 550-56.

<sup>98</sup> See id. at 551-52 & n.35; cf. ROMANO, supra note 74, at 16 (stating that "[Delaware] excels because when it is not the first to innovate, it is among the first to imitate").

of other states.<sup>99</sup> Even though the leading state may expect the innovations to fail, it will not lose its lead as long as the trailing states have adopted the same innovations. And recognizing this possibility, the trailing states will not have much incentive to adopt the innovation in the first place.

For all these reasons, the race to the top is likely to be faster if there are a number of leading contenders than if there is a sole dominant leader. But what determines this equilibrium? To some extent, the answer depends on the size of the spoils to the winner and the losses to the loser. Let us assume that a race starts with at least a few states in contention. If there is a great advantage to being the leading state, that is, if the spoils are large, then as long as there are initially a number of leading contenders, there will likely be a sprint leading to establishment of a leader. If, by contrast, a handful of states more or less share the spoils, then being number one is not much better than being number two, and no state will have an incentive to sprint forward. Whether a winner-takes-all system is ex ante best is thus an empirical question. Even if it is ex ante best to adopt a winner-takes-all system, there may come a time when a leader has emerged, and switching to a system in which several states share the lead, if such a switch were possible, would increase innovation. 100 The issue may turn on the costs to a state of being not merely a trailing state but a laggard state far behind the pack. If there is little difference between finishing second and finishing last, then states will have large incentives to make bold moves for the lead if there is a large advantage to being first.

On the other hand, if there is a large difference between finishing second and finishing last, then states will be hesitant to innovate boldly in an effort to take the lead. In this case, there may be more innovation if the states immediately following the leading state substantially share the spoils with the leading state. This is because the leading states in this situation may still need to innovate somewhat to prevent themselves from falling behind, while if the winner takes all the spoils, no one will innovate because the states just behind the leader will not want to risk finishing last and the leader will thus be able to coast along in front.

Through the lens of innovation, the race-to-the-top story is thus too simple, for it misses many of the dynamics that will occur in real world races among states. Ultimately, the speed of the race will depend on a

Ayres urges that this may help explain Delaware's adoption of antitakeover provisions in the 1980s. See Ayres, supra note 69, at 555–56. For other explanations of Delaware's actions, see ROMANO, supra note 74, which stresses that Delaware lagged behind other states in passing antitakeover statutes. See also Schwartz, supra note 20, at 554 ("Delaware adopted relatively modest antitakeover provisions at a time when many states provided strong defenses against an unfriendly takeover."). Cary was the first to note that the dynamics of antitakeover legislation might be different from those of other corporate law legislation. See Cary, supra note 1, at 668 n.38.

<sup>100</sup> See infra Subsection IV.A.3 (discussing the possibility of imposing caps on the number of firms a single state serves).

range of factors, including the amount by which the leading state is ahead, the spoils that the leading state wins relative to those states close behind, and the cost to a state of falling well behind. Thus, although the race-to-the-top story may be more plausible than the race-to-the-bottom alternative, states' desires to attract firms at the time of initial public offerings does not guarantee that movement toward the top will be a race. <sup>101</sup>

#### C. The Race to Nowhere in Particular

Although the race-to-the-top theory has dominated the race-to-thebottom theory in scholarly commentary, at least in the context of corporate charters, some scholars have asked whether there is a race at all. Most importantly, Jonathan Macey and Geoffrey Miller have offered an interest group alternative to both theories. 102 Under this view, state legislatures are not directly responsive to either shareholders or their managers, but to interest groups. 103 Those interest groups wish to maximize the rents that they can obtain from those firms and care about the number of firms that incorporate in the state only to the extent that such incorporation increases the rents they receive. <sup>104</sup> For example, a state bar might want to maximize the amount of legal work that the state's corporate law will produce. 105 Thus, the corporate law rules that result will not quite maximize shareholder value, because the state will create legal rules and procedures that result in more litigation than shareholders or managers would choose. Firms thus pay states both in straightforward corporate fees and through inefficient rents for interest groups. The result is what William Bratton

<sup>101</sup> That there is no race could help explain the "corporate law paradox," that is, the survival of antitakeover provisions that most commentators believe are inefficient. See Robert M. Daines & Jon D. Hanson, The Corporate Law Paradox: The Case for Restructuring Corporate Law, 102 YALE L.J. 577 (1992) (review essay).

<sup>102</sup> See Jonathan R. Macey & Geoffrey P. Miller, Toward an Interest-Group Theory of Delaware Corporate Law, 65 Tex. L. Rev. 469 (1987).

<sup>103</sup> A more recent account emphasizes that managers of corporations incorporated in particular states may form a separate interest group and that the relative strength of this interest group relative to the corporate bar interest group helps explain differential rates of corporate law innovations across states. See William J. Carney, The Production of Corporate Law, 71 S. CAL. L. REV. 715 (1998).

<sup>104</sup> See Macey & Miller, supra note 102, at 492.

<sup>105</sup> See id. at 506-07; see also ROMANO, supra note 74, at 30 ("Delaware's commanding position in the charter market may possibly enable the corporate bar to siphon a share of Delaware's monopoly rents by generating some laws that decrease firm value and increase attorney income."); cf. Schwartz, supra note 20, at 557 ("In fact, the process of writing and amending most corporate statutes is largely controlled by the corporate bar."). Cary had also noted that Delaware lawyers might have played a critical role in defining the contours of Delaware corporate law. See Cary, supra note 1, at 686-87.

calls a "race to nowhere in particular"—a corporate law equilibrium that is neither at the top or the bottom but somewhere in between. <sup>106</sup>

Macey and Miller's principal insight—that the utility calculus of states designing corporate laws may give a large weight to concentrated interests—is surely correct. Moreover, it implies that corporate law is not now at the top; for giving rents to interest groups is inefficient, and firms would thus be better off not paying the rents and instead paying a smaller amount in increased direct fees to the states. It does not, however, necessarily contradict the claims that corporate law is a race to the bottom or a race to the top. After all, the division by a single state of the spoils among taxpayers and particular interest groups is irrelevant to the conduct of the race as a whole.<sup>107</sup> If the total pecuniary cost to a firm of incorporating in a state is x, it is irrelevant to the firm that some portion of x goes directly to the state, some portion goes to an interest group, and some portion is a deadweight loss. The firm cares only about x. And if another state clearly can provide the same benefits with a lower total pecuniary cost, a firm will incorporate in that state (or even reincorporate in that state, if the costs of reincorporation are sufficiently low), regardless of how that state divides the windfall.

Thus, states will still compete against one another to attract firms—whether they are attracting managers, and thus racing to the bottom, or shareholders, and thus racing to the top—even in the interest group conception. A state may, of course, have a large lead over other states in the benefits that it provides to firms; if, for example, it supplies a corporate law viewed as more stable than any other states' and at least as sound in other ways, it can charge corporations higher fees and rents than other states. As Marcel Kahan and Ehud Kamar put it, a state may have market power in the market for corporate law. It corporate law were at the top (or the bottom, which is really just the top for managers) and the market for corporate law were truly competitive, then the cost to the state of administering the corporate law would be equal to the fees a corporation would pay. Any higher fees, or any rents on top of fees, would mean

<sup>106</sup> See William W. Bratton, Corporate Law's Race to Nowhere in Particular, 44 U. TORONTO L.J. 401 (1994).

<sup>107</sup> See Macey & Miller, supra note 102, at 492 ("From the standpoint of shareholders and corporate managers, both franchise fees and the panoply of indirect costs are largely interchangeable.").

<sup>108</sup> This is, of course, Macey and Miller's view in the context of corporate charter competition. See id. at 492 & n.86.

<sup>109</sup> Marcel Kahan & Ehud Kamar, Price Discrimination in the Market for Corporate Law, 86 CORNELL L. REV. 1205, 1209-14 (2001).

<sup>110</sup> This stems from the standard economic assumption that firms in competitive markets earn zero economic profit. See generally lan Ayres & Robert Gertner, Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules, 99 YALE L.J. 87, 108 n.99 (1989) ("Economic profits are the residual earnings after all implicit and opportunity costs are accounted for.").

that another state could marginally undercut the leading state and induce firms to reincorporate. But just because rents exist now and do not exist at the top or the bottom does not mean that rents will always exist or that the total fees that corporations pay, assuming constant benefits, will not decrease over time. If other states can improve their corporate law products to the level of the leading state, that state will need to decrease the amount it charges to corporations—including both fees and rents—to stay competitive. Thus, unless one state has so great a lead over other states that no state will ever be able to close the gap, there will still be competition among the states to provide a sound corporate law; and though we may be nowhere in particular for now, nowhere in particular will not be where we are moving.

#### D. The Crawl to the Top

Each of the three existing paradigms of corporate law captures something about how states choose corporate law provisions. The race-to-the-bottom paradigm shows that because of agency costs, a state might choose provisions of corporate law that maximize the wealth of managers rather than of shareholders.<sup>111</sup> The race-to-the-top paradigm explains that because firms will choose for initial public offerings those states that offer the corporate law most likely to maximize shareholder wealth, states will care about shareholders in designing corporate law provisions.<sup>112</sup> And the race-to-nowhere-in-particular paradigm explains that corporate law may be inefficient because interest groups may seek inefficient rents.<sup>113</sup> But each of the paradigms fails to incorporate the dynamics of innovation fully into its story. Because firms and states have inadequate incentives to innovate, corporate law is not likely to be *racing* anywhere.

I thus offer a fourth paradigm, which claims that corporate law is a "crawl to the top." The label reflects two assertions. First, corporate law evolves slowly; indeed, the pejorative word "crawl" suggests that it evolves too slowly. Second, this evolution in the long run is likely to produce better corporate law structures. The first assertion is the easier to explain. Regardless of what the endpoint is of corporate law, firms cannot be expected to undertake risky innovations. States might innovate boldly at the beginning of the "race" if the leader obtains substantially all of the benefits of being out in front, but once a leader is established, innovation is

<sup>111</sup> See supra Section II.A.

<sup>112</sup> See supra Section II.B.

<sup>113</sup> See supra Section II.C.

<sup>114</sup> The phrase "crawl to the top" is perhaps closest to Daniel Fischel's description of a "climb to the top." Daniel R. Fischel, *The "Race to the Bottom" Revisited: Reflections on Recent Developments in Delaware's Corporation Law*, 76 NW. U. L. REV. 913, 920 (1982). Fischel's terminology implies neither that innovation will be swift nor that it will be slow.

likely to slow down greatly. Thus, to the extent that corporate law evolves at all, it will evolve at the pace of a crawl.

The second assertion is more speculative. Why should corporate law move towards the top, rather than towards the bottom or towards nowhere in particular? The first half of this question is the more straightforward. In the long run, states that appeal to managers rather than shareholders will lose ground. Even though reincorporations could in theory lead firms to change from a shareholder-wealth-maximizing state to one that expropriates benefits for managers, the race-to-the-top theory is unambiguously stronger than race-to-the-bottom, at least with respect to the initial incorporation decision. Moreover, corporate law can provide means of preventing inefficient reincorporations, for example, by requiring shareholder approval.<sup>115</sup> Thus, even if corporate law contains inefficient provisions that are designed to benefit managers, firms will generally prefer to incorporate in states that do not have such provisions. And so, if corporate law is moving anywhere, then in the distant future, when perhaps a substantial majority of all firms do not even exist today, we should expect efficient rules to displace inefficient ones.

The second half of the question is more difficult, and my description of the disincentives that prevent firms and states from innovating might seem to suggest that corporate law is likely not to move at all. In this view, corporate law might be a completed race to nowhere in particular, rather than a crawl from nowhere in particular to the top. Or, corporate law might evolve in the future but in unpredictable ways depending on interest group concerns, and it would thus be a crawl from one nowhere-in-particular to some other nowhere-in-particular. These views are too pessimistic. Although firms and states may not generally want to innovate by moving corporate law in a direction not tried before, nothing in my analysis suggests that they will not want to adopt innovations that have already proven themselves. 116 Moreover, there may be rare instances when the benefits of an innovation for a firm exceed the costs because unique circumstances exist that the innovation particularly addresses. These occasional adoptions of innovations will provide data to other firms, and if they prove successful, firms will adopt them. And even if these innovations are likely to be relatively small, in an evolutionary process these small innovations may aggregate to larger ones. Corporate law evolution will thus proceed in fits and starts, and it may occasionally even move backwards. In the long run, however, good innovations will tend to defeat bad, and leading firms that adopt inefficient rules may end up

<sup>115</sup> Indeed, supermajority approval could be required for any charter amendment. See ROMANO, supra note 74, at 88.

