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DOES THE EVIDENCE FAVOR STATE COMPETITION IN CORPORATE LAW?

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Does Evidence Favor State Competition in Corporate Law?
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ABSTRACT

In the ongoing debate on state competition over corporate charters, supporters of state competition have long claimed that the empirical evidence clearly supports their view. This paper suggests that the body of empirical evidence on which supporters of state competition have relied does not warrant this claim. The paper first demonstrates that reported findings of a positive correlation between incorporation in Delaware and increased shareholder wealth are not robust and, furthermore, do not establish causation. The paper then shows that, even if Delaware incorporation were found to cause an increase in shareholder value, this finding would not imply that state competition is working well; benefits to incorporating in the dominant state would likely exist in a "race-toward-the bottom" equilibrium in which state competition provided undesirable incentives. Third, the analysis shows that empirical claims that state competition rewards moderation in the provision of antitakeover protections are not well grounded. Finally, we endorse a new approach to the empirical study of the subject that is based on analyzing the determinants of companies' choices of state of incorporation. Recent work based on this approach indicates that, contrary to the beliefs of state competition supporters, states that amass antitakeover statutes are more successful in the incorporation market.

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INTRODUCTION

One of the most central and enduring debates in corporate law scholarship concerns the role of states in the regulation of corporations. Simply put, what are the costs and benefits of allowing a firm, through its incorporation decision, to select which state's corporate law governs its activities? The modern debate on the subject, which began with William Cary's attack on state competition as fostering a "race to the bottom,"[1] has produced a voluminous literature.[2] The debate has had remarkable resiliency; in recent years there has been a burst of writing by legal academics weighing in on the subject.[3] Nor is interest any longer confined to U.S. academics; European policymakers now face the pressing question of how to allocate regulatory authority between the institutions of the European Union and its member national governments in the area of corporate law.[4]

The dominant view among corporate law scholars has been the "race–to–the–top" school of thought. Its supporters contend that the competition among states

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1 *See* William L. Cary, *Federalism and Corporate Law: Reflections upon Delaware*, 83 YALE L.J. 663 (1974).

2 *See, e.g.,* Ralph K. Winter, Jr., *State Law, Shareholder Protection, and the Theory of the Corporation*, 6 J. LEGAL STUD. 251 (1977); Roberta Romano, *Law as a Product: Some Pieces of the Incorporation Puzzle*, 1 J.L. ECON. & ORG. 225 (1985) [hereinafter Romano, *Law as a Product*]; FRANK H. EASTERBROOK & DANIEL R. FISCHEL, THE ECONOMIC STRUCTURE OF CORPORATE LAW 1-40 (1991) [hereinafter EASTERBROOK & FISCHEL, THE ECONOMIC STRUCTURE]; Lucian A. Bebchuk, *Federalism and the Corporation: The Desirable Limits on State Competition in Corporate Law*, 105 HARV. L. REV. 1435 (1992) [hereinafter Bebchuk, *Federalism and the Corporation*]; ROBERTA ROMANO, THE GENIUS OF AMERICAN CORPORATE LAW (1993) [hereinafter ROMANO, GENIUS].

3 *See, e.g.,* Marcel Kahan & Ehud Kamar, *Price Discrimination in the Market for Corporate Law*, 86 CORNELL L. REV. 1205 (2001) [hereinafter Kahan & Kamar, *Price Discrimination*]; Leo E. Strine, Jr., *Delaware's Corporate-Law System: Is Corporate America Buying an Exquisite Jewel or Diamond in the Rough? A Response to Kahan & Kamar's Price Discrimination in the Market for Corporate Law*, 86 CORNELL L. REV. 1257 (2001); Sanjai Bhagat & Roberta Romano, *Event Studies and the Law: Part II: Empirical Studies of Corporate Law,* 4 AM. L. & ECON. REV. 380 (2002); Stephen Choi & Andrew Guzman, *Choice and Federal Intervention in Corporate Law*, 87 VA. L. REV. 961 (2001); Robert Daines, *Does Delaware Law Improve Firm Value?*, 62 J. FIN. ECON. 525 (2001); Lucian A. Bebchuk & Allen Ferrell, *Federalism and Corporate Law: The Race to Protect Managers from Takeovers,* 99 COLUM. L. REV. 1168 (1999) [hereinafter Bebchuk & Ferrell, *Federalism and Corporate Law*]; Lucian A. Bebchuk & Allen Ferrell, *A New Approach to Takeover Law and Regulatory Competition,* 87 VA. L. REV. 111 (2001) [hereinafter Bebchuk & Ferrell, *A New Approach*]; Lucian A. Bebchuk & Allen Ferrell, *Federal Intervention to Enhance Shareholder Choice*, 87 VA. L. REV. 993 (2001) [hereinafter Bebchuk & Ferrell, *Federal Intervention*]; Jill E. Fisch, *The Peculiar Role of the Delaware Courts in the Competition for Corporate Charters*, 68 U. CIN. L. REV. 1061 (2000); Ehud Kamar, *A Regulatory Competition Theory of Indeterminacy in Corporate Law*, 98 COLUM. L. REV. 1908 (1998).

4 Two events have recently brought these issues to the forefront: the potentially sweeping decision of the European Court of Justice in the Centros case, see Case C – 212/97, on which country's corporate law governs a firm and the recent rejection of a proposed European directive on takeover regulation.

over attracting incorporations benefits shareholders.[5] On their view, Delaware, the dominant state for incorporations, has "won" the race for incorporations by being the most virtuous, that is, by offering rules that maximize shareholder wealth. Indeed, one prominent "race–to-the-top" theorist has referred to state competition as the "genius of American corporate law."[6]

The view that state competition works well rests on two propositions: (1) that states actively and vigorously compete for incorporations, and (2) that the ensuing competitive threat provides the dominant state of Delaware, as well as other states, with powerful incentives to provide value-enhancing rules. Even those skeptical of state competition have largely not questioned proposition (1), proceeding under the assumption that states compete vigorously. The debate has thus focused on proposition (2) – concerning the quality of incentives – and this Article will focus on it as well.

In questioning the quality of incentives provided by competition, critics have argued that the competitive threat might push states in undesirable directions with respect to some important corporate issues. This view, to which we subscribe, holds that state competition does not work well with respect to some (but not all) important corporate law issues.[7] On this view, state competition induces states to provide rules that managers, but not necessarily shareholders, favor with respect to corporate law issues that significantly affect managers' private benefits of control, such as rules governing takeovers. It has also been suggested that state competition leads Delaware to offer an excessively unpredictable body of law that creates unnecessary litigation.[8]

To shed light on this debate, researchers have undertaken a large number of empirical studies. The authors of these studies, as well as the corporate law scholars who have used the studies in their own work, have generally interpreted the empirical findings as supporting the race-to-the-top view. Indeed, supporters of state competition have seized on these studies as strong – nay, decisive – evidence that state competition serves shareholder interests. For example, Roberta Romano has concluded that

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5 For further details on this position, *see* Winter, *supra* note 2; ROMANO, GENIUS, *supra* note 2; EASTERBROOK & FISCHEL, THE ECONOMIC STRUCTURE, *supra* note 2.

6 *See* ROMANO, GENIUS, *supra* note 2.

7 *See* Bebchuk, *Federalism and the Corporation*, *supra* note 2; Bebchuk & Ferrell, *Federalism and Corporate Law*, *supra* note 3; Bebchuk & Ferrell, *A New Approach*, *supra* note 3; Oren Bar-Gill, Michal Barzuza, and Lucian Bebchuk, *The Market for Corporate Law*, Harvard Olin Discussion Paper No. 377 (2002), available at http://papers.ssrn.com/abstract=275452; *cf.* Cary, *supra* note 1.

8 *See* Ehud Kamar, *A Regulatory Competition Theory of Indeterminacy in Corporate Law*, 98 COLUM. L. REV. 1908 (1998); *cf.* Jonathan R. Macey & Geoffrey P. Miller, *Toward an Interest-Group Theory of Delaware Corporate Law*, 65 TEX. L. REV. 469 (1987).

> "[the findings of the empirical work] are *compelling* evidence that competition benefits investors." [9]

On a similar note, Frank Easterbrook and Daniel Fischel have stated:

> "Empirical studies confirm[ ] the force of competition. . . . These findings *fatally* undermine [the "race-to-the-bottom"] position . . . ."[10]

This Article challenges this assessment of the evidence. We argue that the conclusions supporters of state competition have drawn from the empirical evidence are unjustified. The existing evidence does not fatally undermine the criticisms of state competition, but rather leaves them unscathed.

Further, evidence generated by a new empirical approach to evaluating state competition indicates that competition rewards and encourages the amassing of antitakeover statutes by states. This new evidence calls into question state competition supporters' belief that state competition does not push states to adopt antitakeover statutes.

The skeptical account of state competition, which we will demonstrate is entirely consistent with the empirical evidence, is as follows: Because managers have substantial influence over where companies are incorporated, a state that wishes to maximize the number of corporations chartered in it will have to take into account the interests of managers. As a result, state competition pushes states to give significant weight to managerial interests.

Of course, catering to managerial interests is only problematic when the interests of shareholders and managers substantially diverge. Thus, in our view, state competition will likely fail shareholders with respect to issues that are "significantly redistributive" in that they involve a significant trade-off between important managerial and shareholder interests. One area where such a divergence of interests is likely to be particularly acute is takeover regulation. Managers interested in preserving their jobs and private benefits of control will tend to favor restrictive takeover rules, whatever the costs to shareholders.

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[9] Roberta Romano, *The Need for Competition in International Securities Regulation* at 90 (Yale Law School, Research Paper No. 258, 2001) [hereinafter Romano, *Need for Competition*]. Professor Romano has expressed similar views in other papers. *See* Roberta Romano, *Empowering Investors: A Market Approach to Securities Regulation*, 107 YALE L. J. 2359 (1998) ("If a change in domicile increases firm value, it would be exceedingly difficult to maintain that charter competition is harmful to shareholders."); Bhagat & Romano, *supra* note 3, at 384 ("One certainly cannot read the event study literature and conclude that firms reincorporating are reducing their shareholders' wealth as [critics of the "race-to-the-top" theory] contend[ ].")

[10] EASTERBROOK & FISCHEL, THE ECONOMIC STRUCTURE, *supra* note 2, at 214-15. (emphasis added).

Does the existing empirical evidence contradict this skeptical account, as so many claim? Part I examines the significant body of empirical work that has sought to determine the effects of Delaware incorporation on shareholder value. This work includes a recent cross-sectional study suggesting that shareholder value is higher for Delaware companies than for non-Delaware companies as well as reincorporation event studies indicating that reincorporations to Delaware were accompanied by increases in stock price.

A close examination of the findings of both types of studies shows that, taken as a whole, they do not establish a robust and significant correlation between Delaware incorporation and higher shareholder wealth. Furthermore, even assuming that a robust and significant correlation between Delaware incorporation and somewhat higher shareholder value were present, supporters of state competition have failed to distinguish satisfactorily between correlation and causation. The correlation of Delaware incorporation and higher stock value would not necessarily imply causation of higher stock value by Delaware incorporation. The selection of firms that incorporate in Delaware, either initially or mid-stream, is not random.