<sup>116</sup> See supra note 83 and accompanying text (discussing the diffusion of successful corporate law innovations across the states).

yielding to unexpected upstarts. And thus we can expect corporate law to crawl to the top.

## III. Constructing Crawls to the Top in Corporate Law

In explaining why we should expect there not to be enough innovation in corporate law and why the path of innovation in corporate law is most likely to be a "crawl to the top," I have attempted to be quite general and not to limit my analysis to the context of corporate charters. This may seem peculiar, since the only existing area of state competition, and thus the only existing crawl to the top, is in that area. Corporate law, however, is about more than board composition, voting rules, and poison pills. It encompasses legal rules that constrain not only a firm's internal decision-making structures but also its interactions with shareholders, creditors, contracting parties, and indeed society at large. Regimes of interstate competition could govern all of these types of interactions, and the purpose of this Part is to broaden our perspective on the possibility of interstate competition. More specifically, this Part assesses the strengths and weaknesses of hypothetical interstate competition in a variety of areas.<sup>117</sup>

I have ordered the areas of possible interstate competition that I explore loosely from most plausible to least plausible, with a recognition that all of the proposals to introduce competition in areas not having it are radical, and, given the low likelihood of adoption, more important to consider as thought experiments than to form into detailed proposals. I begin with corporate charters, the sole area of corporate law in which there has been a vibrant regime of competition. Exploration of this area provides an opportunity to review some empirical results and thus to compare my theoretical analysis above with the reality. Next, I consider regulation of exchanges. This is another area in which some competition exists, but the competition is among private organizations subject to a single federal regulatory regime. One might instead imagine direct state competition or competition of private firms operating under state regulatory regimes that they select. After that, I move to state competition for securities regulation,

Buckley & Margaret F. Brinig, Welfare Magnets: The Race for the Top, 5 Sup. Ct. Econ. Rev. 141 (1996), Daniel C. Esty, Revitalizing Environmental Federalism, 95 MICH. L. Rev. 570 (1996), and Peter P. Swire, The Race to Laxity and the Race to Undesirability: Explaining Failures in Competition Among Jurisdictions in Environmental Law, 14 Yale L. & Pol'y Rev. 67 (1996). The seminal work on interjurisdictional competition is Charles Tiebout, A Pure Theory of Local Expenditures, 64 J. Pol. Econ. 416 (1956). Recent works on interjurisdictional competition generally are Thomas R. Dye, American Federalism: Competition Among Governments (1990); and Competition Among State and Local Governments: Efficiency and Equity in American Federalism (Daphne A. Kenyon & John Kincaid eds., 1991). For a thoughtful critique of the Tiebout model, see Bratton & McCahery, supra note 71.

an area that is currently subject to federal control but for which a recent proposal has suggested the alternative of state competition. No commentators, meanwhile, appear to have suggested state competition for bankruptcy systems, but recent scholarship on bankruptcy helps underline the advantages that such a system might offer.

Contemplating the prospect of expanded interstate competition may seem downright peculiar, given that I have just concluded competition is likely to produce only a "crawl to the top." Such a criticism, however, depends on focusing on "crawl" rather than "top." Even if state competition is slow, it may be faster and more efficient than the alternative of federal regulation. In each of the Sections that follow, I hope to compare the attractiveness of state competition with federal regulation. For each area, I show that, although centralized federal control may have some advantages, state competition offers significant advantages over federal regulation. In addition, the strengths of state competition relative to federal control would be increased if the crawls to the top could be turned into races, a project that I will turn to in Part IV.

## A. Corporate Charters

Competition for corporate charters is perhaps the most obvious place to look to test the theory that corporate law is a crawl to the top. The empirical evidence strongly suggests that competition is, in fact, to the top. 118 Event studies 119 have suggested that when corporations do decide to reincorporate in Delaware, the leading incorporation state, the value of the stocks rise moderately, if they change at all. 120 This indicates that shareholders perceive decisions to reincorporate as value-increasing and thus contradicts the theory that Delaware offers concessions to managers at the expense of shareholders in an effort to induce reincorporation. Because there is no theoretical reason to believe that states would offer any concessions to managers at the time of initial public offerings, or at least there is no reason that states would offer any such inefficient concessions, 121 this finding completes the case against the race-for-the-

<sup>118</sup> See, e.g., ROMANO, supra note 74, at 9 ("The best assessment of the evidence is that state chartering is for the better and that Delaware's code, for the most part, benefits shareholders.").

<sup>119</sup> For a review of event study methodology, see Sanjai Bhagat & Roberta Romano, Event Studies and the Law—Part I: Technique and Corporate Litigation, available at http://papers.ssm.com/sol3/papers.cfm?abstract id=268283 (last visited Jan. 29, 2002).

<sup>120</sup> Event studies on the subject include Michael Bradley & Cindy A. Schipani, The Relevance of the Duty of Care Standard in Corporate Governance, 75 IOWA L. REV. 1 (1989); Peter Dodd & Richard Leftwich, The Market for Corporate Charters: "Unhealthy Competition" Versus Federal Regulation, 53 J. BUS. 259 (1980); Jeffrey Netter & Annette Poulsen, State Corporation Laws and Shareholders: The Recent Experience, 18 FIN. MGMT. 29 (1989); and Romano, supra note 83.

<sup>121</sup> But cf. Lucian Ayre Bebchuk & Luigi Zingales, Corporate Ownership Structures: Private Versus Social Optimality, in CONCENTRATED CORPORATE OWNERSHIP 55-75 (Randall Morck

bottom thesis. Corporate law would not inefficiently favor managers at the incorporation stage, and it does not inefficiently favor managers at the reincorporation stage, so it does not inefficiently favor managers.

The event studies, however, do not prove that Delaware law is as efficient as possible, only that it is viewed as more efficient than the laws of the states from which the specific firms that decide to reincorporate are switching. Event studies are ultimately just fancy opinion polls; although they help reveal shareholder anticipations of the effect of the event analyzed, they do not show whether the event in fact ultimately increases share value. <sup>122</sup> To do this, we would need to study firms' long-term performance after deciding whether to reincorporate. In the absence of firms willing to be randomly selected for reincorporation or to continue with their existing incorporation, such studies are understandably difficult to perform successfully. As a consequence, although we can conclude that shareholders believe that Delaware will probably produce higher returns than other states, it is possible that innovations that already exist in another state's law might actually produce greater growth. As discussed in Part I. firms and states may be risk averse, and, moreover, any informational externality benefits from a firm's innovation will not be impounded in a stock price. Just because investors' best guess is that Delaware is the best place to incorporate therefore does not mean that they believe that Delaware will produce the highest expected returns over a long period of time (it might produce lower expected returns but also a lower variance of returns), and it does not mean that the investors are right.

That corporate charter competition has led to the emergence of a leader in the race suggests, according to the analysis above, that there is less competition than there would be if several states were still vigorously competing for charters. Indeed, the charter race does appear to be more or less a crawl. Although successful innovations are diffused quickly across states. 123 the trailing states seem reluctant to innovate boldly. While state corporation codes are not all identical, they are not strikingly different either, certainly not in comparison to the great differences in corporate structures that exist internationally. Nonetheless, states other than Delaware are far behind the leader in the incorporation game.<sup>124</sup>

Of course, just because there is no evidence that state charter competition has been sufficiently aggressive to constitute a race to the top, the crawl to the top that exists instead is still likely to be superior to the

ed., 2000) (arguing that initial owners seeking to maximize their proceeds may make choices that are privately optimal but socially inefficient).

<sup>122</sup> See supra note 41 and accompanying text.
123 See Romano, supra note 83.
124 See, e.g., Curtis Alva, Delaware and the Market for Corporate Charters: History and Agency, 15 DEL. J. CORP. L. 885, 889 (1990); Kaouris, supra note 68, at 1012 tbl.4 (showing Delaware well ahead in a class of reincorporations).

alternative of federal regulation. For one thing, the past existence of charter competition may have led to more innovation than would have existed in its absence, as Delaware innovated to improve upon the corporate law of New Jersey, which had previously been the dominant state. Moreover, the federal government probably would not be boldly innovative either, and indeed we would not want it to be, because any change in a mandatory federal regime would affect all firms and thus would provide neither portfolio diversification nor much in the way of informational benefits, since uniform innovation would produce no control group. There would likely be even less innovation, as at least under the state system, small innovations that appear unequivocally to be successful become widely adopted. In short, charter competition both helps to verify the theoretical arguments for the crawl-to-the-top paradigm offered above and suggests that, even if the crawl could not be sped up into a race, state competition is still better than the alternative.

## B. Exchange Regulation

Besides corporate charters, the only area of corporate law in which there is competition among lawmakers of any sort is exchange regulation. The competitive regime, to be sure, is quite different: Private exchanges rather than states compete to list individual firms' securities. <sup>126</sup> In contrast to the market for corporate charters, the market for exchanges might seem quite vibrant. Different stock exchanges use quite different methods of trading shares—through market-makers as in the New York Stock Exchange, or over the counter, as in the NASDAQ. <sup>127</sup> Moreover, mergers of exchanges, including the combination of the American Stock Exchange and the NASDAQ, might suggest that competitive forces are successfully at work. <sup>128</sup> Comparing levels of innovation among states for corporate charters and exchanges, however, is unfair, because the revolution in information technology that is driving much of the innovation in

<sup>125</sup> See William E. Kirk, III, A Case Study in Legislative Opportunism: How Delaware Used the Federal-State System to Attain Corporate Pre-eminence, 10 J. CORP. L. 233 (1984); see also Cary, supra note 1, at 664–65. Delaware's code was modeled on New Jersey's. See Wilmington City Ry. v. People's Ry., 47 A. 245, 251 (Del. Ch. 1900).

<sup>126</sup> See generally Joel Seligman, The Future of the National Market System, 10 J. CORP. L. 79 (1984) (discussing exchange regulation).

<sup>127</sup> See John F. Olson & D. Jarrett Arp, Factors a Company Should Consider in Selecting a Market in Which to Trade Its Publicly Held Securities, SB09 ALI-ABA 101 (1996) (discussing various exchanges).

<sup>128</sup> See, e.g., Greg Ip & Silvia Ascarelli, Mergers of Markets May Mean Trading Will Be Cheaper, Speedier and Easier, WALL St. J., July 14, 1998, at C1; Deborah Lohse, NASD and Amex Boards Approve a Merger Agreement, WALL St. J., Mar. 19, 1998, at C1; see also Sara Calian, Market Marriage: Nasdaq & Amex—Stock-Market Merger Talk Hits Europe, WALL St. J., Mar. 13, 1998, at C13 (noting the possibility of similar combinations in Europe); Delhi, Bombay Stock Exchanges Consider Merger, ASIA PULSE, July 9, 2001, available at 2001 WL 20128525.

exchanges has little if any effect on optimal corporate governance structures.<sup>129</sup> Indeed, the continuation of exchange systems that many commentators view as inefficient given modern technology might suggest that there is not enough innovation in the market for exchanges, or at least that there are significant barriers to rapid diffusion of technological advances.<sup>130</sup>

The existing regulatory arrangement, in any event, is not the only means of achieving competition for exchange regulation that we can imagine. Instead of having private exchanges subject to the regulatory control of the federal government, 131 one could imagine a system in which each state may open its own exchange, subject to no interference from the federal government. Thus, the Delaware Exchange might compete against the New York Exchange in such a regime. Transitioning to a system of pure state regulation, however, would probably be both quite expensive, as it would require dismantling the private exchanges and paving just compensation, 132 and counterproductive, since the existence of private exchanges probably facilitates competition. An alternative approach would be to allow each private exchange to choose its regulator and thus operate either within the confines of existing federal rules or under the aegis of any state that passes an enabling statute. 133 States would thus compete to create regulatory regimes that would attract exchanges (and, indirectly, firms) and might retain the option of opening their own public exchanges. States with more efficient rules would crawl to the top, as exchanges selecting them would tend to prosper relative to other exchanges.

It might seem that given the existence of private competition among exchanges, there should be federal deregulation and preemption of state law. This would be a mistake, because it has potential costs and no benefits. Exchanges, after all, must ultimately be subject to at least contract law.<sup>134</sup> Otherwise, exchanges would be able unilaterally to raise fees that they charge firms already listed on their exchange, because there would be no way for firms and exchanges to agree on prices in advance. Some existing, large exchanges might not do so lest they suffer large

<sup>129</sup> See generally Donald C. Langevoort, Information Technology and the Structure of Securities Regulation, 98 HARV. L. REV. 747 (1985) (offering a prescient account of the effects of information technology on securities regulation).

<sup>130</sup> Cf. Michael J. Simon & Robert L.D. Colby, The National Market System for Over-the-Counter Stocks, 55 GEO. WASH. L. REV. 17, 85 (1986) (noting the possible benefits of competition in curing existing inefficiencies in exchanges).

<sup>131</sup> The federal government regulates exchanges in 15 U.S.C. §§ 78a-78mm (2000).

<sup>132</sup> See U.S. CONST. amend. V.

<sup>133</sup> For a recent approach along these lines, see Jonathan R. Macey & Maureen O'Hara, Regulating Exchanges and Alternative Trading Systems: A Law and Economics Perspective, 28 J. LEGAL STID. 17 (1999).

Even libertarians like Randy Barnett support the existence of contract law, at least when contract interpretation is based on the principle of consent. See, e.g., Randy E. Barnett, A Consent Theory of Contract, 86 COLUM. L. REV. 269 (1986).

reputational costs, but the absence of contract law protection would almost surely doom any exchange upstarts. Given the necessity of contract law, we must determine which state's law should apply. With a competitive regime, exchanges (and thus firms) would have incentives to choose states whose contract law is most efficient, and states might even customize generic rules of contract to facilitate efficient transactions specifically in the exchange context. Exchanges, moreover, might want to tie their own hands through restrictive state law provisions to enhance the credibility of their anticipated business plans to firms. Even if these benefits of state law competition were absent, it comes at no cost relative to a federal deregulatory regime. A state, after all, could decide to offer a deregulated regime, perhaps even a deregulated regime without contract protection, to exchanges, and thus exchanges would choose to incorporate in such a state if that arrangement were clearly the most efficient.

State-based competition for exchanges would thus lead to two layers of competition: one among states striving to create optimal legal rules, and one among exchanges striving to create optimal arrangements for trading. Many of the rules that exchanges currently impose on firms, however, do not relate directly to the mechanisms by which securities are traded. Instead, they relate to issues such as minimal financial requirements and disclosure, which are perhaps more properly thought of as part of securities law. Whether exchanges would continue to offer such rules would depend on the outcome of competition, as well as on any changes in other areas of the law. If, for example, securities law were selected via competition among states, as discussed immediately below, then exchanges might find it efficient to leave disclosure requirements and the like to the separate securities law competition.

<sup>35</sup> See generally Anthony T. Kronman, Contract Law and the State of Nature, 1 J.L. ECON. & ORG. 5 (1985) (discussing "hand-tying"); Henry Hansmann & Reinier H. Kraakman, Hands-Tying Contracts: Book Publishing, Venture Capital Financing, and Secured Debt, 8 J.L. ECON. & ORG. 628 (1992) (same). In the corporate charter context, Delaware effectively improves such hand-tying by requiring a two-thirds legislative vote to change corporate law provisions. See Frank H. Easterbrook, Antitrust and the Economics of Federalism, 26 J.L. & ECON. 23, 33–35 (1983); Romano, supra note 83, at 265–73.

<sup>136</sup> A single corporation might select a primary exchange as well as other exchanges on which it agrees to allow its securities to be traded. See generally Yakov Amihud & Haim Mendelson, A New Approach to the Regulation of Trading Across Securities Markets, 71 N.Y.U. L. REV. 1411 (1996) (arguing that a securities issuer should be able to determine in which markets its securities are traded).

<sup>137</sup> For a useful discussion, see Jay D. Hansen, London Calling?: A Comparison of London and U.S. Stock Exchange Listing Requirements for Foreign Equity Securities, 6 DUKE COMP. & INT'L L.J. 197, 206–07 (1995). See also Schwartz, supra note 20, at 555.

#### C. Securities Law

Securities law has been an almost exclusive province of the federal government since the 1933 and 1934 Securities Acts. A proposal by Roberta Romano, however, would change that. Professor Romano, citing the benefits of competition among states in corporate charters, crecommends that each firm should be allowed to choose its securities domicile, just as firms currently choose their corporate domicile. A firm could pick the securities rules of a particular state or could select the federal government (i.e., the Securities and Exchange Commission). The state securities regime would encompass both antifraud rules and disclosure rules, but federal law would continue to preempt rules governing brokers.

My analysis of corporate law innovation ultimately supports Romano's proposal, albeit tentatively. A crawl to the top seems preferable to an exclusively federal regime, especially since, as Romano argues, the federal government may sometimes impose securities rules that are more burdensome than necessary.<sup>144</sup> The crawl-to-the-top paradigm, however,

<sup>138</sup> See Securities Act of 1933, ch. 33, 48 Stat. 74 (codified as amended at 15 U.S.C. §§ 77a-77aa (2000)); Securities Exchange Act of 1934, ch. 44, 48 Stat. 881 (codified as amended at 15 U.S.C. §§ 78a-78mm (2000)).

<sup>139</sup> See Roberta Romano, Empowering Investors: A Market Approach to Securities Regulation, 107 YALE L.J. 2359 (1998) [hereinafter Romano, Empowering Investors]. A related proposal that focuses on the international context is Stephen J. Choi & Andrew T. Guzman, Portable Reciprocity: Rethinking the International Reach of Securities Regulation, 71 S. CAL. L. REV. 903 (1998). See also Stephen J. Choi, Gatekeepers and the Internet: Rethinking the Regulation of Small Business Capital Formation, 2 J. SMALL & EMERGING BUS. L. 27 (1998) (explaining how the Internet is making it more difficult for countries to enforce mandatory securities law disclosure regimes). Romano extended her argument to the international context and responded to various objections in Roberta Romano, The Need for Competition in International Securities Regulation, 2 THEORETICAL INQUIRIES L. 387 (2001). For a response to Romano, arguing that each issuer would select a socially suboptimal level of disclosure in a competitive regime, see Merritt B. Fox, The Issuer Choice Debate, 2 THEORETICAL INQUIRIES L. 563 (2001).

<sup>140</sup> See Romano, Empowering Investors, supra note 139, at 2383-88.

<sup>141</sup> Other scholars have suggested that exchanges should be the locus of regulation, with firms able to choose among exchanges. See A.C. Pritchard, Markets as Monitors: A Proposal to Replace Class Actions with Exchanges as Securities Fraud Enforcers, 85 VA. L. REV. 925 (1999).

<sup>142</sup> See Romano, Empowering Investors, supra note 139, at 2365.

<sup>143</sup> See id. at 2369-70.

<sup>144</sup> See id. at 2373-83. There has long been a vibrant debate in the literature about whether securities disclosure laws are justified. Compare George J. Benston, Required Disclosure and the Stock Market: An Evaluation of the Securities Exchange Act of 1934, 63 AM. ECON. REV. 132, 144-45 (1973) (arguing that the 1934 Act did not substantially increase disclosure by firms), with Irwin Friend & Randolph Westerfield, Required Disclosure and the Stock Market: Comment, 65 AM. ECON. REV. 467 (1975), and Joel Seligman, The Historical Need for a Mandatory Corporate Disclosure System, 9 J. CORP. L. 1 (1983). Other relevant studies, finding no increase in value following the 1933 Act for new stock registration, are Gregg A. Jarrell, The Economic Effects of Federal Regulation of the Market for New Securities Issues, 24 J.L. & ECON. 613 (1981), and George J. Stigler, Public Regulation of Securities Markets, 37 J. BUS. 117, 120-24 (1964). In addition to siding with those who argue the SEC has not had a substantial effect, see Romano, Empowering Investors, supra note 139 at 2373 n.37, Romano also argues that federal antifraud laws are unlikely to give better protection than state

suggests that Romano's proposal might not be as revolutionary as one might initially guess. Because firms are risk-averse, many will be hesitant to opt out of the federal securities regime, even if they believe (but are unsure) that a state's securities rules are likely to produce higher returns. This is particularly true given that switching out of the federal regime might be viewed as a signal that the firm has something to hide; this signaling effect could lead to an unraveling in which no state has an incentive to opt out of the federal securities laws. Of course, if federal securities laws are in fact not just suboptimal but extremely suboptimal, then the signaling effect would likely be diminished, as security holders would recognize the benefits of opting out. Moreover, the possibility that a vast majority of firms might stick with a federal regime might be seen as a benefit, by ensuring a smooth transition from one regime to the other. The supplementary of the supplementary of the other.

The possibility that many firms might continue to subject themselves to the federal regime even if it is suboptimal suggests, however, that it might be advantageous not to allow the federal government as a regulatory choice. By eliminating the Securities and Exchange Commission's regulatory role altogether, the government would eliminate the signaling problem; all firms would need to choose a state law regime and would thus presumably choose the regime most likely ex ante to produce the greatest net benefits. Such a regime might in fact be quite like the regime used by the SEC, since states could copy those aspects of current federal practice that they believe will allow them to attract firms.

An additional advantage of eliminating the federal government option is that such elimination would guarantee vigorous competition among states for securities business. Ultimately, a clear leader might emerge and innovation would thus slow down, but in the interim, states would have incentives to innovate boldly in hopes of winning firms' allegiance in the early years of securities competition. Presumably, firms would be relatively willing to change the state of their securities domicile in the first few years of competition; because investors would recognize that determination of the best securities domicile would take some time, a change in securities domicile from one state to another would not have a great signaling effect. Understanding this, states whose initial attempts at innovation proved unproductive would be relatively willing to change

antifraud laws, see id. at 2381-83.

<sup>145</sup> See Ayres, supra note 69, at 547-59.

Empirical evidence suggesting that companies would be willing to opt out of the federal regime is that many U.S. public companies have issued securities offshore under a Regulation S exemption from securities registration requirements. See Stephen Choi, The Unfounded Fear of Regulation S: Empirical Evidence on Offshore Securities Offerings, 50 DUKE L.J. 663 (2000).

<sup>147</sup> But cf. Louis Kaplow, An Economic Analysis of Legal Transitions, 99 HARV. L. REV. 509 (1986) (arguing that legal transitions should be immediate).

course and try something new. Of course, eliminating the federal government option seems less politically feasible than creating alternative options.

States would also be more tolerant of innovation than in the corporate charter context because, regardless of whether the federal government option were available, a state contemplating innovation has very little to lose. In the corporate charter context, an innovation gone awry could cause harm to firms incorporated locally and could cause an exodus of firms that decide to reincorporate elsewhere, but at the beginning of competition among states for securities regulation, states will have almost no business at all. 148 While states might already have rules governing intrastate securities, they could easily preserve such rules and write new ones to govern interstate securities. Creating a new securities regime is not costless, of course, a state would need to invest some resources in drafting rules and, perhaps, in starting up a new court. These costs, however, pale compared to the risks that a state takes when innovating with respect to corporate charters. Moreover, states could choose not to compete in a securities law competition if the costs of creating a regulatory apparatus were expected to exceed the benefits.

An interesting aspect of Romano's proposal that has potential repercussions for other possible areas of state competition is her suggestion that corporations be allowed to select a foreign government as their securities regulator.<sup>149</sup> This recommendation builds on the work of Stephen Choi and Andrew Guzman, who have urged a regime of "portable reciprocity," in which the United States would recognize the legitimacy of the securities regulation regime of any foreign country that recognizes the legitimacy of U.S. regulation.<sup>150</sup> Certainly, this modification to a state competition system cannot hurt; the only plausible grounds for not extending competition are protectionist, and the "portable reciprocity" rule is responsive to any such concern.<sup>151</sup>

<sup>148</sup> I say "almost no" because some state securities regulation continues to exist. But cf. ROMANO, supra note 74, at 112 ("The important fact from the viewpoint of federalism is that the effect of [state] merit regulation on corporate equity capital has become increasingly contained over time, and it is primarily a nuisance, as the dynamic of state competition, however slowly, prods states to discard cumbersome arrangements with dubious benefits."). See generally Mark A. Sargent, A Future for Blue Sky Law, 62 U. CIN. L. REV. 474 (1993) (exploring the possibility of a greater role for state securities regulation); Mark A. Sargent, State Disclosure Regulation and the Allocation of Regulatory Responsibilities, 46 MD. L. REV. 1027 (1987) (discussing the allocation of responsibility for securities regulation between the federal government and the states).

<sup>149</sup> See Romano, supra note 139, at 2418-27.