Firms electing to incorporate in Delaware and firms not making such elections must differ in some way that accounts for their different incorporation decisions. Any stock price effects correlated with Delaware incorporation may very well be due not to the direct effects of Delaware incorporation but rather to these underlying differences among firms. Indeed, we show that there is evidence that selection effects are likely to be very much at work and that inferences about the relative value of Delaware law cannot be reliably made from existing findings on correlations between Delaware incorporation and shareholder value.

Although we conclude in Part I that the existing evidence fails to demonstrate that Delaware incorporation increases shareholder value, we do believe that it is reasonable to assume that Delaware incorporation on average benefits investors, even if in a rather small and limited way. However, as Part II explains, a marginal superiority of Delaware incorporation for shareholder value does not imply that state competition (as currently structured) benefits investors. Indeed, the presence of such a marginal superiority would be entirely consistent with our skeptical account of state competition.[11]

On our view, the incentive to cater to managerial interests, and in particular to protect managers excessively from takeovers, exists in all states that wish to attract incorporations. Consequently, all such states will be pushed towards privileging managers' interests over shareholders' interests when the two conflict. In such an equilibrium, Delaware incorporation might still provide some benefits to shareholders due to Delaware's well-developed legal infrastructure and to network

[11] This point is formally demonstrated in a model developed in Bar-Gill, Barzuza, and Bebchuk, *supra* note 7.

externalities. Nevertheless, the overall corporate regimes that states adopt would be adversely shaped by state competition.

The critical question to resolve, as Part II will emphasize, is whether the existing state competition equilibrium is superior to the set of corporate rules that would prevail in the quite different equilibrium that would obtain in the absence of the current form of state competition. This question should not be confused, as supporters of state competition seem to have done, with the question of whether Delaware is somewhat better than other states in the existing state competition equilibrium.

Part III turns from these general considerations to the concrete case of state takeover regulation and what it can tell us about how state competition works in an important area of corporate law. State takeover regulation presents state competition supporters with a dilemma. The dilemma stems from the fact that many state competition supporters believe that existing state takeover law restricts corporate takeovers excessively. Supporters have therefore been forced to reconcile this belief with their view that state competition produces desirable corporate law. To this end, they have made empirical claims that state competition has not contributed to the proliferation of antitakeover statutes but rather rewarded those states that have been comparatively moderate. Delaware, by far the most successful state in the incorporation marketplace, is usually cited as the paradigm of a state with a "moderate" takeover regime.

Part III shows, however, that the empirical claims made by supporters of state competition fail to establish that state competition rewards moderation in the provision of antitakeover protections. First, although Delaware does not go as far as some states that have adopted extreme antitakeover statutes, it is far from clear that Delaware is more moderate than most states in its antitakeover stance. Second, the studies of states that adopted extreme antitakeover statutes (Massachusetts, Ohio, and Pennsylvania) do indicate that the adoption of these statutes has been detrimental to shareholder value, but they do not show that the incorporation marketplace has penalized these three states by reducing the number of incorporations in them. Whether these states have in fact been harmed or benefited by their adoption of extreme antitakeover protections in the incorporation marketplace is a question Part IV addresses.

Part IV proposes a promising new approach to the empirical investigation of state competition. We argue that researchers and corporate law scholars should seek to identify the determinants of firms' incorporation choices. Whereas prior work has largely taken incorporation choices as given, and has sought to identify how those incorporation decisions were associated with shareholder value, the proposed approach attempts to identify the factors that determine incorporation decisions in the first place. Furthermore, whereas prior work has largely ignored the considerable variance among states other than Delaware with respect to success in the incorporation market, we argue that this variance can be used to examine how differences in state corporate law regimes affect firms' incorporation decisions.

Part IV presents some summary statistics and basic cross-state comparisons that illustrate the value of this approach. Part IV also summarizes and discusses the findings of a separate study by two of us (the Incorporation Study) which carried out a full empirical analysis based on this approach.[12]

As will be described in more detail below, the analysis of incorporation decisions reveals that the competition for incorporations does in fact reward the amassing of antitakeover protections. At one end of the spectrum, states with no antitakeover statutes, such as California, do quite poorly, retaining a relatively small fraction of the companies headquartered in them and attracting a small or even negligible number of out-of-state companies. At the other end of the spectrum, the states that are quite successful on these two dimensions are typically ones that have amassed most if not all of the standard antitakeover statutes. In general, the success of a state in the market for incorporations increases as its level of antitakeover protection increases (controlling, of course, for company characteristics and for the characteristics of states other than their takeover laws).

Interestingly, the evidence does not show that the incorporation market penalizes states that have adopted extreme antitakeover statutes, as Massachusetts, Ohio, and Pennsylvania have done. Although the adoption of these statutes was universally criticized and accompanied by a significant reduction in the stock value of corporations incorporated in these states, these states have not suffered in the incorporation market. We do not doubt that there is some level of extreme antitakeover protection that would "over-do it" and make a state adopting it less attractive to incorporators. However, in contrast to the beliefs of state competition supporters, this level has apparently not been reached by Massachusetts, Ohio, and Pennsylvania, the three states blacklisted by scholars as extreme.

The study of the determinants of domicile decisions can thus shed a more systematic light on the connection between state competition and takeover rules. Competition appears to reward, and thus encourage, the amassing of antitakeover statutes. It is therefore difficult to maintain, as many supporters of state competition have done, both that (1) state competition generally rewards the provision of rules that enhance shareholder value, and (2) amassing antitakeover protections will restrict takeovers excessively and hurt shareholder value. At least one of these two propositions is in need of revision.

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[12] *See* Lucian Bebchuk & Alma Cohen, "Firms' Decisions Where to Incorporate," Harvard Olin Discussion Paper No. 351 (2002), forthcoming J. LAW & ECON (2003), available at http://papers.ssrn.com/abstract=304386 [hereinafter Incorporation Study].

Another contemporaneous study which applies this approach, and whose results we discuss, is Guhan Subramanian, *The Influence of Antitakeover Statutes on Incorporation Choice: Evidence on the 'Race' Debate and Antitakeover Overreaching*, 150 U. Pa. L. Rev. 1795 (2002).

Part V concludes that, in contrast to the strongly held beliefs of race-to-the-top scholars, the evidence is consistent with, and in certain ways supports, the skeptical view of how state competition, as currently structured, performs with respect to certain important corporate law subjects. This conclusion has significant implications for the ongoing debates regarding state competition, corporate governance, and state takeover law.

Before proceeding, we wish to note an additional reason – which is outside the scope of this Article's analysis – for questioning the empirical basis of the view supporting state competition. As noted, whereas we focus here on the proposition that competition provides desirable incentives, another key proposition underlying the race-to-the top view is that states vigorously compete for corporate charters. In companion work, we put forward empirical evidence questioning this premise as well. The Incorporation Study indicates that competition is highly imperfect in that Delaware faces scant competition in the market for out-of-state incorporations; firms largely incorporate either in Delaware or in the state of their headquarters.[13] Building on this finding, a companion work by Assaf Hamdani and one of us provides evidence that Delaware's dominance of the incorporation market is stronger and more secure than has been recognized, and it then discusses how this feature of the incorporation market casts doubt on the extent to which this market can be relied on to produce rules that enhance shareholder value.[14] This work complements the analysis of this Article and reinforces its message – that the existing evidence does not support the views of state competition's advocates.

I. DOES DELAWARE INCORPORATION INCREASE SHAREHOLDER VALUE?

Researchers have tried to test whether Delaware corporate law is superior by identifying how, compared with firms incorporated in other states, incorporation in Delaware affects stock price, Tobin's Q,[15] or some other metric associated with shareholder wealth. We begin our examination of these studies by discussing, in Part I.A, Robert Daines's influential paper measuring and comparing the Tobin's Q of Delaware and non-Delaware firms. Part I.B will then look at reincorporation event studies, which measure stock price reaction to a firm's reincorporation from one state to another. We will show that the findings of some of these studies are weaker and less conclusive than has been generally recognized. More importantly,

[13] See Bebchuk & Cohen, *supra* note 12.

[14] *See* Lucian A. Bebchuk & Assaf Hamdani, *Vigorous Race or Leisurely Walk: Reconsidering the Debate on State Competition in Corporate Law*, forthcoming Yale L. J. 2002, available at http://papers.ssrn.com/abstract_id=325520. An empirical analysis that complements this work is offered by Marcel Kahan and Ehud Kamar, *The Myth of State Competition in Corporate Law*, forthcoming STAN. L. REV. (2002).

[15] *See* RICHARD A. BREALEY & STEWART C. MYERS, PRINCIPLES OF CORPORATE FINANCE 775-76 (5th ed. 1996) (explaining Tobin's Q).

both reincorporation event studies and Daines's Tobin's Q study fail to establish that their findings of increased value for Delaware firms, whatever the metric being used, should be attributed to Delaware's provision of a superior corporate law system. It is crucial in assessing these studies to remember that incorporation and reincorporation decisions are not random; there is thus no good basis for inferring that the measured differences in shareholder wealth are due to differences in corporate law quality as opposed to whatever influences firms' (re)incorporation decisions.

A. Tobin's Q Differences Between Delaware and Non-Delaware Corporations

Recognizing the limitations of reincorporation event studies, which we will discuss in the next section, Robert Daines sought to test the effect of Delaware incorporation on shareholder wealth in a different way. In a recent but already influential study, he compared Delaware and non-Delaware companies in terms of Tobin's Q.[16] Tobin's Q, which is the ratio between a firm's market value and its book value, is a widely used measure of how valuable a firm's assets are in relation to their replacement cost. Looking at the aggregate data from 1981 to 1996, Daines found that Delaware companies had a higher Tobin's Q even after controlling for a variety of factors. He inferred from this finding that Delaware law accounts for the higher Tobin's Q and, therefore, acts to increase shareholder value.

Daines's findings have received a great deal of attention,[17] and have been put forward by supporters of state competition as strong evidence for their view.[18] As explained below, however, subsequent work has shown that the reported correlation between Tobin's Q and Delaware incorporation no longer exists. Furthermore, the evidence about the existence of such a correlation in the past does not at tell us whether such a correlation was due to a selection effect rather than beneficial effects of Delaware incorporation.

1. The Current Nonexistence of Correlation

Work done subsequent to Daines's study indicates that the reported correlation no longer exists. The Incorporation Study, examining data from the end of 1999, found that there was no correlation between Delaware incorporation and higher Tobin's Q at the end of 1999.[19] Another recent study, by Gompers, Ishii and

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[16] *See* Daines, *supra* note 3.

[17] *See, e.g.,* Steven Lipin, *Firms Incorporated in Delaware are Valued More by Investors*, Wall Street Journal (Feb. 28, 2000).

[18] *See* Jonathan Macey, *Displacing Delaware: Can the Feds Do a Better job than the States in Regulating Takeovers?* 57 BUS. LAW. 1025 (2002) (relying on Daines's findings to oppose a proposal by Bebchuk and Ferrell for choice-enhancing federal intervention).