<sup>150</sup> See Stephen S. Choi & Andrew T. Guzman, The Dangerous Extraterritoriality of American Securities Law, 17 Nw. J. INT'L L. & BUS. 207, 231-33 (1996). The word "portable" indicates that the legal regime selected need not be that of the country in which the securities are traded.

<sup>151</sup> For a discussion of reciprocity in the trade context, see Vincent M. Paladini, Note, Foreign Ownership Restrictions Under Section 310(b) of the Telecommunications Act of 1996, 14 B.U.

Allowing selection of an international regime would likely amount to more than just a mechanism by which to make the proposal sensible in a world with increasingly international capital flows. It would also be likely to increase innovation. Because foreign countries are likely to have quite different securities regimes from the United States or from particular states, <sup>152</sup> the informational externality benefits of competition will be greater. Moreover, the existence of very different regimes ultimately could lead to the development of empirical data that might embolden states to attempt reforms that otherwise might have been too radical. The greater the differences at the beginning of a securities competition, the more vigorous the competition to innovate that is likely to result.

# D. Bankruptcy

Like securities law, bankruptcy is dominated by federal law. Though this result historically may be a function of the Constitution's Bankruptcy Clause, <sup>153</sup> no barriers prevent Congress from exercising its bankruptcy power by requiring firms to choose from among state systems. <sup>154</sup> Under such a system, every new corporation, public and private, would choose a bankruptcy domicile, a state which could charge a fee for being selected. Creditors, of course, would be aware of a firm's domicile choice and could take it into account in lending decisions. Because creditors would be concerned with how much they will be able to recover should a debtor enter bankruptcy, the debtor would maximize the amount it can borrow and minimize the interest rates that it is charged by choosing the state with the most efficient bankruptcy system. A bankruptcy system's efficiency depends on the optimality of decisions it makes about when a firm is in bankruptcy, <sup>155</sup> whether a bankrupt firm should be liquidated or reorganized

INT'L L.J. 341, 357-68 (1996).

For analyses of the possibility of an effectively integrated international securities market, see David E. Van Zandt, *The Regulatory and Institutional Conditions for an International Securities Market*, 32 VA. J. INT'L L. 47 (1991), and Samuel Wolff, *Recent Developments in International Securities Regulation*, 23 DENV. J. INT'L L. & POL'Y 347 (1995). For an example of a comparative discussion of securities law, see Donald C. Langevoort, *Fraud and Insider Trading in American Securities Regulation: Its Scope and Philosophy in a Global Marketplace*, 16 HASTINGS INT'L & COMP. L. REV. 175 (1993).

<sup>153</sup> U.S. CONST. art. I, § 8.

<sup>154</sup> See generally James Steven Rogers, The Impairment of Secured Creditors' Rights in Reorganization: A Study of the Relationship Between the Fifth Amendment and the Bankruptcy Clause, 96 HARV. L. REV. 973 (1983) (discussing the Clause, but without addressing the particular proposal advanced here).

In general, firms enter bankruptcy voluntarily. This might suggest that too few firms are declared bankrupt because of disincentives that prevent creditors from filing for bankruptcy on account of firms. But see Susan Block-Lieb, Why Creditors File so Few Involuntary Petitions and Why the Number Is Not Too Small, 57 BROOK. L. REV. 803 (1991).

as a going concern, 156 and how proceeds from bankruptcy should be distributed.157

Although no commentator appears to have proposed a federalist approach to bankruptcy, 158 articles by Alan Schwartz offer analysis that helps make clear why state competition is an attractive alternative to the exclusive federal regime. 159 Professor Schwartz argues against rules that prevent firms from contracting around bankruptcy. His particular concern is the choice between liquidation and reorganization. Because a firm's and managers receive private benefits from choosing reorganization instead of liquidation, they will always prefer the former. 160 Current bankruptcy law relies on firms to negotiate with creditors ex post to induce firms to choose liquidation when that is optimal, but because the firm has substantial bargaining power in such situations, the firm in Schwartz's model can capture all of the surplus resulting from such negotiations. 161 Anticipating this ex ante, creditors will be less willing to finance projects than they would be if the firm always made the optimal choice. 162 Contracts that "bribe" the firm to choose the optimal reorganization system by allowing it to keep a portion of returns from liquidation can improve the creditors' ex post receipts (and ex ante willingness to lend), 163 as can contracts that condition choice of reorganization or liquidation around some signal. 164 Firms should be able to contract around the default bankruptcy rules, Schwartz concludes, so

<sup>156</sup> See, e.g., William L. Cary, Liquidation of Corporations in Bankruptcy Reorganization, 60 HARV. L. REV. 173 (1996).

<sup>157</sup> See, e.g., John D. Ayer, Rethinking Absolute Priority After Ahlers, 87 MICH. L. REV. 963 (1989); Bruce A. Markell, Owners, Auctions, and Absolute Priority in Bankruptcy Reorganizations, 44 STAN. L. REV. 69 (1991).

<sup>158</sup> Although scholars have not advocated a system of state competition, two articles have advocated allowing a corporation to choose the bankruptcy system it would like to be subject to in its corporate charter. See Robert A. Haugen & Lemma W. Senbet, Bankruptcy and Agency Costs: Their Significance to the Theory of Optimal Capital Structure, 23 J. FIN. & QUANTITATIVE ANALYSIS 27 (1988); Robert K. Rasmussen, Debtor's Choice: A Menu Approach to Corporate Bankruptcy, 71 TEX. L. REV. 51 (1992). David Skeel, meanwhile, has advocated partial state regulation of bankruptcy, but he has specified that the regulator be whatever state a corporation has chosen for its corporate charter. See David A. Skeel, Jr., Rethinking the Line Between Corporate Law and Corporate Bankruptcy, 72 TEX. L. REV. 471, 523 (1994). While Skeel's proposal appears to represent a significant step forward, in my view an independent state competition for bankruptcy registration would be superior. See infra Subsection IV.A.1 (discussing the benefits of delinking various areas of competition).

<sup>159</sup> See Alan Schwartz, A Contract Theory Approach to Business Bankruptcy, 107 YALE L.J. 1807 (1998) [hereinafter Schwartz, Contract Theory Approach]; Alan Schwartz, Contracting About Bankruptcy, 13 J.L. ECON. & ORG. 127 (1997).

<sup>160</sup> See Schwartz, Contract Theory Approach, supra note 159, at 1821 ("Conditional on insolvency's having occurred, the firm's managers or owners will prefer the bankruptcy system that is more likely to permit the firm to survive or to enable them to enjoy control privileges for a longer time if it ultimately fails.").

<sup>161</sup> See id. at 1824 & n.54.

<sup>162</sup> See id. at 1832.163 See id. at 1827-30.

<sup>164</sup> See id. at 1830-31.

that they can draft such contracts and thus increase the number of projects that lenders will be willing to finance.

If firms should be able to contract around the default rules of the federal bankruptcy system, perhaps they should also be allowed to choose a bankruptcy system other than the federal system. State bankruptcy systems would compete along a number of dimensions, including being able to distinguish situations in which a firm should be liquidated from those in which it can be reorganized. An assumption in Schwartz's argument is that although it is impossible to write contracts that can distinguish perfectly ex ante the situations in which a firm should be reorganized from those in which it should be liquidated, the firm and its creditors will know ex post which approach is more efficient. 165 These assumptions are in some tension with each other; if it is easy ex post to determine whether liquidation or reorganization is better, parties in theory could simply write vague contracts that would let courts make the determinations. The problems, of course, are that it is not always so obvious which route is superior, and even if it were, courts might sometimes make a suboptimal choice ex post. Some judges and courts, however, might acquire reputations for making better ex post determinations than others. 166 If this is so, a state could compete by crafting a legal regime that chooses between liquidation and reorganization not through a complex series of rules, but by allowing considerable discretion to courts. If ex post choice really is more efficient than following ex ante rules, states that establish knowledgeable, reliable courts will defeat states that rely on bright-line ex ante rules in regulatory competition.

State competition for bankruptcy systems would differ from state competition for charters and securities law in a significant way. With competition for corporate charters and securities law, the purpose of the legal regime is solely to protect a firm's owners, who ultimately make the domicile choice. In bankruptcy, the legal regime is designed ultimately for the benefit of creditors, but it is the firm's owners who select the domicile. Because the firm's owners will want to make a bankruptcy domicile choice that will be attractive to creditors, however, this distinction does not mean that bankruptcy competition would be a race for the bottom. An

<sup>165</sup> See id. at 1823 ("[P]arties know after insolvency which of the two bankruptcy systems would maximize monetary returns. As in the illustrations above, however, the ex post circumstances and their relation to what an optimal bankruptcy choice would be are too costly to describe in a contract.").

<sup>166</sup> Indeed, in the corporate charter context, some scholars believe that Delaware is successful not because of its rules, but because its judges, irrespective of the rules, can be expected to manipulate the law ex post in a consistently efficient manner. See, e.g., Douglas M. Branson, Indeterminacy: The Final Ingredient in an Interest Group Analysis of Corporate Law, 43 VAND. L. REV. 85 (1990).

important consequence, however, is that, in contrast to corporate charter and securities law competition, a firm cannot have unilateral, unfettered power to change its bankruptcy domicile choice. Otherwise, firms would change to the least creditor-friendly states just before bankruptcy.

One solution to this problem might be to allow firms and creditors to write contracts that prevent or condition changes in bankruptcy domicile. There is, however, an alternative solution more consonant with the philosophy of this Article: A firm's bankruptcy domicile could be allowed to craft rules determining when a firm could change bankruptcy domicile. A limitation of this approach is that states might have incentives to prevent firms from switching to an alternative bankruptcy domicile. If a state prevented efficient switches to another state's domicile, however, firms ex ante would be hesitant to choose the state, and so there is some constraint upon states' abilities to race to the bottom with respect to this aspect of bankruptcy administration. This constraint could be strengthened by a federal requirement that state rules about switching to alternative domiciles be default provisions that firms may opt out of at the time they select their bankruptcy domiciles.<sup>167</sup> An advantage of allowing state competition for rules about changing bankruptcy domicile is that firms may have different needs at different points in their life cycles. Thus, some states might seek to attract relatively young firms with both bankruptcy rules that will be efficient should those firms go bankrupt and with rules that allow the firms to change bankruptcy domicile efficiently when they mature. Other states, in turn, would seek to offer bankruptcy rules appealing primarily to mature, large firms. 168

Competition for bankruptcy systems is likely to lead to a relatively great amount of innovation relative to competition for corporate charters and probably relative to competition for securities law as well. The reason is that there are many, widely varying proposals for reorganizing bankruptcy law in the academic literature, from market-based proposals to those emphasizing more modest bankruptcy reforms. A problem with a federal bankruptcy system is that it makes experimentation with alternative systems difficult, if not impossible. Though allowing contracting around bankruptcy by individual firms might alleviate this

Such a rule would be a mandatory rule that requires other rules to be default rules. See generally John C. Coffee, Jr., The Mandatory/Enabling Balance in Corporate Law: An Essay on the Judicial Role, 89 COLUM. L. REV. 1618 (1989) (discussing mandatory and default rules).

<sup>168</sup> But see ROMANO, supra note 74, at 45 ("Competing state codes are not, however, necessary to sort firms by size, because a single state can offer separate codes for differently sized firms.").

<sup>169</sup> E.g., Barry E. Adler & Ian Ayres, A Dilution Mechanism for Valuing Corporations in Bankruptcy, 111 YALE L.J. 83 (2001).

<sup>170</sup> For an interesting assessment of why the current debate is at an impasse, see Douglas G. Baird, *Bankruptcy's Uncontested Axioms*, 108 YALE L.J. 573 (1998).

greater innovation is of no more moment than the observation that it might be nice if the stock market were higher than it is.

# A. Controlling Competition

### 1. Increasing Areas of Competition

Part II of this Article enumerated various areas of possible competition in corporate law. It did not, however, specify whether a corporation choosing among states would need to pick the same state in various areas. Must a state's securities domicile, for example, be the same as its corporate charter domicile? The answer is that a corporation should not be forced to use the same state for each area of corporate law for three reasons. First, if one state has the best securities regulatory regime and another state has the best corporate charter regime, then forcing a corporation to choose just one state for both securities and charter regulation would mean that the corporation would be unable to attain the best of both worlds.

Second, competition among states to improve their laws is likely to be more robust the narrower the area. Even if a state like Delaware were an overall leader, some other states might be close behind in some areas, forcing Delaware to innovate to improve its law in those areas. And trailing states have more incentive to innovate because they have a better chance of catching a leading state in a narrow area than in corporate law altogether.