[19] *See* Bebchuk & Cohen, *supra* note 12.

Metrick, using a set of controls that includes firm-level corporate governance arrangements, found that during the 1990s Delaware incorporation was, on average, associated with a *lower* Tobin's Q.[20]

Furthermore, in a working paper study focusing on the correlation between Tobin's Q and Delaware incorporation, Guhan Subramanian finds that no correlation between a higher Tobin's Q and Delaware incorporation existed in any of the years 1996-2001.[21] Subramanian improves upon Daines's testing methodology in several ways and provides a thorough and careful testing of the Tobin's Q question. While his results confirm the existence of a correlation between Tobin's Q and Delaware incorporation during the years 1991-1996, they indicate that such correlation does not exist in any of the years after 1996, which is when Daines's study ended.

Interestingly, the single-year regressions in Daines's study indicate that a positive correlation between higher Tobin's Q and Delaware incorporation did not exist in five years during this period (1982, 1987, 1989, 1991, 1995); in an additional year (1996), the statistical significance of the correlation was only at the 90% level.[22] Subramanian reexamines three of these years (1991, 1995, and 1996) and finds that the correlation did exist in them but does not do so for the other three.

In any event, whether or not the correlation existed in all of the years during the period covered by the Daines's study, for our purposes the crucial point is that such a correlation does not exist at the present time. This fact should give supporters of state competition some pause. If the existence of the correlation is viewed by them as an indication that competition works well, shouldn't the nonexistence of such a correlation now lead to doubts as to whether competition is working well at the present time?

2. The Fluctuations of the "Delaware Effect"

An assessment of Daines's findings should take into account the fluctuations in the size of the Delaware effect. An examination of his results indicates that the magnitude of the correlation varied greatly from year to year. For instance, Daines's regressions indicate that Delaware companies had a Tobin's Q in 1986 that was 12% higher (at the 99% confidence level) than that of non-Delaware companies. In the

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[20] *See* Paul A. Gompers et al., NBER Working Paper No. 8449 (August 2001). Specifically, they find that Delaware incorporation tended to be positively correlated at the beginning of the studied period and negative toward the end, with an average coefficient that was negative and statistically significant.

[21] *See* Subramanian, *The Disappearing Delaware Effect*, working paper, Harvard Law School (on file with authors) (September 2002).

[22] The same basic picture emerges if one uses Tobin's Q unadjusted by industry. There were four years in which there was no statistically significant correlation between Delaware incorporation and (an unadjusted) Tobin's Q and one additional year in which the statistical significance of the correlation was only at the 90% level. Daines, *supra* note 3.

subsequent year, 1987, however, the increase in Tobin's Q associated with Delaware incorporation was only 5%, which was statistically insignificant from zero. To take another example, in 1991 the increase in Tobin's Q associated with Delaware incorporation was 4%, also not statistically significant from zero, while in 1992, that figure suddenly increased to 12% (at the 99% confidence level).[23]

Such large fluctuations from year to year are deeply puzzling if one takes the view that differences in value between Delaware and non-Delaware companies are the result of the benefits of Delaware law. For Daines's attribution of the differences in Tobin's Q to the superiority of Delaware's corporate law regime to be plausible, there must have been ground-breaking legal changes in Delaware corporate law that occurred during these years that can account for these fluctuations. It is hard to imagine what these dramatic changes could have been. Whatever the benefits of Delaware's legal regime and thus of Delaware incorporation, they must be more stable than that.

In his working paper that re-does Daines's analysis, using different specifications for some key variables, Subramanian obtains results in which the Delaware effect does not fluctuates wildly form year to year but still changes significantly over time. He finds that, while Delaware firms were worth 2-3% more during 1991-1996 (3% in 1991-1993 and 2% in 1994-1996), there was not statistically significant difference between Delaware and non-Delaware firms from 1997 on. Subramanian seeks to explain the change in the value of Delaware firms between 1996 and 1997 by a growing perception in the market, caused by three cases in which Delaware firms fended off hostile bidders, that Delaware would allow firms to "just say no." Subramanian acknowledges that the permissibility of just say no was largely established by Delaware law several years earlier and that the bidders in the three cases on which he relies did not even try to get the Delaware courts to order pill redemption. But he conjectures that these three cases might have made the permissibility of just say no under Delaware law more salient. It is far from clear, however, that such a saliency story can account for a 2% decline in the value of Delaware firm from 1996 to 1997.

The fluctuations in the Delaware effect, whether from year to year or from period to period, might be due to a selection effect. Under this story, Delaware companies differ significantly from non-Delaware firms in some underlying way – they are of a different "type." And it is not unusual in the stock market for the relative pricing of firms of different types to fluctuate considerably from year to year. This brings us to the general problem of selection.

[23] Daines, *supra* note 3, at 535 tbl. 3.

3. The Problem of Selection

There might be some who, upon finding that the correlation between Tobin's Q and Delaware incorporation no longer exist, might want to move on to other pieces of the empirical evidence. It would be worthwhile, however, examining whether the existence of correlation in some past periods (even if not now) indicates that Delaware incorporation did produce significant increases in value for shareholders. To draw such an inference, it would be necessary to determine whether the relationship between Delaware incorporation and a high Tobin's Q (or a positive abnormal price reaction in the case of reincorporation event studies) is one of causation or mere correlation. In other words, did Delaware law cause Delaware firms to have a high Tobin's Q or did companies choosing to incorporate in Delaware tend to have a higher Tobin's Q?

If incorporation and reincorporation decisions were random, and if we could therefore safely assume that Delaware and non-Delaware firms were identical other than in their state of incorporation, differences in Tobin's Q would arguably be attributable to Delaware's superior corporate law regime. But if incorporation decisions were not random, then the differences in Tobin's Q could have resulted from the systematic differences between firms that incorporated in Delaware and those that did not. Below we discuss why incorporation decisions should not be regarded as random.

a. Selection Follows from the Very Presence of a Delaware Wealth Effect

If there were any period in which Delaware incorporation could bring about an increase in shareholder value, it would follow that Delaware and non-Delaware firms differed in systematic ways other than in their state of incorporation. Consider a period in which a move to Delaware could have produced, say, a 3% or 5% increase in value for companies incorporated in other states.[24] Why did some firms choose to leave so much money on the table, money they could easily have collected by simply incorporating in Delaware? There must have been something different about these firms. The difference might have been in managerial quality, or agency costs, or firm strategy. Whatever it was, this difference must have been significant enough to cause non-reincorporating firms to forgo an easy and significant increase in firm value. Once differences between Delaware and non-Delaware firms are admitted, however, there is a real possibility that they, rather than the purported benefits of Delaware incorporation, account for whatever differences in value existed, at the given point in time, between Delaware and non-Delaware companies.

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[24] Five percent is the estimate provided by Daines's study for the value-added of Delaware law given the pooled sample estimates. *Id.* at Tbl. 3. Subramanian, *supra* note 21, estimates that Delaware firms were worth 2%-3% more during the period 1991-1996.

While Daines's study makes an impressive effort to control for as many parameters as possible, including type of business and firm size, it nonetheless remains true that if in a group of seemingly identical firms, some firms incorporate in Delaware and others do not, there must be omitted variables that produce this differential behavior. This is all the more true if it is supposed that one choice produces a substantial increase in firm value and the other does not.

The presence of such variables is clearly suggested by the results of the Incorporation Study. Using the Compustat database that Daines also used, this study sought to identify which characteristics make companies more or less likely to incorporate in Delaware. It found, for example, that larger and newer companies are more likely to incorporate in Delaware. For our purposes, however, the crucial point is that the study's regressions, controlling for various company characteristics (which Daines also controlled for) had an explanatory power of only 13% for the decision whether or not to incorporate in Delaware.[25] This finding clearly suggests the importance of omitted variables in explaining why some firms but not others choose Delaware incorporation.[26]

b. Understanding Selection

There are various explanations that could account for why firms with the same Compustat data characteristics make different incorporation and reincorporation decisions. Consider, for example, the following scenario.[27] Law

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[25] Bebchuk & Cohen, *supra* note 12.

[26] It is worth noting another interesting attempt by Daines to isolate his findings from the selection effect. He estimates the difference in Tobin's Q only between mature Delaware and mature non-Delaware firms on the theory that a firm's current valuation is unrelated to its valuation years ago. He also estimates the difference in Tobin's Q between Delaware and non-Delaware firms while controlling for the prestige of the firm's underwriter at the time of its initial public offering, assuming that this prestige is correlated with the firm's quality and value. These tests also show a correlation between Delaware incorporation and a higher Tobin's Q.

But these tests do not solve the selection problems for two reasons. First, the finding that otherwise identical firms, as indicated by their choice of an underwriter or maturity, make different choices on whether or not to incorporate in Delaware still raises the same type of questions. If the firms are really identical, one must ask what accounts for the difference in incorporation choices, unless one believes that incorporation choices are random? And why are underwriters with similar prestige sometimes associated with Delaware incorporations and sometimes with non-Delaware incorporations, which are value-reducing?

Second, these tests cannot address selection effects that occur after incorporation. We know that some selection among firms must be occurring because of the non-random nature of reincorporation decisions. Controlling for decisions made at the time of incorporation does not control for the decisions that have been made since that time with respect to whether or not to reincorporate. The current state of incorporation of the firms whose Tobin's Qs are being measured will reflect these post-incorporation decisions.

[27] This story is suggested in Bebchuk & Ferrell, *A New Approach*, *supra* note 3, at 137-38.

firms centered in national financial centers such as New York City might tend to prefer Delaware incorporation. And companies that use such law firms for their counsel might be persuaded or influenced to incorporate in Delaware. It is possible that these companies may be more likely to have sophisticated and ambitious managers or have some other quality that operates to increase firm value. Of course, this scenario, based on managerial heterogeneity, is only one of many possible stories that an examination of the selection issue should consider. The critical point is that the different incorporation choices of firms with the same basic financial features – some incorporate in Delaware and some do not – are bound to reflect some other differences between them, and the latter might account for whatever differences in corporate value exist between Delaware and non-Delaware firms.

Discovering what influences companies' incorporation decisions is an area in need of empirical work. Until such studies are available and we know a great deal more about how firms make incorporation decisions, the attribution of differences in firm value to differences in corporate regimes will remain questionable.

B. Event Studies of Reincorporations

A number of studies have examined stock price reaction to changes in a firm's state of incorporation. The overwhelming majority of the firms examined by these studies, as is true with reincorporating firms in general, reincorporate to Delaware.[28] The reincorporation studies are by far the most commonly cited evidence for the proposition that Delaware corporate law increases shareholder wealth. Such studies, for instance, provided much of the basis for the views of Professors Easterbrook, Fischel and Romano quoted earlier.[29]

What conclusions should we draw from these reincorporation studies? The next section will emphasize that in answering this question one should bear in mind the flaws in some of these event studies and the fact that the documented positive abnormal returns associated with reincorporations are, on the whole, quite modest. Part I.B.2 will then argue that there is no firm basis for attributing these modest positive abnormal returns to the superiority of Delaware's corporate law regime.