Third, if there are synergies in a state's offerings of two different types of corporate law regimes, corporations have every incentive to pick a single state to control both areas.<sup>172</sup> A state could even offer discounts to corporations choosing the state for more than one area of regulation if it cost the state less to administer laws to a single firm in two different areas than to two different firms. Thus, the prospect that synergies might exist does not justify forcing corporations to choose a single state for various separable areas of corporate law.

The possibility of increasing areas of competition, however, need not apply only across areas of corporate law regulation. It might be possible to split individual areas into multiple areas. For example, there is no inherent reason that a corporation needs to select a single state to run all of its

<sup>171</sup> Professor Romano reaches the same conclusion. See Romano, Empowering Investors, supra note 139, at 2408-10.

<sup>172</sup> See id. at 2410 ("[T]he choice-of-law-clause approach obviates the need to guess whether the potential synergies of one regime for corporate and securities law are substantial—market participants' domicile choices would provide the information.").

problem, competition among states would likely lead to instantiation of a number of alternative bankruptcy regimes, at least initially, and ultimately might allow for empirical work clarifying the benefits and costs of different systems.

### IV. Speeding up the Crawls to the Top

So far, this Article has offered an unusual blend of pessimism and optimism about state competition in corporate law. It has challenged legal scholarship's general assumption that as long as corporate law is moving towards an ideal, that is good enough. At the same time, it has suggested expanding competition beyond the area of corporate charters, justifying these recommendations with the maxim that a little competition is likely to be better than none at all. This Part seeks to reconcile the Article's pessimism about innovation and optimism about competition. It does so by discussing some mechanisms that might help stimulate innovation in a framework of competition. The mechanism that shows the most promise is a form of intellectual property protection for corporate law innovations, both because such protection would provide the best fit with the problem and because existing patent laws may allow for at least a crude form of protection for such innovations.

I do not, however, intend to project optimism about the likelihood that any, let alone all, of these proposals would be adopted in the near future, at least in the ideal form that I might imagine them. Despite the trend in the literature toward embracing regulatory competition, I am skeptical that we will see any deliberate move by the United States in that direction in the next decade or two, for the same reasons that I have argued that governments will usually not undertake sudden dramatic reforms even when those reforms are expected to produce good results. At most, we can hope that some form of intellectual property protection might evolve, and that this form might serve as a springboard some years down the line to a stronger form or to some existing institution. This conservativeness is probably appropriate, because while each of the proposals is designed to foster competition, each would represent a considerable change in the federal legal environment; and given epistemic uncertainties about how effective regulatory competition would be, immediate adoption of any radical approach would be inappropriate. My project is thus admittedly primarily conceptual, and the proposals that follow are simple sketches of solutions. Yet if this Article's philosophy reflects one principle, it is that the absence of innovation in corporate law should not be accepted as an inevitable and unproblematic fixture of legal systems. Canvassing of conceivable remedies is a necessary part of the project, for unless there are at least potential solutions, then identification of the mere possibility of internal affairs. An alternative might be to allow a corporation to choose one state's law to govern the selection of a board of directors, another state's law to govern takeovers, a third state's law to govern derivative suits, and so on. An advantage of splitting up different areas of corporate law this way is that it could thwart a special interest group that seeks to obtain inefficient rules in a particular area of corporate law.

An important objection to splitting up corporate law is that it may be interdependent. I am skeptical that corporate law is inherently interdependent; there is no reason that a state could not develop a takeover code that would be sufficiently nuanced to accommodate various other states' corporate law structures. In any event, if interdependence exists within an area of law, corporations likely would pick one state for all areas, just as across areas of competition, so competition could do little harm. For many corporations, it may not even be worthwhile to research different states' regimes, just as many corporations probably choose Delaware law without any conscious consideration, but there may be other firms that would choose multiple states' laws. Moreover, even if there is overlap between some of the various areas of corporate law, choice-of-law rules could develop clarifying which state's law and courts would govern which legal questions. Indeed, one might even imagine states competing for firms to choose them as their corporate charter choice-of-law domicile. If it turns out that this apparatus has costs exceeding benefits, then firms will have incentives to choose the same state to administer all of these areas.

It might similarly be possible to split up securities competition. Although Professor Romano notes that a firm should not be required to choose its incorporation state as its securities domicile, she does not take her argument to its logical conclusion: that a firm should not be required to choose a single regulator for all areas of securities law. In particular, securities law, as Romano recognizes, consists of two relatively discrete areas: disclosure regulation and fraud suits.<sup>173</sup> Of course, fraud suits might sometimes turn in part on a firm's disclosure requirements, but it is conceivable that state law could take this into account.

Bankruptcy law could also be split into different components. For example, one state's law might govern the question of when a firm enters bankruptcy, while another state's law might govern the question of whether to liquidate a firm that has entered bankruptcy. In addition, states might compete to govern the question of when a firm may change its bankruptcy domicile. Thus, for example, a firm might choose California law to determine at a later date whether it could change its bankruptcy domicile from Delaware to New York. Of course, a state offering rules

about changing bankruptcy domicile might customize its rules depending on the particular area of bankruptcy for which a state wished to change its domicile.

In contract and commercial law, as well as in other areas of competition, one might imagine separating a state's provision of a forum in which to settle disputes from its provision of the governing substantive law. Thus, a firm might choose New York corporate law but a Delaware forum to interpret that law, and it would then be required to pay some amount in fees to both. Of course, there are large synergies between creating law and interpreting it. Delaware's Chancery Court, for example, obviously has special expertise in Delaware corporate law.<sup>174</sup> But it is possible that one state might develop expertise in analyzing another state's law, or that some state might simply provide efficient interpretation of law generally.<sup>175</sup>

My sketch of how various areas of state competition might be subdivided is of course quite tentative. The ultimate question is whether the division among areas would need to be established in advance. On this question, I do not have a firm answer. The advantage of letting states determine how to carve up particular areas of law is that this would create competition not just in individual areas but in the question of how to divide up those areas. If the federal government dictated how states should divide some area of corporate law, it might not perform the task optimally. Dividing an area into too few sub-areas of competition would impede vigorous competition; dividing an area into too many sub-areas might impose unnecessary administrative costs on firms, states, and investors.

There are, however, two disadvantages to allowing states to carve up competition themselves. First, because different states might divide up areas of law differently, litigation might result to determine which state's law governed a particular dispute. Of course, this may merely militate in favor of a particular firm choosing states that have subdivided competition in the same way, but states might have difficulty coordinating their regimes. Second, a state might try to use its lead in one area to dominate another area by requiring a firm to choose all or nothing. Of course, a firm might choose nothing; so a leading state would be less able to allow one sub-area of law to lag behind than it could without subdividing competition at all. But a leading state might seek to use its market power in one area of law to gain market power in another area.<sup>176</sup>

<sup>174</sup> Perhaps as a result, most Delaware corporations are sued in Delaware. See ROMANO, supra note 74, at 41.

<sup>175</sup> See supra note 166

<sup>176</sup> See generally Benjamin Klein, Market Power in Antitrust: Economic Analysis After Kodak, 3 SUP. CT. ECON. REV. 43 (1993) (discussing tying in antitrust law); Thomas G. Krattenmaker et al., Monopoly Power and Market Power in Antitrust Law, 76 GEO. L.J. 241 (1987) (same).

These two problems in combination are probably sufficient to make spontaneous evolution of corporate charter regulation unlikely. While it is plausible that some state might seek to develop expertise in one sub-area of corporate law and attract state charter business, Delaware courts could be expected not to recognize other states' authority to control Delaware companies, even where those companies have sought to opt-out of a portion of Delaware law by signing up with another jurisdiction. If the Delaware courts did not do so, they could expect to receive competition in so many areas that Delaware would soon lose its distinctiveness. And without Delaware's cooperation, any natural tendency for corporate law competition to become more refined is probably doomed. This provides a justification for intervention by the federal government, which might seek to prevent a state from forcing firms to choose all of corporate law or from granting excessively large discounts to firms that choose a single state for multiple competitive areas. But federal involvement would raise many thorny questions, and the notion that the feds could supervise competition in corporate law without displacing it may well be fantasy. In any event, federal involvement is not likely anytime soon, and so, for now, more nuanced competition for corporate charter business, let alone division of other areas in which competition has not yet been created, must remain a topic of and for academic discussion.

# 2. Allowing for Private Provision of Law

Increasing the number of areas in which states may compete effectively increases the number of markets in which competition occurs, but not the number of competitors within any one market. Still, nothing about states makes them exclusively suitable providers of substantive law and interpretations. Indeed, Professor Romano specifically allows for a firm to choose federal law, District of Columbia law, or the law of a foreign country in the area of securities. <sup>177</sup> If a firm can choose the law of any sovereign, perhaps it should also be allowed to choose the law of any entity whatsoever. In other words, there is no justification for preventing corporations from competing with states and other governments to become a firm's domicile in some area of corporate law.

Allowing private companies to develop law would improve competition in two primary ways. First, it would increase the sheer number of competitors. The more competitors, the greater the pressure on the leader to innovate. In addition, more competitors means a greater possible variety of corporate law structures from which firms can choose. This means that a firm is more likely to be able to find a corporate law regime

particularly suited to it. Moreover, it means greater positive informational externality benefits, since more innovations will be attempted, and greater portfolio diversification for security holders.

Second, private firms may have greater incentives to innovate than states. Private firms providing legal regimes may be less risk averse than states because entrepreneurs and venture capitalists may be willing to fund projects that have a large percentage chance of failure but a small percentage chance of great success. States may be hesitant to innovate for fear of adversely affecting firms that have already incorporated with them, <sup>178</sup> but new private providers of law would face no such risk.

This does not necessarily mean, of course, that private firms would necessarily do better than states in offering appealing regimes to corporations. The existence of political pressure on states and the difficulty of changing state law may provide a guarantee of stability from state regulation that private providers of law cannot match.<sup>179</sup> Even if this is true, however, allowing private provision of law would do no harm; the worst case scenario is that it would not succeed. And one might imagine that private providers of law could find other ways of assuring firms of stability. One means of providing such stability might be to enter into contracts with firms that could be enforced against the private legal provider in a state court. In any regime of private competition, however, it would be necessary to ensure that a private firm does not free-ride off a state's provision of a forum to resolve disputes. A state could ensure this by charging fees to a private provider of law for any disputes in its courts.

A system of private provision of law could arise in either of two ways. First, the federal government might specifically allow firms to compete with states in some areas of corporate law competition. For example, if the federal government were to create a regime of securities competition, it might provide that publicly traded corporations choosing their security domiciles could choose private providers of law. The federal law might either contain special provisions for what law governs should a private provider of law go bankrupt, or it might simply leave firms and private providers to resolve such issues themselves by contract.

Second, a state might specifically authorize private firms to provide law under the state aegis. Indeed, there does not appear to be any reason that this could not happen today in competition for corporate charters. For example, Nevada could license private providers of law, and any firm incorporating in Nevada could either choose Nevada law entirely or choose a licensed private provider of law. The firm would then pay to the private provider whatever fee the provider specified, as well as some fee to

<sup>178</sup> See supra Section I.C.

<sup>179</sup> See supra note 135 (discussing the perceived benefits of the stability of Delaware law).

Nevada itself. In essence, a state would be delegating part of its lawmaking duties to private firms, but only with the permission of the regulated. 180

The advent of private provision of law through any means seems particularly unlikely, however, in the wake of the recent accounting scandals. The pressure is for more governmental involvement, not less. and the possibility that corporations might be regulated by other corporations would thus seem quite unattractive, especially since much of the blame for the recent problems is appropriately on accounting firms. My concession on this point, however, should not be confused with an admission that the accounting scandals undermine the substantive merits of the proposal. After all, the scandals occurred despite the existence of uniform federal securities laws. And while the existence of misleading disclosures undoubtedly will prompt tightening of disclosure loopholes. the scandals furnish no reason to believe that the SEC is better positioned than the private sector to develop rules that will inspire investor confidence. Corporations have ample incentive to assure investors that their disclosures are accurate, and private regulators are more likely than public regulators to suffer from a failure to provide such confidence. Andersen may have profited for awhile from its lax accounting standards, but now that the failure is evident, the market has severely punished Andersen. The SEC is stronger than ever. Any federal agency monitoring disclosure lacks profit incentives to prevent exploitation of existing rules in novel business environments, and when loopholes inevitably arise. private regulators who face the danger of implosion should investors lose confidence in their monitoring will be better motivated than public agencies to stomp them out.<sup>181</sup>

# 3. Imposing Caps on Firms per State

A simple solution to insufficient competition among states might be to limit the number of firms that any one state can serve. The purpose of such a proposal would be to prevent the emergence of a single leading state and thus spur more innovation by states seeking to be among the leaders. A federal policy to this effect might require a state above the cap to raise the fees it charges to corporations gradually until enough

<sup>180</sup> A state legislature's ability to do this would depend on the particular state's constitutional limits on delegation of authority. For a survey of state delegation law, see Gary J. Greco, Standards or Safeguards: A Survey of the Delegation Doctrine in the States, 8 ADMIN. L.J. AM. U. 567 (1994).