1. The Abnormal Returns Findings: Questions of Robustness and Magnitude

There have been eight reincorporation event studies. Overall, the picture that emerges is one of modest gains accompanying reincorporation. Six of the eight studies documented positive abnormal stock returns associated with the reincorporating firms in the sample.[30] The remaining two found negative abnormal

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[28] *See* Bhagat & Romano, *supra* note 3; Romano, *Law as a Product*, *supra* note 2.

[29] *See supra* Introduction.

[30] *See* Jianghong Wang, *Performance of Reincorporating Firms* (1995) (unpublished manuscript on file with authors) (Yale School of Management); Jeffrey Netter, & Annette Poulson, *State*

returns associated with reincorporations; one found negative returns associated with the entire sample,[31] while the other found negative returns associated with a subgroup of the reincorporating firms.[32] Pooling the results from all eight studies, the weighted average price reaction to reincorporation is +1.28%.[33] Even accepting this finding at face value, the positive abnormal return attributable to Delaware's superior corporate law regime is rather small. Before drawing any firm conclusions, however, it is first worth taking a closer look at these event studies.

The two earliest reincorporation event studies used problematic methodologies that were subsequently viewed to be unreliable.[34] Six subsequent

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Corporation Laws and Shareholders: The Recent Experience, 18 FINANCIAL MANAGEMENT 29-40 (1989); Michael Bradley & Cindy A. Schipani, *The Relevance of the Duty of Care Standard in Corporate Governance,* 75 IOWA L. REV. 1-74 (1989); Romano, *Law as a Product*, *supra* note 2; Peter Dodd & Richard Leftwich, *The Market for Corporate Charters: Unhealthy Competition v.s. Federal Regulation,* 53 J. OF BUS. 259-283 (1980); and Allen Hyman, *The Delaware Controversy – The Legal Debate*, 4 J. OF CORP. LAW 368-398 (1979).

31 *See* Randall A. Heron & Wilbur G. Lewellen, *An Empirical Analysis of the Reincorporation Decision*, 33 J. OF FIN. & QUANT. ANALY. 549-568 (1998).

32 *See* Pamela Peterson, *Reincorporation Motives and Shareholder Wealth*, 23 FIN. REV. 151 (1988).

33 Returns are weighted by their sample size. In taking pooled average price reactions, we follow John C. Coates IV, *Takeover Defenses in the Shadow of the Pill: A Critique of the Scientific Evidence,* 79 TEX. L. REV. 271, 283 (2000) and Michael C. Jensen & Richard S. Ruback, *The Market for Corporate Control: The Scientific Evidence*, 11 J. FIN. ECON. 5, 12-13 (1980).

34 In the first study, Allen Hyman found positive abnormal returns for reincorporating firms for four of the five trading days prior to the public announcement of reincorporation. Hyman, *supra* note 30. But this finding does not tell us whether the positive abnormal returns were associated with the reincorporation announcement itself, which is the relevant date. Whether statistically abnormal returns for the sample occurred over a period spanning the five days before and after the announcement day itself is unreported. The study does not tell us whether there were positive abnormal returns associated with the period spanning one day immediately before and after the announcement date, a commonly used time-frame for reincorporation studies. These concerns are heightened by the fact that abnormal returns were determined by reference to the performance of the Standard & Poor's index, a somewhat unorthodox, and unreliable, methodology.

The second reincorporation event study, by Peter Dodd and Richard Leftwich, examined a sample of 140 publicly traded companies that reincorporated between 1927 and 1977. Dodd & Leftwich, *supra* note 30. The study did find statistically significant positive abnormal returns, but it used an interval of *two years* before the reincorporation date. Such an extended period sheds little light on the effect of reincorporation. It is generally true that using an interval of a few days or weeks around an event, rather than just the day of the event itself, can still do a good job of capturing the effects of the event. However, this is not true for a two-year interval. *See, e.g.,* S.P. Kothari & Jerold P. Warner, *Measuring Long-Horizon Security Price Performance*, 43 J. FIN. ECON. 301, 301 & 337 (1997) (finding that tests of multi-year abnormal returns around firm-specific events are "severely mis-specified" and concluding that "the interpretation of long-horizon tests requires extreme caution."); Brad M. Barber & John D. Lyon, *Detecting Long-Run Abnormal Stock Returns: The Empirical Power and Specification of Test Statistics*, 43 J. FIN. ECON. 341, studies used more standard and reliable methodologies. These six studies, summarized in the table below, present a rather mixed picture.[35] Roberta Romano's study, the earliest and most influential of the six, found a positive abnormal return of 4.18%.[36] However, three of the subsequent five studies found abnormal returns in the vicinity of 1%, and two of the subsequent five studies, including the most recent event study which used the largest sample size, did not find an abnormal return that differed from zero in a statistically significant way.

Authors	Abnormal Return	Sample Size
Romano (1985)	4.18%	150
Peterson (1988)	.27%	30
Bradley & Schipani (1989)	1.04%	32
Netter & Paulson (1989)	.93%	36
Wang (1995)	.97%	145
Heron & Lewellen (1998)	-.15%	294

Thus, a 1% positive abnormal return is probably as fair a measure as any if one were inclined to rely on these event studies to measure the effect on stock price of reincorporation to a superior corporate law regime.[37] Accordingly, even if the positive abnormal stock price reaction is entirely due to the benefits of Delaware incorporation, these benefits appear to be rather modest.[38] For instance, the adoption of confidential voting, which is usually not considered a significant change, has a reported positive abnormal return of approximately 1%.[39] But should one attribute the entire positive abnormal return found in these event studies to the superiority of Delaware incorporation?

342-43 (1997) (also finding that long-run tests are mis-specified and identifying new listing bias, rebalancing bias, and skewness bias as reasons).

35 *See* Heron & Lewellen, *supra* note 31; Wang, *supra* note 30; Netter & Paulson, *supra* note 30; Bradley & Schipani, *supra* note 30; Peterson, *supra* note 32; Romano, *Law as a Product*, *supra* note 2.

36 *See* Romano, *Law as a Product*, *supra* note 2.

37 The pooled weighted average abnormal return of these six studies is 1.16%.

38 We do recognize, of course, that a 1% increase in firm value can still be quite meaningful in terms of the dollars at stake. We point out the size of the abnormal return merely to place it in perspective.

39 Coates, *supra* note 33, at 284 (pointing out that the positive abnormal return of adopting confidential voting is .9234%).

2. *The Problem of Confounding Events*

a. Confounding Events

If the subset of firms reincorporating at any point in time were a random selection from the universe of all corporations, it would follow that unaccounted for increases in a reincorporating firm's stock price on the date the news of reincorporation reached the market could reasonably be attributed to Delaware's superior corporate law. The randomness of the selection would help ensure that firm-specific characteristics were not affecting stock price.

However, there is good reason to believe (as was also the case when considering Daines's Tobin's Q study) that reincorporation decisions are not random, but rather are associated with or produced by specific events or occurrences, a phenomenon we will refer to as "confounding events." As a result, any findings of positive abnormal returns could well be the result not of investors' anticipation of moving to a better legal regime but rather of investors' reactions to these confounding events. The need to disentangle various effects is a generic problem that arises with the use of event studies in the field of corporate law, but its importance varies with the context.[40] In the context of corporate reincorporations, the presence of confounding events is an issue that must be confronted because reincorporation decisions are clearly not random. Only some firms elect to reincorporate, and they choose to do so at a particular point in time. Thus, some event, perhaps the receipt of new information concerning the corporation or a new firm strategy, must underlie the decision of the managers of a minority of companies to pursue reincorporation to a particular state at a specific point in time. Investors could very well revise their estimates of a company's value in light of such an event, if the event is observable, or in light of the inference that such an event might have occurred, if the event is not observable. Either way, reincorporations are likely to be accompanied by investors revising their estimates of the value of reincorporating companies for reasons that have nothing to do with differences in legal regimes.

Indeed, a close examination of the reincorporation event studies confirms that confounding events have a considerable impact on documented returns. Most of the studies indicate that reincorporations are the product of significant selection effects and were accompanied by certain events (which could have caused revised valuation) or were followed by certain events (and thus could have been viewed by investors as signals that such events might indeed follow). For example, in a well-

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[40] For instance, an important issue in corporate finance is the effectiveness of event studies in identifying the underlying sources of the gains that occur as a result of corporate mergers. *See* Gregor Andrade et al., *New Evidence and Perspectives on Mergers*, 15 J. ECON. PERSP. 103, 117 (2001).

known study, Romano found that "most reincorporations preceded or coincided with a series of distinct and identifiable transactions,"[41] and that "the most plausible explanation of the reincorporation phenomenon is that corporations planning to engage in specific activities consider the choice of domicile important."[42] Such findings are consistent with the view that reincorporations are not random, and that the returns accompanying reincorporations reflect investors' reactions to events that partly coincide with, and partly might be inferred from, the reincorporation decisions.

Of Romano's sample of 150 reincorporations, 63 were associated with an active merger and acquisitions program by the firms in question.[43] Such programs are known to be associated with positive abnormal returns.[44] Below we will discuss two other types of confounding events stories that seem plausible in light of the evidence. Each one of them could well have been present in some significant fraction of reincorporations and could explain why, even if firms do not on average benefit from moving to Delaware's legal regime, reincorporations were accompanied by increases in company value. The following list of types of confounding events is meant to be illustrative, not exhaustive.

b. Scheduling Reincorporation Votes in Relatively Good Times

Managers interested in reincorporation might well prefer bringing reincorporation proposals to a shareholder vote when things are going well, or at least not poorly, for the company. Managers are more likely to receive shareholder approval for a proposal if shareholders are content with the company's overall performance. Managers, who have a great deal of flexibility in terms of when a reincorporation proposal will be brought before shareholders, can orchestrate, at least to a significant extent, shareholder votes to coincide with good times.

Thus, it might be that, on average, managers bring reincorporation proposals to shareholders when contemporaneous news about the company's performance, or news expected to be released by the time of the vote, is better than average. Indeed, to produce an average positive stock price effect, it would be enough merely that managers avoid pursuing reincorporations at times when particularly bad news about the company is revealed. In short, according to this story, reincorporations may generally be accompanied by an upward revision in investors' valuations because investors on average receive or expect to receive better than average news.

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41 *See* Romano, *Law as a Product*, *supra* note 2. Professor Romano reports that 72% of reincorporations between 1960 and 1982 were associated either with a public offering of stock, mergers, or adoption of antitakeover defenses. ROMANO, GENIUS, *supra* note 2.

42 Romano, *Law as a Product, supra* note 2, at 261.

43 *Id.* at 268.

44 *See* Katherine Schipper & Rex Thompson, *Evidence on the Capitalized Value of Merger Activity for Acquiring Firms*, 11 J. OF FIN. ECON. 85 (1983).

The story that managers time reincorporation votes to take place when things are going better than average sits well with a pattern established by the reincorporation event studies. As Michael Bradley and Cindy Schipani explain, "firms choose to reincorporate in Delaware *after* they have experienced an abnormal run-up in their stock price."[45] Consistent with this observation, the Dodd and Leftwich reincorporation event study found, both for the entire sample of reincorporating firms as well as for the group of firms for which they had accurate reincorporation announcement dates, that most of the abnormal returns experienced by reincorporating firms occurred well before the event date. The same finding was subsequently reproduced in both Romano's 1985 event study and Bradley and Schipani's 1989 event study. This pattern is consistent with the view that the reincorporation event studies lump together abnormal returns that lead to or influence the timing of the reincorporation decision (and which could well continue to be present at the time of the reincorporation announcement) with abnormal returns that should be attributed to the reincorporation announcement itself, shorn of any confounding events.

Furthermore, the Heron and Lewellen reincorporation event study reports that a significant number of reincorporations in the study's raw data set coincided with substantial corporate events such as dividend increases. Whereas Heron and Lewellen excluded these reincorporations from the sample they studied, other studies did not similarly attempt to exclude companies that increased their dividends (or had other coincident events) at the same time that they announced their plan to reincorporate, which might explain why these studies found higher positive abnormal returns associated with reincorporation than did the Heron and Lewellen study.

c. Increased Likelihood of Takeover

A second plausible confounding events story centers on takeover defenses. As the reincorporation events studies indicate, a significant number of reincorporations are motivated by antitakeover considerations. Reincorporating companies often candidly admit that antitakeover considerations are a motive for seeking reincorporation.[46] When investors suspect or are told that a company is moving for such reasons, they will adjust their valuations of the company to reflect not only (1) the direct effect of the company being subject to a different state takeover regime, but also (2) the increased probability, inferred from the managers' focus on antitakeover considerations, of the company being a target.

The second factor, the increased probability of a takeover, is generally received as good news by investors and can be expected to have a positive effect on

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45 Bradley & Schipani, *supra* note 30, at 67 (emphasis added)

46 *See, e.g.,* Heron & Lewellen, *supra* note 31, at 553; Romano, *Law as a Product*, *supra* note 2, at 225, 249-61.

stock prices. Thus, the presence of this factor, according to this story, implies that the reported positive abnormal returns documented in reincorporation event studies represent an upward biased estimate of the effect of moving companies to a different state takeover regime. Even if it were the case that the first factor (subjecting the company to a different state takeover regime) has a sufficiently large negative effect on stock prices so that all the antitakeover-motivated reincorporations are accompanied by a negative abnormal return, this negative abnormal return would still be an upward biased estimate of the lower return caused by the first factor alone. And this upward bias in the documented returns for part of the reincorporation sample would, of course, increase average results for the sample as a whole.

d. Different Reincorporation Categories

Consistent with the significance of confounding events, two recent studies found that the abnormal returns experienced by reincorporating firms vary depending on the announced motivation for the firm's decision to reincorporate. Heron and Lewellen found that reincorporations motivated by a desire to erect takeover defenses were accompanied by statistically significant negative abnormal returns.[47] In contrast, reincorporations motivated by a desire to limit directors' liability resulted in positive abnormal returns.[48] Peterson's reincorporation event study also documented that abnormal returns differed depending on the announced motivation for reincorporation.[49] If the motivation for the reincorporation was defensive in nature, the abnormal return was -.16%, while other reincorporations experienced a positive abnormal return of .65%.

Romano's 1985 study broke down reincorporations into three groups: reincorporations that seemed motivated by mergers and acquisition programs; reincorporations that seemed motivated by antitakeover considerations; and a miscellaneous group consisting of all the remaining reincorporations. She found that each of the three groups had a substantially different average abnormal return but that the variance of the three associated abnormal returns was not statistically significant.[50]

In recent papers, Sanjai Bhagat and Roberta Romano argue that, based on Romano's 1985 study, confounding events do not influence the returns reported in the event studies literature.[51] Bhagat and Romano interpret the lack of statistically

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[47] Heron & Lewellen, *supra* note 31, at 549-68.
[48] *Id.* at 550, 557 tbl. 5.
[49] *See* Peterson, *supra* note 32.
[50] Romano, *Law as a Product*, *supra* note 2, at 272. Peterson's study, which also found different abnormal returns across subgroups of reincorporating firms, did not test the statistical significance of the returns' variance.
[51] *See, e.g.,* Bhagat & Romano, *supra* note 3, at 387.

significant differences between the three groups as evidence that "significant positive returns upon reincorporation can be attributed to investors' positive assessment of the change in legal regime, not a confounding of the impact of reincorporating firms' other future projects."[52] But this inference, which the 1985 study did not make, is unwarranted.

To start, such an inference would overlook the different conclusions reached by more recent studies. Perhaps more importantly, Romano's 1985 testing was not designed to address the confounding events issue. The testing examined whether reincorporations with different motivations had different effects on stock market values. Tests for confounding events should focus on all the information that was publicly known at the time of the reincorporation, but the information on which Romano's 1985 study relied differed from this category of information in two significant ways. First, Romano's analysis used for the classification information that was not publicly known at the time of the reincorporation, such as information about acquisitions in the year following the reincorporation and information disclosed to Romano privately in response to the questionnaire she circulated to firms many years after their reincorporation. Second, Romano's analysis did not include some public information that would be relevant for studying the confounding events question, such as how the earnings and other financial disclosures of reincorporating companies at the time of their reincorporation compared with those of non-reincorporating companies.[53]

In sum, there are good reasons, grounded in the empirical evidence, to believe that reincorporations are accompanied by confounding events that can help explain the documented positive abnormal returns. What is lacking in the literature to date is a better understanding of what causes firms to incorporate at given times in particular jurisdictions. We will return to this issue in Part IV.

II. DOES A MARGINAL SUPERIORITY OF DELAWARE INCORPORATION IMPLY THAT STATE COMPETITION BENEFITS INVESTORS?

Part I questioned whether the available empirical evidence demonstrates that Delaware's legal regime benefits investors more than that of other states. In this Part, we change directions and assume that incorporation in Delaware does add

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[52] *Id.; see also* ROMANO, GENIUS, *supra* note 2, at 18; Romano, *Need for Competition, supra* note 9.

[53] It is also worth noting that the breakdown of reincorporating firms into groups in Romano's 1985 study involved substantial "noise" which made it difficult to get statistically significant results. Given that the breakdown into groups involved a great deal of noise (as the study itself readily admits), the 1985 study prudentially emphasizes that this noise, "may very well be the source of the test's inability to find any significant difference among the groups." Romano, *Law as a Product, supra* note 2, at 272. The only conclusion that the 1985 study was prepared to make was that "[w]e cannot conclude definitely that the stock returns for the different types of reincorporations are significantly different." *Id.*

some value, even if it is difficult to measure. It is reasonable to assume that reincorporation often adds some value; otherwise, shareholders would tend not to vote to reincorporate. But what are the implications of such benefits for the merits of state competition?

Many scholars have assumed, without much discussion, that the presence of benefits to shareholders from Delaware incorporation would prove that state competition benefits investors. This assumption is not valid, however. The relative performance of Delaware in a state competition system and the overall performance of the state competition system are two separate issues. Findings of Delaware marginal superiority do not address the question of how well state competition is performing overall and, in particular, whether it performs better than would an alternative regime. And it is the performance of the state competition regime overall that is at the heart of the debate surrounding state competition for corporate charters.

A. The Need to Evaluate States' Collective Performance

It is worthwhile emphasizing that, in many respects, the various states' corporate regimes are not very different from each other when compared against the range of possible choices and the laws of other countries. This feature of U.S. corporate law has been well documented in William Carney's comprehensive study of state corporate law.[54] The similarity is especially noteworthy in light of the existence of fifty-one separate corporate codes and the resulting opportunity for a wide variety of approaches to many corporate law issues.[55]

Given the fundamental similarity among state corporate law regimes, assessing the collective approach that the states have adopted in most areas of corporate regulation is as important in assessing the value of state competition as evaluating some of the real differences (such as in the area of takeover regulation) that do exist between states. This assessment of states' collective approach should focus on those areas where there is a substantial divergence between the interests of managers and shareholders. It is in these areas that states, including Delaware, are likely to collectively adopt a sub-optimal position.

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[54] *See* William J. Carney, *The Production of Corporate Law,* 71 S. CAL. L. REV. 715 (1998); *see also* John C. Coffee, Jr., *The Future as History: The Prospects for Global Convergence of Corporate Governance and Its Implications*, 93 NW. U.L. REV. 641, 702 (1999) ("[T]he best documented finding in the empirical literature on the U.S. corporate chartering competition is that a high degree of uniformity has emerged in American corporate laws.").

[55] For example, despite the large number of U.S. jurisdictions, none of them has offered, as the British City Code has done, a clear and categorical ban on the use of defensive tactics in the presence of a bona fide tender offer in the absence of shareholder approval. See 2 P.F.C. Begg, CORPORATE ACQUISITIONS AND MERGERS: A PRACTICAL GUIDE TO THE LEGAL, FINANCIAL, AND ADMINISTRATIVE IMPLICATIONS (Graham & Trotman Limited, 1985).

B. A Skeptical Account of State Competition is Consistent with Delaware Marginal Superiority

The superiority of Delaware law, as purportedly documented by the studies we reviewed in Part I of this paper, is consistent with the pro-state competition position. But such a finding is equally consistent with a more skeptical theory of how state competition works and, therefore, is inconclusive in adjudicating the debate over state competition. Indeed, any account of state competition – whether critical or supportive – that takes into account the substantial uniformity among states in substantive arrangements, would likely start from the premise that Delaware's corporate regime is marginally better. If all states have essentially the same substantive rules, it is likely that Delaware's unique non-substantive advantages will outweigh any of the relatively small differences that exist among state laws. Delaware is the beneficiary of network externalities and a well-developed legal infrastructure.[56]

For example, consider the following skeptical account of state competition. Just as shareholders presumably approve reincorporations when they increase firm value, a decision by managers not to reincorporate, which is not reviewable by shareholders under state law, is presumably in the interests of managers. With respect to certain corporate law subjects, there will often be a substantial divergence between the interests of managers and those of shareholders. In such circumstances, Delaware, as well as other states, will care a great deal about satisfying managers' preferences, as states will wish to prevent managers from pursuing reincorporation elsewhere.[57]

As we have argued in earlier work, corporate rules that are significantly redistributive from shareholders to managers and rules that affect the discipline of the market are likely areas where states, as a result of the competition for corporate charters, will fail to maximize shareholder wealth. The failure to maximize shareholder wealth in these areas will be true not only of Delaware, but of other states as well. As a result, it is theoretical possible for there to be a competitive equilibrium were it is true both that: (1) states adopt corporate law regimes which tend to favor managerial interests over shareholder interests where there is substantial divergence of interests; and (2) reincorporation to Delaware often provides some additional value, on the margin, to shareholders if Delaware offers advantages not reflected in its substantive rules. This reasoning can be captured formally in a model where such an outcome is a competitive equilibrium.[58]

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[56] *See generally* Fisch, *supra* note 3.

[57] *See* Bebchuk, *Federalism and the Corporation, supra* note 2; Bebchuk & Ferrell, *Federalism and Corporate Law*, *supra* note 3.