A full exploration of the accounting scandals' implications for corporate governance is beyond the scope of this Article. For an excellent treatment, concluding that the costs of new regulations may exceed the benefits while arguing that gatekeepers like auditors should be held to high standards, see William W. Bratton, *Enron and the Dark Side of Shareholder Value*, 76 TULANE L. REV. 1275 (2002). *See also* Margaret M. Blair, Post-Enron Reflections on Comparative Corporate Governance (Georgetown Law & Econ. Res. Paper No. 316663, June 6, 2002) (discussing lessons to be drawn from the Enron scandal).

corporations felt the pinch and reincorporated in another state. For example, in corporate charter competition, Delaware would be required to raise its fees until some number of firms sought to leave Delaware for other states. Other states desiring Delaware's lost business would seek to improve their corporate law services. Today, states might not have adequate incentives to improve their corporate law to the Delaware level of quality, because firms have little reason to leave Delaware; but if firms were forced to leave, then other states might have a better chance of attracting these firms and thus try harder.

Of course, if other states merely attempted to duplicate the corporate law structures of the leading state, the cap would not immediately spur innovation. A cap would, however, give states the chance to prove that they had established rules as good (or almost as good) as the leading state. Eventually, several competitive leading states might emerge as equals to the original leading state. At that time, one or more of these states would have incentives to innovate boldly in an effort to become the leading state. The cap would thus need to be set high enough so that there would still be an incentive to become the leading state, but low enough so that other states would initially have the opportunity to even themselves out with the leading state. Perhaps the best policy would be to have a temporary cap, which would be removed once a number of states became effectively equal competitors.

A problem with caps is that they might help to stimulate competition only when there is a leading state but would inhibit competition when there are several equal states. In addition, if the government passed a law that would dynamically impose and remove caps depending on the number of firms registering in each state, the caps might be ineffective, because there would not be as great an incentive to become a leading state. On the other hand, even if a state knew that its emergence as a leading state would lead to a cap, it might still have adequate incentives to become a leading state, because being the leader might generate a considerable profit in the time it took for other states to catch up as the cap was imposed. Ultimately, it might be too late to impose a cap in corporate charter competition, as firms and Delaware would claim unfair surprise, even if it were plausible that a federal statute creating a cap, as well as possibly an agency to administer it, were politically feasible. Moreover, imposition of such a cap might be counterproductive, as it might lead some firms to incorporate blindly in their home states, thus reducing whatever impetus to the top that Delaware produces. But if some new area of competition were created, a cap might be a useful way of ensuring that no single state emerged as a permanent leader. The cap, however, would have to be designed not to go into effect right away, lest the initial competition to become the leading state be lessened.

#### B. Subsidization

### 1. Paying Out Direct Federal Subsidies

The proposals that we have considered focus on the supply side by seeking to invigorate competition among providers of law. Let us now consider demand-side proposals that seek to reward firms or states for innovating in corporate law. In Part I, we saw that innovation produced benefits that firms and states did not have an adequate incentive to take into account when formulating corporate law. Rewarding firms and states that innovate responds particularly to the informational externality problem. It also responds, however, to the fact that managers may not care sufficiently about portfolio diversification benefits to shareholders; if a firm actually receives funds for innovating, managers may find it more difficult to resist shareholders' preference for innovation.

Perhaps the simplest way to reward innovation would be to establish a federal agency that would simply make cash payments to firms attempting particularly innovative corporate law structures or to states attempting useful innovations. Focusing on firms is probably preferable to focusing on states, however, for two reasons. First, it would require less money to induce a single firm to innovate than to induce a state. On the other hand, a firm can only innovate to the extent that the state it has selected uses default rather than mandatory rules in the relevant area of corporate law. Second, giving direct payments to states would be likely to politicize the process more than giving payments to firms. A federal agency encouraging corporate law innovation could work effectively only if it were relatively insulated from political pressures.

The prospect of a federal agency rewarding firms for innovation may sound bizarre, but it would not be so different from other agencies that reward firms for various types of supposedly desirable activities. Nor is it different in principle from federal agencies that encourage scientific experimentation. An alternative, though, that might seem less unusual might be to accomplish the same goal though a federal agency that competes with states for firms in a particular area of corporate law. For example, if a regime of securities competition were established, one reason to keep the SEC is that the SEC might be able to encourage innovation

<sup>182</sup> See, e.g., Editorial, Cleaning Up Commerce, N.Y. TIMES, Jan. 24, 1997, at A30 (noting the Commerce Department's use of taxpayer dollars to subsidize advertising and sales of American products abroad). While some federal subsidies may be wasteful, use of federal money to encourage activities providing positive externalities would not be, at least in theory.

<sup>183</sup> In 1990, for example, federal spending constituted 45% of health-related research and development. *See* OFFICE OF TECHNOLOGY ASSESSMENT, U.S. CONGRESS, PHARMACEUTICAL R&D COSTS, RISKS & REWARDS 203 (1993).

more than the states. Presumably, the SEC would be more willing than the states to encourage innovation; because its constituency is national, it would effectively internalize the informational benefits of any innovations with which it experiments. Whether or not the SEC (or other federal agency in some other area of corporate law competition) were to pay firms to innovate, it could subsidize innovation by lowering fees for firms that agree to take part in experiments with new corporate law structures.

In theory, a federal agency could provide enough money that firms or states would internalize entirely the benefits of their innovations. In practice, though, I suspect that the relevant dollar amounts that the agency would need to provide to reach this goal would be so high as to be politically impractical. After all, to induce a Fortune 500 company to indulge a risky innovation would probably require a great deal of federal money. This does not, however, mean that pursuing innovation is not worth it; to the contrary, it merely emphasizes that firms have great incentives not to innovate. A small federal agency, in any case, might still do some good. It could focus on relatively small companies initially and then use the results of successful experiments to induce progressively larger companies to try specified innovations. Of course, once an innovation proved itself, the federal agency would not need to pay companies to adopt it at all.

# 2. Holding Public Good Auctions

The problem of providing direct subsidies to corporations for innovations is that the government must determine whether the benefits of an innovation exceed the amount of money that it would have to pay a state or firm to implement the innovation. If the government had some mechanism of determining how much shareholders would value a corporation's innovation, then it would be able to offer a corporation up to that amount for innovating. One such mechanism, famous in the public choice literature, is that of demand-revealing preferences. <sup>184</sup>

In a demand-revealing preferences scheme for corporate law innovation, any corporation could propose an innovation. After a corporation made a proposal, other entities would inform the government how much they would be willing to pay to the government for that corporation to perform the innovation. For example, if a large company offered to innovate by having a board of directors consisting of just three directors, other companies that might be interested in determining the results of this innovation would inform the government of the

<sup>184</sup> See generally T. Nicolaus Tideman & Gordon Tullock, A New and Superior Process for Making Social Choice, 84 J. POL. ECON. 1145 (1976) (describing the demand-revealing preferences mechanism).

informational benefit of this scheme to them. At the same time, the company offering to innovate would indicate how much the government would need to pay it to go through with the innovation.

The government would fund the innovation at the requested price if and only if other companies' bids indicating their willingness to pay for the innovation exceeded the requested price. The incentive that an entity would have to give an honest valuation is that the entity would need to pay the amount it specified if that amount were needed for the sum of valuations to exceed the requested amount. Thus, if ten entities indicated that they would be willing to pay \$100,000 for an innovation, an eleventh entity specified a willingness to pay \$500,000, and the corporation demanded payment of \$1,300,000, then the eleventh entity would be required to pay \$300,000.

While a system of demand-revealing preferences eliminates any incentive that entities have to lie about how valuable innovations would be to them, it has two significant weaknesses. First, the funding for the innovations would still need to come largely from the federal government. Theorists have shown that a system of demand-revealing preferences cannot both collect the amount of money needed to fund projects and induce honest valuations. 186 Second, small players would not have an incentive to indicate the value of innovations to them, because the research cost of determining how to value innovations might exceed the marginal benefit of bidding. 187 Because an entity's valuation matters only if that valuation takes the total over the top, a corporation benefits from bidding only when its valuation does in fact take the total over the top and only to the extent that the corporation still receives some surplus. Nonetheless, one might imagine that very large corporations might bid when innovations are of particular interest to them. Perhaps more importantly, very large institutional shareholders, who would gain both the portfolio diversification and informational externality benefits from innovation. might still have incentives to announce valuations. The government might use these valuations to extrapolate what smaller institutional shareholders would have bid and use these numbers to determine whether to fund a project.

<sup>185</sup> For useful examples that explain why bidders will give honest valuations, see DENNIS C. MUELLER, PUBLIC CHOICE II 124–25 (1989).

<sup>186</sup> See, e.g., Elizabeth Hoffman & Matthew L. Spitzer, Experimental Law and Economics: An Introduction, 85 COLUM. L. REV. 991, 1016 (1985).

<sup>187</sup> See MUELLER, supra note 185, at 132 ("To the extent that the size of the incentive tax levied on any individual falls as the number of voters increases, the incentive to provide information conscientiously dwindles.").

# C. The Intellectual Property Alternative

Outside of corporate law, a more traditional means of encouraging innovation is to grant intellectual property protection. The next Subsection describes what a sui generis intellectual property regime for corporate law might look like and identifies the advantages of such an approach relative to other means of encouraging corporate law innovation. The subsequent Subsection explains how the existing patent law regime might provide a foundation for such a regime, though it would deviate from the ideal hypothetical regime in several respects.

# 1. The Case for an Intellectual Property Regime

While intellectual property scholars have noted that a "prize" system might be a viable alternative to patent protection, 188 the latter is currently dominant in encouraging research and development of innovative ideas. If the federal government were to give a state some form of intellectual property protection for its corporate law innovations, it would increase the incentives to produce such innovations. Because an innovating state would realize that no competitor would be able simply to copy its innovations, the state would be able more or less to internalize the informational benefits of innovation. A state that successfully innovated not only would be uniquely positioned to attract firms to it but would also be able to license its innovation to other states until the intellectual property protection expired. 189 A state thus might even attempt some innovation not likely to have greater benefits than costs. If it turned out that the innovation were beneficial, the state not only would capture the benefit for existing firms in the state but also could derive revenues from firms switching to the state or from other states deciding to license the innovation.

An intellectual property regime would thus be particularly responsive to one of the reasons that states might not innovate enough, that the informational benefits of a state's innovations are largely externalized. It is not directly responsive to the other problems, that mandatory terms may deter new firms, that the innovation may adversely affect firms that have already incorporated in the state, that states may be risk-averse, and that a state may have a relatively short time horizon. The potential revenue from licensing the intellectual property protection, however, could be sufficient

<sup>188</sup> See Lichtman, supra note 33, at 704 n.36 (discussing the possibility of a prize system).

<sup>189</sup> It might be desirable to mandate licensing in certain situations. See Note, Limiting the Anticompetitive Prerogative of Patent Owners: Predatory Standards in Patent Licensing, 92 YALE L.J. 831 (1983).

<sup>190</sup> See supra Section I.C.

to overcome these obstacles. If not sufficient by itself, intellectual property protection might facilitate government subsidization, eliminating the need to have government make decisions about which innovations are worthwhile. For example, the federal government could agree to pay some amount of money for each dollar in licensing revenues that a state received from other states or firms.

Such subsidization would help to overcome corporate inertia. In the absence of significant innovations, corporations ordinarily will be reluctant to reincorporate, and therefore there will be little pressure on states to change their corporate laws. While newly incorporated companies are a potential source of business, they are not necessarily a sufficiently large source of business to encourage bold innovation. If, however, the federal government subsidizes innovation, then it may become worthwhile for supplier states to seek even relatively small licensing deals with other states. The adoption of innovations by a small number of such states, meanwhile, may increase the demand by other states for the innovation, since what matters in the corporate law market, like all markets in which all consumers will necessarily make purchases, is relative attractiveness. Intellectual property protection by itself might be sufficient to induce bold experiments that have the potential for large revenues, but subsidies might also encourage smaller experiments. These experiments otherwise might be too minor to be of interest to states, since the costs of reincorporation might swamp the benefits, even though their impact on shareholder wealth could be considerable by virtue of benefits to corporations that would not change anyway.

If intellectual property protection were granted to corporate law innovations, for charters or in some new area of competition, some variant on patent protection would be vastly superior to copyright protection. Patent law protects ideas. It does, however, generally require that to enforce a patent the licensor reduce the invention to practice. This requirement would certainly be appropriate in the context of corporate law intellectual property protection. After all, the concern motivating this Article is that states and firms will not experiment with corporate law structures, even when they have ideas with positive expected benefits. Thus, by requiring states to implement an innovation before allowing them

<sup>191</sup> Copyright, after all, does not protect ideas but only their specific implementation. See 17 U.S.C. § 102(b). Thus, copyright protection would mean that one state could copy another's innovations as long as it worded its statute differently.

<sup>192</sup> See, e.g., Scott v. Finney, 34 F.3d 1058 (Fed. Cir. 1994) (exploring the reduction-to-practice requirement). An important qualification, however, is that a "constructive" reduction to practice, as opposed to an "actual" reduction to practice, will suffice for a patent application, though not for patent enforcement. See, e.g., The Telephone Cases, 126 U.S. 1, 535, 572-73 (1888) (upholding Alexander Graham Bell's patent application, even though he had not completed manufacture of a telephone at the time he filed for a patent).

to enforce a patent, the intellectual property regime would ensure not just development of ideas but also experimentation.

The same logic suggests that originality need not be a prerequisite for this form of intellectual property protection. Even if a proposal for innovation has been around for decades, clearly identified in the prior art. states and firms might fail to implement the proposal because they cannot internalize the benefits of doing so. Limiting intellectual property protection in the corporate law context to new ideas would prevent the system from encouraging exploitation of ideas that otherwise would sit dormant. Indeed, paradoxically, an innovation long proposed but never tried should be a stronger candidate for intellectual property protection in this regime than an innovation never before proposed. Intellectual property regimes ideally should focus on encouraging whatever is in short supply or is otherwise deemed socially desirable. 193 The problems identified in this Article suggest that a system of intellectual property protection for corporate law ideally should focus on providing incentives to experiment, and limiting the system to new ideas for corporate law innovation would frustrate full achievement of this goal.

This does not mean, however, that originality should be entirely irrelevant to a determination of whether a particular corporate law innovation should receive protection. Although there are individuals who have incentives to develop ideas for innovation in corporate law, for example law professors and officials of states seeking to improve their standing in a regulatory competition race, there might still be room for others to develop additional innovations. An intellectual property system for corporate innovation conceivably could yield more reform proposals, or more fully developed reform proposals, than we currently have. The nonobviousness of a corporate law innovation might be relevant to a determination of whether the corresponding experimentation likely would have occurred in the absence of a system of corporate law intellectual property protection. Ideally, the intellectual property system should not provide protection for corporate law experiments that would have occurred even in the absence of such protection, and nonobviousness may be one way of narrowing down all new corporate law experiments to those that the system should protect. 194 The standard for nonobviousness, though,

Copyright thus provides incentives for turning ideas and research into tangible forms of expression; trademark encourages the development of brand identities that will help consumers make purchasing decisions; and patent facilitates both the development and the commercialization of new inventions. See generally F. Scott Kieff, Property Rights and Property Rules for Commercializing Inventions, 85 MINN. L. REV. 697, 703-04 (2000) (discussing the commercialization function of patent law)

Some scholars have suggested that patent law should look explicitly to whether an invention likely would have been created in the absence of the patent system. See, e.g., Roberts v. Sears, Roebuck & Co., 697 F.2d 796 (7th Cir. 1983); A. Samuel Oddi, Beyond Obviousness: Invention

should be high, so that new ideas should count only if they would not have been expected to emerge given recent developments in corporate law and theory.

These considerations are sufficient to provide at least a sketch of the requirements for intellectual property protection geared specifically toward corporate law innovations. A corporate law intellectual property system would afford protection for the first state or firm to experiment with a proposal that had existed for long enough that it would be unlikely to have developed in the absence of an intellectual property system. At the same time, a state or firm that develops a corporate law innovation so nonobvious that it would have been unlikely even to have been thought of in the absence of intellectual property protection also would receive protection. Either way, the key to protection would be the conclusion that the innovation would not have occurred but for the protection. The existence of prior art anticipating an innovation would thus be relevant not because it automatically would bar intellectual property protection, but because it might be relevant as evidence of whether the protection would have occurred in the absence of the intellectual property regime.

Perhaps the principal argument against a regime in this form is its vagueness and its susceptibility to hindsight bias. The assessment of whether a particular proposal would have been developed or implemented in the absence of the effort by the specific innovator is necessarily subjective. A state implementing an innovation would thus face not only the risk that the innovation might fail but also the risk that the innovation might succeed and yet be unpatentable. But adding one uncertainty to an inherently uncertain endeavor at worst would reduce some of the benefits of intellectual property protection, with some deciding not to go forward with an innovation because of the possibility of nonprotection. Also, though it is impossible to prove this empirically, assessing whether a corporate law innovation would have occurred in the absence of protection may not be as difficult as assessing whether some other type of innovation would have occurred. Legal officials may be better suited institutionally to consider how plausible a legal change would have been in the absence of a profit motive than they are to grapple with the complex economics and science of, say, whether anyone would have developed an innovative medical procedure in the absence of such protection.

In addition, there is a simple institutional device that could be used to address concern about the possibility of not receiving protection for an innovation that a state or firm might make only because of the potential for profit. An agency responsible for the intellectual property regime could allow a state or firm to seek intellectual property protection in advance of

actual implementation. This does not address the obverse problem—that of a firm or state receiving intellectual property protection for an innovation that someone else would have made anyway. One way to address this would be to require the innovation to be published for some period before adoption. Other firms or states would have the right to experiment with the innovation in that time without the benefit of intellectual property protection; and if such experimentation occurred, an inference that the experiment would have been conducted anyway would be drawn, and no protection would be provided to the initial applicant. This approach, of course, ought not be required for innovations that would not have been made only because they were nonobvious. A determination that an innovation truly was nonobvious is less subjective than one that someone would have dared experiment with an innovation in any event.

Intellectual property protection, of course, is not without costs. As in markets for goods and services, the provision of a patent would give the innovating state or firm monopoly rights for some period of time. 195 Indeed, the costs of such monopoly rights—higher prices and a lower than optimal quantity of the innovative good or service—have led some intellectual property scholars to note that the case for having a patent law is not unambiguous. 196 The deadweight costs of intellectual property protection, however, might be smaller in the corporate law context, because the relatively small number of players would facilitate price discrimination by holders of rights to innovations. 197 Even if intellectual property protection is desirable for corporate law, however, there is no reason to assume that the 20-year monopoly period that patent law grants would be the right length for corporate law. 198 Because the small number of states may stunt competition for corporate law, however, the case for patent protection in corporate law may in theory be at least as strong as the case for protection in markets for goods and services.

Although it is difficult to make definitive comparisons between a system of intellectual property protection and other possible approaches to increasing innovation in corporate law that I have discussed, the intellectual property approach would have two significant advantages. First, the intellectual property approach would be relatively decentralized. If the federal government were to pay out direct subsidies to states or

<sup>195</sup> See Note, supra note 189, at 837.

<sup>196</sup> See, e.g., Donald F. Turner, The Patent System and Competitive Policy, 44 N.Y.U. L. REV. 450, 453-57 (1969). See generally Kenneth W. Dam, The Economic Underpinnings of Patent Law, 23 J. LEGAL STUD. 247 (1994) (assessing the economic justification for patent law).

Perfect price discrimination eliminates deadweight loss, because all consumers who value a product at above marginal cost will be able to purchase the product at the price at which they value it. See, e.g., WALTER NICHOLSON, MICROECONOMIC THEORY: BASIC PRINCIPLES AND EXTENSIONS 574 (5th ed. 1992).

<sup>198</sup> See 35 U.S.C. § 154(a)(2) (2000).

firms, it would require an administrative apparatus to choose among competing applications. Although existing patent regimes depend on an office to grant a patent, such assessments are binary, not ordinarily requiring comparison among different applications or measurements of how much of an innovation any particular patent represents. Similarly, supervising public goods auctions, subdividing competition into a number of different spheres, or imposing caps on states would all require substantial government involvement. As F. Scott Kieff has argued, conceivably patent law could operate entirely through a registration system, with only minimal involvement of the executive branch. Innovating states or firms that had registered a corporate law innovation under such a system could seek to enforce the innovation by suing any alleged infringers. Congress thus conceivably could create protection for corporate law innovations without creating a large administrative bureaucracy.

Second, the intellectual property approach does not require the government to make an assessment of how large a problem slow innovation in corporate law is or how many resources should be devoted to encouraging greater innovation. While I have argued that states and firms have inadequate incentive to innovate, an evaluation of how much additional innovation would be optimal would require a detailed analysis of various corporate law reform proposals, which may be not only beyond the scope of this article but also beyond the institutional competence of the federal government. For example, we can have little confidence that the federal government would make efficient decisions about how much money to devote to corporate law innovation or about the optimal number of caps on firms that a state could serve. An intellectual property regime, by contrast, requires no such decisions. If it were to turn out that there are few innovations that would be worth trying even with intellectual property protection, there still would be no harm in creating such a system. On the other hand, if corporate law innovations became potentially valuable, intellectual property protection could give states and firms incentives to innovate beyond what any other governmental program would be likely to encourage.

I have admittedly not specified all of the details of how an ideal intellectual property regime would work. Although I have provided a standard for determining whether protection would be granted, I have not

<sup>199</sup> Patent interference proceedings are an exception, but these focus on the date of innovation, rather than on a comparison of the quality of different proposals. See generally Charles L. Gholz, A Critique of Recent Opinions of the Federal Circuit in Patent Interferences, 81 J. PAT. & TRADEMARK OFF. SOC'Y 241 (1999) (discussing interference proceedings).

<sup>200</sup> See F. Scott Kieff, The Case for Registering Patents and the Law and Economics of Present Patent-Obtaining Rules (2001) (unpublished manuscript, on file with author).

considered the full range of doctrinal questions about that standard. For example, I have not considered whether an applicant would need to show that the innovation would not have occurred by a preponderance of the evidence or by some higher or lower standard. Similarly, I have not explained how the administrative agency administering the system would be structured or the extent to which the decisions of this agency could be challenged in courts of law. I have omitted those details not because they would be unimportant, but because this Section is admittedly a thought experiment, and analysis of the thought experiment does not require resolution of exactly how it would be implemented.

Could a system like the one that I have described be implemented? I doubt it. Perhaps the most likely route to create a viable system with incentives for private parties to innovate would be for an entrepreneurial state allowing for private provision of law to establish intellectual property-like rules preventing one private provider within that state from stealing the ideas of another. This would not prevent states from copying successful innovations by these private providers, but it would provide such private providers with some protection vis-à-vis one another. This protection might be enough to encourage experimentation with radical corporate forms that states would be hesitant to create in any case. Private providers of law might try to induce firms to accept their jurisdiction initially by paying them. If an innovation proved successful, the private provider would at least have a head start on states hoping to duplicate the effort. Of course, even though this proposal would require the action of only a single state within the existing corporate law framework, it seems unlikely in the foreseeable future, because it would require a state to make two radical changes, first allowing for private provision of law, and second allowing for intellectual property protection for participants.