[58] See Bar-Gill, Barzuza, and Bebchuk, *supra* note 7. This model does differ from the position adopted by William Cary in an important respect. Cary believed in a "race-to-the-bottom" in which Delaware was offering especially poor corporate rules. *See* Cary, *supra* note 1. In

Even if it were empirically true (which we do not believe it is) that the superiority of Delaware for many shareholders lies in its having a better substantive regime, this should still be the beginning, not the end, of the analysis. It would still be the case that where states have ended up overall could be questioned. One could, for example, imagine a takeover regime, such as the one embodied in the British City Code, that is far more hospitable to takeovers than that of Delaware or any other state. Or one might believe that it would be preferable to have a regime even more protective of target management than that currently provided by any state. A regime in which dead-hand and slow-hand poison pills were permitted and routinely used would be one such example.

III. DOES STATE COMPETITION WORK WELL IN THE AREA OF TAKEOVER REGULATION?

Despite the substantial similarity in state corporate law regimes, there is some significant variance among states in their regulation of takeovers. Although most states have adopted some antitakeover statutes, important differences remain between states' antitakeover stances. Supporters of states competition have sought to reconcile their position that competition works well with the view, which is supported by the evidence, that antitakeover statutes often do not serve shareholders. To this end, they have made empirical claims that state competition does not reward, and thus does not contribute to, the adoption of antitakeover protections. As this Part shows, however, these empirical claims are unconvincing.

A. The View That States Restrict Takeovers Excessively

State takeover law consists of two basic components. First, states impose rules on bidders wishing to acquire companies. These rules are usually contained in antitakeover statutes. Second, takeover law includes rules governing the use of defensive tactics by managers wishing to defeat an unwanted takeover bid. In Delaware, the law on defensive tactics consists almost entirely of judge-made law. In other states, statutory law plays a more important role in the form of poison pill endorsement statutes and constituency statutes.[59]

While case law, such as Delaware's law on the use of defensive tactics, is extremely important, empirical studies of the effect of takeover law on shareholder wealth has focused on antitakeover statutes, including statutes addressing the use of

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contrast, this model puts forward a race to the bottom equilibrium in which Delaware is slightly better than other states with respect to protecting shareholders' interests.

[59] Poison-pill endorsement statutes explicitly authorize the use of the "poison pill" defense against hostile takeovers, a defense that is highly effective. Constituency statutes explicitly permit target management to take into account the interests of non-shareholder groups, such as employees, to justify fending off hostile takeovers.

defensive tactics. Because these statutes are proposed and adopted on specific dates, they allow for empirical estimation of their effects. The evidence from this research consistently shows that antitakeover statutes virtually never increase firm value and, in fact, often decrease it.[60]

While a typical antitakeover statute has a negative, albeit modest, effect on shareholder value, there are three states that have gained notoriety for the extreme nature of their antitakeover statutes. Massachusetts, Ohio, and Pennsylvania have adopted antitakeover statutes that either impede or substantially reduce the attractiveness of takeovers above and beyond that normally associated with state antitakeover statutes. All three antitakeover statutes have been heavily criticized and identified in empirical studies as causing a substantial reduction in firm value.[61]

Supporters of state competition are among those who tend to believe that states often restrict takeovers excessively. For instance, Ralph Winter, one of the early influential proponents of the pro-state competition position, has expressed his belief that a legal regime that facilitates takeovers increases firm value.[62] Frank Easterbrook and Daniel Fischel have famously argued that managers should be "passive" in the face of a takeover and not engage in defensive tactics.[63] Another leading pro-state competition theorist, Roberta Romano, has forthrightly acknowledged the "dismal track records of most states in takeover regulation."[64]

How do supporters of state competition square this circle? The stock response has been to emphasize the fact that Delaware, the leading corporate law jurisdiction, has a less restrictive antitakeover statute than that of many other states. They reason that if the most successful state has among the mildest of antitakeover

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[60] *See, e.g.,* Jonathan M. Karpoff & Paul H. Malatesta, *The Wealth Effects of Second-Generation State Takeover Legislation,* 25 J. OF FIN. ECON. 291 (1989) (forty second-generation statutes adopted in twenty-six states had, on average, a -.294 % impact on stock prices on the date that the earliest known newspaper article concerning the proposed legislation appeared). For a survey of the many event studies on state antitakeover statutes, see GRANT GARTMAN, STATE ANTITAKEOVER LAWS (2001) (on file with authors).

[61] *See* Samuel J. Szewcyk & George P. Tsetsekos, *State Intervention in the Market for Corporate Control: The Case of Pennsylvania Senate Bill 1320*, 31 J. OF FIN. ECON. 3 (1992) (examining Pennsylvania's antitakeover statute); Jonathan M. Karpoff & Paul H. Malatesta, *Pennsylvania Law: State Antitakeover Laws and Stock Prices*, 46 FIN. ANALYST J. 8 (1990); L. Mick Swartz, *The 1990 Pennsylvania Antitakeover Law: Should Firms Opt Out of Antitakeover Legislation*, 11 J. OF ACCT., AUDITING, & FIN. 223 (examining Pennsylvania's antitakeover statute); Michael Ryngaert & Jeffry Netter, *Shareholder Wealth Effects of the 1986 Ohio Antitakeover Law Revised: Its Real Effects*, 6 J. L. ECON. & ORG. 253 (1990) (examining Ohio's antitakeover statute); Robert Daines, *Do Staggered Boards Affect Firm Value? Massachusetts and the Market for Corporate Control* (working paper on file with authors) (2001) (examining Massachusetts's antitakeover statute).

[62] Winter, *supra* note 2, at 289.

[63] *See* Frank H. Easterbrook & Daniel R. Fischel, *The Proper Role of a Target's Management in Responding to a Tender Offer*, 94 HARV. L. REV. 1161 (1981).

[64] Roberta Romano, *Competition for Corporate Charters and the Lesson of Takeover Statutes*, 61 FORDHAM L. REV. 843, 860 (1993).

statutes, then it follows that state competition does not encourage states to impose excessive antitakeover protections. Specifically, supporters of state competition have made the following four claims:

(1) Delaware corporations have a higher incidence of bids and a higher acquisition rate, indicating that Delaware's takeover law is more hospitable to takeovers;

(2) Direct observation of the terms of states' antitakeover laws also reveals that Delaware's takeover regime is relatively moderate;

(3) The market for incorporations has penalized those states that have enacted extreme antitakeover statutes, such as Massachusetts, Ohio, and Pennsylvania;

(4) The adoption of state antitakeover statutes is largely outside the normal parameters of state competition for incorporations.

We will examine each of these four claims in turn.

B. Claims That Delaware Corporations Are Acquired More Often

Robert Daines's Tobin's Q study, discussed in Part I, identified Delaware's takeover regime as one of the factors accounting for a higher Tobin's Q among Delaware firms.[65] He found that Delaware firms are more likely to receive bids and are more likely to be acquired than non-Delaware firms. Daines attributed the different bid and acquisition rates of Delaware firms to Delaware's provision of fewer impediments to hostile bids.

This attribution of the different bid and acquisition rates of Delaware firms to Delaware's takeover law is unwarranted for several reasons. First, although cleanly separating friendly and hostile acquisitions is tricky,[66] Daines fails to distinguish between friendly and hostile acquisitions. Because the majority of all acquisitions are friendly, the difference in acquisition incidence might be due in large part to differences in the incidence of friendly acquisitions of Delaware and non-Delaware firms. Even if one were to take the view that Delaware is mildly more hospitable to hostile takeovers than other states, it would be hard to attribute a substantial

[65] On a related note, Peter Dodd and Richard Leftwich attribute the high rate of reincorporation to Delaware in the late 1960s to Delaware's relatively permissive stance on mergers and tender offers. *See* Dodd & Leftwich, *supra* note 30, at 268.

[66] *See* G. William Schwert, *Hostility in Takeovers: In the Eyes of the Beholder?*, 55 J. OF FIN. 2599 (2000).

difference in the incidence of friendly acquisitions to this mild difference in the treatment of hostile acquisitions.[67]

Rather than attributing the different acquisition (and bid) rates to differences in the treatment of hostile bids, the more plausible explanation for the differences between Delaware and non-Delaware firms is once again self-selection. Firms choosing to incorporate in Delaware are different in some way, and the differences between them and non-Delaware firms could be responsible for the different bid and acquisition rates. This theory is more plausible because the differences between Delaware takeover law and that of most other states are relatively minor, as we will explain in the next section, and are therefore unlikely to account for the observed variation in the overall incidence of friendly and hostile acquisitions. Interestingly, a recent empirical study found that whether a target firm is a Delaware firm or not has no effect on the outcome of a hostile bid.[68] In sum, Daines's findings do not provide a firm basis for concluding that Delaware is more hospitable to takeovers than other states.

C. Claims That Delaware's Takeover Law Is Relatively Moderate

It is far from clear that Delaware offers less antitakeover protection than most other states. While it is true that some states have more antitakeover statutes or antitakeover statutes of a more extreme nature, others, such as California, have no such statutes.

More importantly, an assessment of Delaware's relative position cannot be based merely on a comparison of antitakeover statutes because case law plays a central role in Delaware's takeover regulation. Delaware has a well-developed body of case law, which makes the absence of some types of antitakeover statutes practically irrelevant. Delaware's judges have played an active role in developing legal doctrines that permit the use of defensive tactics in general and the potent poison pill defense in particular. Because of the large body of Delaware judge-made law upholding the indefinite use of poison pills, there is no need for an antitakeover statute explicitly authorizing the use of poison pills (a poison-pill endorsement statute) or for an antitakeover constituency statute that provides managers with discretion to defend against bids.

Furthermore, Delaware's case law on the use of poison pills has rendered the absence of a control-share-acquisition antitakeover statute and a fair-price antitakeover statute practically irrelevant; as long as a poison pill is in place, any additional antitakeover defense is superfluous since the pill completely blocks a

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[67] Guhan Subramanian found no differences between Delaware and non-Delaware firms in terms of the incidence of hostile bids. Thus, according to this evidence, the difference in acquisition rates is largely due to the incidence of friendly acquisitions.

[68] *See* Lucian A. Bebchuk et al., *The Antitakeover Power of Classified Boards: Theory, Evidence and Policy,* 54 STAN. L. REV. 887 (2002).

bidder from proceeding. Were a bidder to overcome the poison pill defense by taking control of the target corporation's board in a proxy contest (and having the poison pill redeemed by the board), a control-share-acquisition antitakeover statute and a fair-price antitakeover statute, which are usually only applicable to bids that the board does not approve, would still be irrelevant.

In contrast, the adoption of additional antitakeover statutes might be more significant events for states with less developed case law. Poison-pill endorsement statutes and constituency statutes in such states might provide managers with the confidence, notwithstanding the limited case law in the state, that indefinite use of a poison pill defense will be tolerated. Furthermore, the adoption of additional antitakeover statutes may also convey the message that the state is committed to providing substantial protection to managers who are facing unwanted takeovers. Delaware has already sent this message loud and clear through its case law. Thus, it is far from evident that Delaware's antitakeover law is more moderate; any comparison between Delaware's takeover regime and those of other states must take into account the central role in takeover regulation played by Delaware's extensive case law.