### 2. Evolution of Intellectual Property Protection from Patent Law

It is far more likely that intellectual property protection over corporate law innovations would arise from an existing intellectual property framework than that a government would decide to create such a regime from whole cloth. Congress is not in the business of regularly creating novel intellectual property regimes, and creation of a new regime seems particularly unlikely here, given the lack of awareness of the problem of underinnovation, as well as an absence of a single group that would expect to benefit sufficiently from such a change to make it a lobbying priority. It is, however, entirely plausible that intellectual property law, and patent law in particular, could evolve to protect corporate law innovations. Patent law has famously been described as

protecting "anything under the sun," <sup>201</sup> and so coverage of corporate law innovations would be no more remarkable than coverage of gene sequences, which not only might seem an odd candidate for patent protection but also has been identified by some scholars as an area in which protection may create more harm than benefit. <sup>202</sup>

Indeed, the doctrinal foundations for patent protection for corporate law innovations already exist. In *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, <sup>203</sup> the Federal Circuit upheld the validity of a patent detailing an algorithm for managing an investment fund structure. Such business method patents have been controversial, <sup>204</sup> but the Federal Circuit reasoned that there was no reason to exclude business method patents from the scope of patentable subject matter if they met the usual requirements. <sup>205</sup> The logic extends without difficulty to corporate law innovations. If someone develops a nonobvious way to structure a corporation, this method could receive patent protection, and the patentee would be able to enforce the patent even against a firm competing in a different industry. Erik Maurer has noted that lawyers might seek to patent a variant on the poison pill antitakeover defense or perhaps an antidote to the poison pill. <sup>206</sup> Patent coverage might enable riskier strategies as well, including strategies that might prove ineffective because of any uncertainty about whether they would be upheld by the courts, thus

Diamond v. Chakrabarty, 447 U.S. 303, 309 (1980) ("Congress intended statutory subject matter to 'include anything under the sun that is made by man.") (quoting S. REP. No. 82-1979, at 5 (1952), reprinted in 1952 U.S.C.C.A.N. 2394, 2399).

<sup>202</sup> See, e.g., Rebecca S. Eisenberg, Patents and the Progress of Science: Exclusive Rights and Experimental Use, 56 U. CHI. L. REV. 1017 (1989); Michael A. Heller & Rebecca S. Eisenberg, Can Patents Deter Innovation? The Anticommons in Biomedical Research, 280 SCIENCE 698 (1998); Arti Kaur Rai, Regulating Scientific Research: Intellectual Property Rights and the Norms of Science, 94 Nw. U. L. Rev. 77 (1999).

<sup>203 149</sup> F.3d 1368 (Fed. Cir. 1998).

<sup>204</sup> See, e.g., Rochelle Cooper Dreyfuss, Are Business Method Patents Bad for Business?, 16 SANTA CLARA COMPUTER & HIGH TECH L.J. 263 (2000); Jeffrey R. Kuester & Lawrence E. Thompson, Risks Associated with Restricting Business Method and E-Commerce Patents, 17 GA. ST. U. L. REV. 657 (2001); Leo J. Raskind, The State Street Bank Decision: The Bad Business of Unlimited Patented Protection for Methods of Doing Business, 10 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 61 (1999); Brian P. Biddinger, Note, Limiting the Business Method Patent: A Comparison and Proposed Alignment of European, Japanese and United States Patent Law, 69 FORDHAM L. REV. 2523 (2001); Sari Gabay, Note, The Patentability of Electronic Commerce Business Systems in the Aftermath of State Street Bank & Trust Co. v. Signature Financial Group, Inc., 8 J.L. & POL'Y 179 (1999); James Gleick, Patently Absurd, N.Y. TIMES MAGAZINE, Mar. 12, 2000, at 44; Nicholas Groombridge & Christopher Loh, Congress Takes Aim at Business Method Patents, N.Y.L.J., Mar. 6, 2001, at 1.

<sup>205 &</sup>quot;The plain and unambiguous meaning of § 101 is that any invention falling within one of the four stated categories of statutory subject matter may be patented, provided it meets the other requirements for patentability set forth in Title 35, i.e., those found in §§ 102, 103, and 112, ¶ 2." State Street, 149 F.3d at 1372.

<sup>206</sup> Erik S. Maurer, Note, An Economic Justification for a Broad Interpretation of Patentable Subject Matter, 95 Nw. U. L. REV. 1057, 1080-81 (2001).

encouraging the development of precedent and the clarification of corporate law.

The scope of patent protection, of course, would not match the exact scope recommended above. Old proposals would be excluded under the nonobviousness requirement, even if no one had ever attempted to implement them because of an inability to internalize the benefits of experimentation with the invention. Over-inclusiveness might be a problem too. Patents could issue for corporate law innovations that likely would have been developed and implemented even in the absence of intellectual property protection as a natural response to developments in the corporate law environment. Patent protection thus might frustrate the adoption of useful corporate law innovations. Patentees, however, would have an incentive to license their innovations to maximize their revenues, and a firm desiring to take advantage of a particular innovation could always reincorporate in the innovating state. Although it is impossible to calculate to what extent the imperfect scope of the patent system in this context would undercut the case for a patent proposal, the benefits of patent protection seem likely to be greater than in other fields. This Article has shown that there are substantial obstacles to innovation in corporate law, perhaps greater than in markets for goods and services, where commentators have estimated that many inventions would be commercialized even in the absence of intellectual property protection.<sup>207</sup>

Moreover, the costs of patent protection for corporate law innovations are no greater than the costs of protection in some other areas, such as business method patents. Indeed, there is a strong argument that business method patents, like unnecessary patents, 208 entail the danger of unnecessarily stifling innovation, because the field of business methods features the same mismatch between the law and an ideal intellectual property regime as I have identified for corporate law innovations. Ideas, for the most part, are not in short supply in the business world. Everyone and his sister have ideas about what could turn into the next Wal-Mart. What are in short supply are entrepreneurs (and, perhaps more significantly, financiers) willing to take a chance on a particular idea. Of course, many do take chances by starting up innovative businesses, but it is plausible that many potential businesses do not exist because secondmover advantages outweigh first-mover advantages. Business method patents provide only an imperfect answer because the validity determination is not based on direct consideration of these relative advantages. Thus, some business method patents offer protection where none is needed given first-mover advantages, while the patent system may

<sup>207</sup> See, e.g., Edwin Mansfield, Patents and Innovation: An Empirical Study, 32 MGMT. Sci. 173 (1986).

<sup>208</sup> See supra note 194.

refuse protection for obvious ideas that nonetheless will not be developed because of the dominance of second-mover advantages. Patent law does not directly make this comparison for other subject matter either, but in fields of endeavor like pharmaceutical drugs, there may be greater congruence between the need for patents and the standards for issuing them.

Of course, given the criticisms of business method patents among commentators, the imperfection of business method patents may not seem to make a compelling case for patents on corporate law innovations. The mismatch, however, is likely to be of lesser concern with corporate law innovations, because first-mover advantages are likely to be smaller for corporate law innovations than for other business method patents. Federal Express may have had substantial first-mover advantages by creating the first overnight delivery service, both because it was able to establish a brand name and because it may have been able to take advantage of network externalities.<sup>209</sup> Brand name is less likely to be of concern for corporate law innovations, for two reasons. First, states, likely to be the primary players in innovation, may already have brand identities that any one innovation is unlikely to change significantly. Second, because incorporation is a significant decision, brand associations are likely to be of less significance than they would be for relatively minor consumer purchasers. Network externalities may be an issue in the corporate law context, but because any innovating state will start with a fairly large base of corporations, it may be less of one. Thus, second-mover advantages will tend to dominate first-mover advantages, and while this raises the danger of false negatives, it reduces the danger of false positives. A smaller percentage of patents for corporate law innovation are thus likely to be harmful than would be the case for business method patents.

Perhaps the most significant practical obstacle to patents for corporate law innovations would be the constitutionality of enforcing such patents against infringing states. There is little doubt that Congress would have power under either the Intellectual Property Clause or the Commerce Clause to enact such a regime. While Congress may not be able to take advantage of its commerce power to skirt limitations imposed by the Intellectual Property Clause, <sup>210</sup> if one found that the Intellectual Property Clause were irrelevant for corporate law innovation (a result that I doubt), there would be no obstacle to Congress's assertion of its commerce power,

<sup>209</sup> See supra notes 36-40 and accompanying text.

<sup>210</sup> See, e.g., Malla Pollack, Unconstitutional Incontestability? The Intersection of the Intellectual Property and Commerce Clauses of the Constitution: Beyond a Critique of Shakespeare Co. v. Silstar Corp., 18 SEATTLE U. L. REV. 259 (1995). Whether Congress could override the requirement that copyrights be for "limited times" by use of the commerce power is at issue as an alternative argument in the Eldred case before the Supreme Court. See Eldred v. Reno, 239 F.3d 372 (D.C. Cir. 2001), cert. granted, 122 S. Ct. 1062 (2002).

which clearly extends to the regulation of business activity, at least under modern doctrine allowing such agencies as the SEC. First, given recent interpretations of the Eleventh Amendment, states would have sovereign immunity in suits by private parties. This problem is mitigated by the fact that states can sue other states, the fact that states wind up in the Supreme Court's original jurisdiction, they could undesirably drain the scarce resource of the Supreme Court docket. Thus, the same concerns about states violating private parties' intellectual property rights because of sovereign immunity could appear in this context. A possible solution here would be for the federal government itself to police violations of states' intellectual property rights by other states, or indirectly to allow qui tam plaintiffs to police such violations, since the federal government clearly can bring suit against states in federal court.

Second, even with jurisdiction, courts might be hesitant on substantive grounds to enjoin a state from designing its corporate law as it chooses. One might argue that the anti-commandeering principle of *New York v. United States*<sup>214</sup> would bar Congress from forcing a state government to structure its law in any particular way. This argument seems like a stretch, however, for the government would not be *requiring* a state to structure its law in a certain way but *prohibiting* a state from committing a tort, which happens to be committed through operation of state law. There is little doubt, after all, that a state law permitting state agencies to copy copyrighted works without compensation would subject the state to liability, albeit a liability that cannot be enforced for jurisdictional reasons by the aggrieved parties. To be sure, a full analysis of the anti-commandeering principle would be beyond the scope of this Article, and the doctrine is sufficiently thin that a variety of doctrinal outcomes are possible.

In any event, states seeking intellectual property protection might have a workaround if the federal courts refused to allow them to sue each other. Instead of suing other states copying their corporate law regimes, they could sue private firms taking advantage of the corporate law innovation. This might be easier for innovations that directly affect

<sup>211</sup> See Fla. Prepaid Postsecondary Educ. Expense Bd. v. College Sav. Bank, 527 U.S. 627(1999). This decision does not preclude suit by one state against another, which would be in the Supreme Court's original jurisdiction.

<sup>212</sup> See, e.g., Maryland v. Louisiana, 451 U.S. 725 (1981) (finding a controversy among states justiciable where the plaintiff states claimed economic damages).

<sup>213</sup> See Vt. Agency of Natural Res. v. United States ex rel. Stevens, 529 U.S. 765 (2000).

<sup>214 505</sup> U.S. 144 (1992).

<sup>215</sup> For an analysis of some of the doctrinal uncertainties created by New York v. United States, see Matthew D. Adler & Seth F. Kreimer, The New Etiquette of Federalism: New York, Printz, and Yeskey, 1998 SUP. CT. REV. 71.

<sup>216</sup> See College Sav. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd., 527 U.S. 666 (1999).

individual firms than for innovations strictly internal to a state regime. For example, if New York developed a new process for voting by corporate boards and received a patent on such a process, it would likely be able to enforce this patent against a New Jersey corporation infringing on that patent, even if the corporation were simply following New Jersey law. (Of course, a corporation that itself developed such a process also could seek and enforce a patent against another corporation using that patent.) On the other hand, if New York created an innovative new court for adjudicating corporate law cases, it might have trouble suing a New Jersey corporation after New Jersey copied its scheme. Even in such a case, however, New York could argue that the New Jersey corporation was guilty of contributory infringement by bringing its case in an infringing court.<sup>217</sup>

#### Conclusion

Legal scholarship almost invariably takes the form of advising judges on how they should make decisions when faced with particular questions. A higher-order problem is to focus on the decisionmakers' incentives to render sound legal decisions. The scholarship on competitive federalism is one of the few areas of legal literature to take this approach. That scholarship, however, has focused narrowly on the question of what the ultimate outcome of competition is likely to be, without exploring the pace at which competition is likely to proceed or institutional mechanisms that might affect states' and firms' incentives to innovate. My aim in this Article has not been so much to announce a solution to the question of how best to structure competitive lawmaking in corporate law but to refocus attention on the mechanisms of competition and to offer preliminary proposals for addressing the problem of underinnovation. Patent law, at least, provides a doctrinally sound basis for experimentation that might make possible a clearer assessment of the potential value of additional innovation and might further stimulate the conversation that in this Article I have tried to start. Allowing states to compete in corporate law is but a first step. The task remains of speeding up the crawl to the top.

<sup>217</sup> For a thorough discussion of the doctrine of contributory patent infringement, see Alfred P. Ewert & Irah H. Donner, Will the New Information Superhighway Create "Super" Problems for Software Engineers? Contributory Infringement of Patented or Copyrighted Software-Related Applications, 4 Alb. L.J. SCI. & TECH. 155, 161-73 (1994).