Although it is difficult to compare Delaware's takeover regime directly to that of other states, much can be learned about the merits of state competition from a more systematic comparison of how states other than Delaware fare in the incorporation market when they adopt various antitakeover statutes. Given that these states vary widely in their antitakeover statutes and how they fare in the incorporation market, a cross-comparison within the group of non-Delaware companies would be helpful in obtaining a better understanding on how the incorporation market reacts to different levels of antitakeover protection. Part IV discusses this approach.

D. Claims That Outlier States Have Been Penalized

Supporters of state competition often point to the extreme antitakeover statutes of Massachusetts, Ohio and Pennsylvania as examples of Delaware's virtue. Consistent with this view, pro-state competition scholars have suggested that these three states have been penalized rather than rewarded by the incorporation market as a result of their actions. Moreover, these scholars have directed some of their empirical work towards documenting the adverse effects that these extreme antitakeover statutes have had on shareholders.

For example, Robert Daines has found that Massachusetts companies have lower Tobin's Qs than those of Delaware firms.[69] In another study, Daines found that the adoption of Massachusetts's antitakeover statute was accompanied by a significant reduction in the share value of Massachusetts companies.[70] This second

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[69] Daines, *supra* note 3 at 546.

[70] *See* Daines, *supra* note 61 (examining Massachusetts' antitakeover statute).

study is consistent with earlier studies that found strong negative stock reactions to the adoption of the antitakeover statutes of all three states. However, this work simply shows that the antitakeover statutes of these states harm shareholders, a point with which we readily agree. This in no way establishes that these states have, in fact, been penalized by the incorporation market as a result of their bad behavior.

Roberta Romano has pointed out that many Pennsylvania companies have opted out of Pennsylvania's extreme antitakeover statute.[71] She argues that this indicates that state competition has worked well. However, such an inference should not be drawn. Because the opt-out procedure under the Pennsylvania antitakeover statute was simple, the managers of Pennsylvania companies that chose to opt-out were not harmed by the passage of the statute. In contrast, those managers of companies that did not opt-out obtained substantial antitakeover protections that they would not have enjoyed otherwise. The substantial incidence of opting out thus does not imply that the passage of the Pennsylvania antitakeover statute did not serve managers of a substantial fraction of Pennsylvania companies at shareholder expense. More to the point, it does not imply that passage of the statute harmed Pennsylvania in the market for corporate charters.

The evidence provided by the supporters of state competition therefore fails to demonstrate that the outlier states have actually been hurt by the incorporation market, as they should have been if state competition does, as its supporters assert, penalize the adoption of shareholder welfare-reducing corporate rules. Surprisingly, supporters of state competition have made no effort to directly test their prediction that the actions of the outlier states would actually hurt them in the incorporation market. As we shall discuss in Part IV, this predicted effect does not in fact exist.

E. Claims that Antitakeover Statutes Are Outside the Parameters of State Competition

In an effort to reconcile their views on state competition with the evidence on antitakeover statutes, state competition proponents have also argued that many antitakeover statutes were passed to prevent particular, politically influential local companies from being acquired. Therefore, proponents argue, these statutes represent an aberration outside of the normal parameters of state competition. On this view, even though the adoption of such statutes does not serve and indeed hurts the goal of attracting incorporations, states have adopted them because of the political power of some in-state corporate targets.[72]

As Ralph Winter puts it: "The problem is not that states compete for charters but that too often they do not."[73] The desire to increase the number of incorporations does not encourage states to adopt antitakeover statutes; to the contrary, it moderates their tendency, due to lobbying by firms, to do so. This argument

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[71] *See* ROMANO, GENIUS, *supra* note 2, at 68-70.

[72] *See* Roberta Romano, *The Political Economy of Takeover Statutes*, 73 VA. L.REV. 111 (1987).

[73] Winter, *Foreword*, in ROMANO, GENIUS, *supra* note 2.

predicts that states that adopt antitakeover statutes to protect particular companies, disregarding the incorporation market, will attract fewer incorporations as a result.

Supporters of state competition have made no attempt, however, to test this prediction by examining how the adoption of antitakeover statutes has actually affected states' success in the incorporation market. As we shall discuss in Part IV, the evidence does not confirm this prediction but rather indicates that adopting antitakeover statutes makes states more, not less, successful in the incorporation market.

IV. Recent Evidence on the Determinants of Incorporation Decisions

A. A New Approach

A natural way to determine how state competition actually works, and whether or not it benefits shareholders' interests, is to focus directly on how the choices states make with regard to corporate legal regimes affect their competitive position in the market for corporate charters. According to the "race-to-the-top" position, states that adopt legal regimes that diminish shareholder wealth should suffer by attracting fewer incorporations. Conversely, states that adopt legal regimes that enhance shareholder wealth should be rewarded with increased numbers of incorporations. These are testable propositions.

Unfortunately, prior empirical work has not pursued this approach. Rather, the question it has asked is: Given incorporation decisions, does Delaware incorporation increase firm value? As Part I emphasized, this is often equivalent to assuming that incorporation decisions are random events, allowing researchers to treat the incorporation decision as a given. But the fundamental premise of the state competition debate, whichever side one takes, is that incorporation decisions are not random but deliberate.

Another shortcoming of most existing empirical work is that it typically begins its analysis by dividing the incorporation market between Delaware and non-Delaware firms. It then investigates whether incorporating in (or reincorporating to) Delaware benefits investors. This approach effectively lumps together all the non-Delaware states into one undifferentiated mass and thus overlooks important variations that exist among the non-Delaware states.

The variations among the non-Delaware states are significant in certain respects. In particular, states vary widely in how successful they are in retaining companies already headquartered in them ("in-state corporations") and in attracting corporations headquartered elsewhere ("out-of-state corporations"). Furthermore, although states are overall rather similar in their corporate laws, there is still significant variance among states in some areas of corporate law, such as takeover law. Thus, the variation among states both in terms of their laws and in terms of their success in the incorporation market provides a natural laboratory for examining which corporate rules make states more or less attractive.

There is yet another advantage of our approach that is worth highlighting. Delaware is a special case because of the important institutional advantages it offers shareholders. Thus, in comparisons between Delaware and non-Delaware corporations, it is difficult to disentangle the effects of these institutional advantages from the effects of different substantive corporate rules. By focusing on the large set of non-Delaware states, it is possible to make comparisons among states, none of which has the special "Delaware advantages." Removing this variable makes it easier to identify the effects that variations in legal rules have on the distribution of incorporations.

Below we illustrate the value of this approach by presenting some summary statistics and simple cross-state comparisons. A separate study by two of us (the Incorporation Study) has carried out a full empirical analysis of the determinants of domicile decisions.[74] We will focus here on the findings of this study concerning how takeover rules affect states' ability to retain in-state companies as well as their ability to attract out-of-state companies.[75]

The approach that we propose can also be applied to identify how aspects of state corporate law, other than state takeover law, affect companies' domicile decisions. For example, the Bebchuk and Cohen study analyzes how a state's adoption of the Revised Model Business Corporation Act ("RMBCA") affects its success.[76] We focus here on takeover rules, however, because of the importance of these rules in the debate over the merits of state competition. We start by describing how incorporations are distributed among the states. We then examine the distribution of various types of antitakeover statutes. Finally, we analyze these patterns to determine whether or not antitakeover statutes actually help states retain in-state companies and attract out-of-state companies.

B. The Pattern of Incorporations

How does each state fare in terms of retaining its in-state companies and attracting out-of-state companies? Surprisingly, most of the empirical work on state competition has not documented these basic patterns of incorporation. Indeed, it has

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[74] *See* Bebchuk & Cohen, *supra* note 12.

[75] Subramanian also studies empirically the effects of antitakeover statutes on the ability of states to retain their in-state companies. *See* Subramanian, *supra* note 12. As will be discussed below, his conclusions are consistent with those of the Incorporation study, *supra* note 12, with respect to standard antitakeover statutes but not with respect to extreme statutes. He does not study the effect of states' antitakeover statutes on their success in attracting out-of-state corporations.

[76] It was found that adopting the RMBCA did not help states retain their in-state companies and it made states less attractive to out-of-state companies. *See* Bebchuk & Cohen, *supra* note 12.

not even documented how the 50% of total incorporations not captured by Delaware are currently distributed among different states.

The patterns we describe account for all the incorporations of nonfinancial publicly traded companies for which there was data in the Compustat database at the end of 1999 and which have both their headquarters and their incorporation in the United States.[77] There were 6530 such companies. Table 1 displays how the headquarters of these companies are distributed among states. By "states" we mean throughout the fifty-one jurisdictions consisting of the fifty states and the District of Columbia.

[Insert Table 1 here]

Table 2 displays the distribution of incorporations among states. A comparison of Tables 1 and 2 reveals the considerable differences between the distributions of headquarters and incorporations.

[Insert Table 2 here]

Tables 3 displays how each state fares in the market for incorporations. The Table displays the following for each state: (1) how many of its in-state companies it retains, both in absolute numbers and as a percentage of all in-state companies; and (2) how many out-of-state companies it attracts, again in absolute numbers and as a percentage of all out-of-state incorporations.

[Insert Table 3]

The Table indicates that the large majority of states are net "exporters" of companies. The Tables also indicate that there is a great deal of variance among non-Delaware states in terms of how they fare, both in retaining in-state companies and in attracting out-of-state companies. For example, whereas California retains only 21.77% of its in-state companies, Ohio and Washington retain more than 50%, and Minnesota and Indiana retain approximately 70%. As for out-of-state incorporations, while thirty-three states attract less than ten out-of-state incorporations each, there are four states with more than fifty each. The question on which we shall focus next is the extent to which this relative performance depends on the antitakeover statutes adopted by the various states.

[77] In focusing on nonfinancial firms we follow the approach of Robert Daines's study, *supra* note 3. When financial companies are included, the results are qualitatively the same.

C. The Landscape of State Antitakeover Statutes

Table 4, which is taken from Grant Gartman's comprehensive survey of state antitakeover statutes,[78] indicates which antitakeover statutes each state has. Most states have at least one antitakeover statute. Pennsylvania, Ohio and Massachusetts also have unique antitakeover statutes that will be discussed separately. The vast majority of these statutes were adopted in the period 1985-1991.

[Insert Table 4 here]

The standard antitakeover statutes are control-share-acquisition statutes, fair-price statutes, three-year no-freezeout business combination statutes, five-year no-freezeout business combination statutes, poison-pill endorsement statutes and constituency statutes. Control-share-acquisition statutes typically require a would-be acquirer to win approval from a majority of outstanding disinterested shares before it can acquire control. Fair-price statutes attempt to ensure that an acquirer does not pay a premium for control and then buy the remaining shares at a lower price. No-freezeout business combination statutes prohibit acquirers, under certain conditions, from merging with the acquired company for a certain number of years, typically either three or five years. Poison-pill endorsement statutes explicitly authorize the use of the poison pill defense by target management. Finally, constituency statutes authorize the use of defensive tactics, such as the poison pill defense, by target management in the name of non-shareholder constituencies, such as employees.

As was emphasized earlier, the antitakeover statutes adopted by states might have been important not only in what they actually did, but also arguably in the antitakeover message they sent. For instance, adopting the full arsenal of standard antitakeover statutes sends a clear antitakeover message to state courts and to potential and existing incorporators. Therefore, in assessing the overall level of protection against takeovers it is of interest to look at a state's total number of standard antitakeover statutes. To study cross-state differences in shareholder protection, the Bebchuk and Cohen study uses an antitakeover index that attaches to each state a score from zero to five, which corresponds to the number of antitakeover statutes it has among the five standard types.

In addition to the standard antitakeover statutes, unusual and more restrictive statutes were adopted by three states. Pennsylvania and Ohio adopted statutes that enables the "disgorgement" or "recapture" of all the short-term profits made by a hostile bidder. Massachusetts adopted a statute that mandates a classified board structure even for companies that did not elect to have a classified board in their charter, a requirement that has a powerful antitakeover effect.[79]

[78] *See* GARTMAN, STATE TAKEOVER LAWS, *supra* note 60.

[79] *See* Bebchuk et al., *The Antitakeover Power of Classified Boards, supra* note 68.

D. Do Antitakeover Statutes Help States Retain In-State Corporations?

One fact that is immediately apparent from looking at the distribution of incorporations from Table 3 is the presence of "home preference." States generally are better able to attract incorporations from companies headquartered in them ("in-state companies") than from companies headquartered elsewhere. Even states that hardly attract any out-of-state incorporations are commonly able to retain a significant fraction of their in-state companies. However, states do vary greatly in the fraction of in-state companies that they retain.

Table 3 indicates that states without antitakeover statutes do rather poorly in terms of retaining their companies. Whereas the average fraction of in-state companies retained is 38%, most states with no antitakeover statutes retain a much lower fraction. For example, California retains only 21.77% of its in-state companies. Conversely, Table 3 also indicates that states with all the standard antitakeover statutes generally retain a larger-than-average fraction of their in-state companies. For example, Indiana and Wisconsin, each of which offers a "royal flush" set of five standard antitakeover statutes, retain 69% and 72% respectively of their in-state companies. Finally, observe that Pennsylvania and Ohio, both of which have the notorious recapture statute, retain a larger-than-average fraction of their in-state companies. Pennsylvania retains 39% of all its in-state companies, and Ohio retains 54% of all of its in-state companies. The third "misbehaving" state, Massachusetts, retains 30% of its in-state companies, a figure a bit below the average.

Of course, these initial observations are merely suggestive, and a more systematic testing is necessary before definite conclusions can be reached. One needs to control for factors other than state antitakeover statutes that might be influencing the incorporation decisions of in-state companies. The Incorporation Study accomplished this by controlling for a number of factors that could conceivably be important, including characteristics of the incorporating company as well as characteristics of the state in which the company is headquartered.[80]

This testing indicates that having a larger antitakeover index – that is, a larger number of antitakeover statutes – makes a state more likely (at a 99% confidence level, the highest degree of confidence conventionally used in such testing) to retain its in-state companies. Of the different antitakeover statutes, the ones most useful in retaining in-state firms are control-share-acquisition statutes, no-freezeout statutes

[80] Controlled-for characteristics of the company included the company's sales, Tobin's Q, return on assets, number of employees, and age (when the company went public). Controlled-for characteristics of the state in which the company is headquartered included the state's population, number of located companies, per capita income, ideological leaning, geographic region, and whether the state had adopted the RMBCA (or its predecessor the MBCA).

with a moratorium period of more than three years, and poison-pill endorsement statutes.[81]

This testing indicates that the effect of adopting antitakeover statutes is not only statistically significant but also large in magnitude. Controlling for other firm and state characteristics, the Incorporation Study estimates that, had states that currently have all the standard antitakeover statutes not adopted them, the fraction of local firms that they retain would have been reduced from the current 49% of such firms to 23%. Conversely, it is estimated that, adopting all the standard antitakeover statutes by states that currently have no such statutes would have raised the percentage of local firms that they retain from 23% to 50%.

Finally, consistent with the observations made above, the testing indicates that providing a recapture antitakeover statute, as do Pennsylvania and Ohio, does not adversely affect a state's ability to retain its in-state companies. With respect to the classified board statute of Massachusetts, the results are mixed, depending on the type of testing done, but overall do not support the prediction that enacting such a statute would hurt an adopting state in the incorporation market.[82]

E. Do Antitakeover Statutes Help States Attract Out-of-State Corporations?

Even if antitakeover statutes help states retain in-state corporations, how do these statutes affect their competitive position in attracting corporations with their headquarters in another state ("out-of-state corporations")? We will now turn to this second dimension of how states fare in the competition over incorporations.

Table 5 displays the distribution of out-of-state incorporations going to states other than Delaware, and it lists all the states attracting more than six out-of-state incorporations. Of the ten (excluding Delaware) that are the most successful in attracting out-of-state incorporations, eight have either four or five antitakeover statutes.

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[81] Guhan Subramanian also tests how the presence of standard antitakeover statutes affects states' ability to retain their headquartered companies, and his results are consistent with those obtained by the Incorporation Study. *See* Subramanian, *supra* note 12.

[82] In contrast to the results of the Incorporation Study, Subramanian concludes that the recapture and classified boards statutes have hurt the ability of the states adopting them to retain companies. He uses one dummy variable to stand for the presence of either a recapture or a classified board statute and he controls only for company characteristics but not for state characteristics other than their antitakeover statutes. Running the same regressions as Subramanian did, the Incorporation Study obtained similar results to his. However, in order to allow for the possibility that the incorporations market did not treat recapture and classified boards statutes in the same way, the Incorporation Study used a separate dummy variable for each of these statutes. With this specification, the recapture statute was no longer found to hurt the states adopting it even without introducing state characteristics. Once state characteristics were controlled for, the results no longer indicate a negative effect due to the classified board statute. *See* Subramanian, *supra* note 12.

[Insert Table 5 here]

The figures provided by Table 5 provide no basis for concluding that the three "outlier" states, which have been blacklisted as extreme, have been hurt in the market for out-of-state incorporations. Pennsylvania holds a respectable seventh place (excluding Delaware) in terms of the number of out-of-state companies it attracts. Massachusetts and Ohio are both comfortably in the top of half of states in their ability to attract out-of-state companies.

Again, definite conclusions cannot be drawn without controlling for characteristics of states and firms. The Incorporation Study conducts such testing, and its conclusions confirm what is suggested by the above observations. The findings indicate that having a higher antitakeover index (that is, more antitakeover statutes) makes a state more attractive -- again, at the high 99% confidence level -- for out-of-state incorporations. Of the different types of standard antitakeover statutes, the ones most helpful for attracting out-of-state incorporations are control-share-acquisition statutes and poison-pill endorsement statutes.

The testing also provides clear results with respect to the two types of extreme antitakeover statutes. Neither a classified board statute nor a recapture statute has a statistically significant effect on the ability of a state to attract out-of-state incorporations. Thus, again, there is no empirical basis for concluding that the incorporations market penalizes states adopting extreme antitakeover statutes.

F. Reconsidering Established Positions

States have been busy over the last three decades adopting antitakeover statutes. They have often gone back to the drawing board more than once, either because earlier statutes were held unconstitutional or because they wanted to take advantage of newly hatched types of antitakeover statutes. Many states have ended up with most or all of the standard antitakeover statutes. However, the enthusiasm of state officials for such statutes has not been matched by shareholders. The passage of antitakeover statutes has generally been accompanied by a negative reaction or, at best, no reaction in the stock price of the companies governed by them.

As the pro-state competition position has long been the dominant view in corporate law scholarship, most students of corporate law would agree with the following two propositions:

(1) Amassing state antitakeover statutes does not serve shareholders; and

(2) State competition rewards, and thereby induces, adopting rules that serve shareholders.

Facing a possible tension between these two propositions, supporters of state competition have sought to reconcile them by advancing an additional proposition:

(3) State competition does not reward, and indeed might discourage, the amassing of antitakeover statutes.

However, as suggested by the observations made above, and by the reported results of the Incorporation Study, proposition (3) is inconsistent with the evidence. This implies that the commonly held view, which consists of propositions (1) and (2), can no longer be maintained. Those who have held this view should revise their position on at least one of these two propositions. Although the evidence discussed in this section enables rejecting (3), it does not speak directly to which revisions should be made. What is certain, however, is that the conventional picture of state competition needs to be revised.

Our own view is that, although some antitakeover statutes might not be harmful and at times arguably beneficial,[83] not all are,[84] and state competition thus provides excessive incentives to restrict takeovers. If the "race-to-the-top" story were true, it would be particularly puzzling that competition has failed to discipline the states adopting the most extreme antitakeover statutes. Although they have been the subject of strongly negative market reaction and widespread criticism by scholars of corporate law, these statutes have been on the books for a long time now. Still, the states having these statutes continue to fare respectably in the incorporations market – both in terms of retaining in-state companies and in terms of attracting out-of-state companies.

Although puzzling for the conventional "race-to-the-top" view, the adoption of antitakeover statutes and the evidence presented in this Part are not puzzling at all to those who hold a skeptical account of state competition. On this account, state competition can be expected to produce excessive protections from takeovers. It is a natural consequence of the competitive process itself as currently structured. This process provides states with incentives to place weight on managers' interests, rather than solely on shareholders' interests, when selecting rules that have a major effect on managers.

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[83] Control-share-acquisitions statutes, for example, might be helpful in the absence of other arrangements in addressing pressure to tender problems. *See* Lucian A. Bebchuk, *Toward Undistorted Choice and Equal Treatment in Corporate Takeovers,* 95 HARV. L. REV. 1695 (1985); Lucian A. Bebchuk & Oliver Hart, *Takeover Bids vs. Proxy Fights in Contests for Corporate Control,* NBER Working Paper No. 8633 (2001).

[84] Poison-pill endorsement statutes, for example, can produce excessive protection from takeovers for the large fraction of companies that have classified boards. *See* Bebchuk et al., *The Antitakeover Power of Classified Boards, supra* note 68.

CONCLUSION

A recurring claim in the literature on state competition over corporate charters is that the existing empirical evidence decisively supports the view that state competition benefits shareholders. Those who are more skeptical of state competition (as currently structured) and the regulatory choices it has produced, have often been portrayed as fighting against established empirical facts. This Article has shown that the body of empirical evidence on which supporters of state competition rely does not warrant their claims of empirical support.

First, the evidence does not establish that Delaware incorporation produces an increase in share value. Although studies have found an association between Delaware incorporation and higher shareholder value, there are significant questions with respect to the generality, robustness, and magnitude of this correlation. More importantly, correlation does not imply causation; any correlation of the sort alleged could reflect the underlying differences between firms that elect to incorporate in Delaware and those that do not.

Second, even if it were established that Delaware incorporation is marginally beneficial to investors in the existing state-competition equilibrium, this does not imply that state competition benefits investors overall. In a race-toward-the-bottom equilibrium in which all states are induced by competition to choose sub-optimal rules (on certain issues), incorporation in the dominant state might still be beneficial as a result of network effects and the dominant state's institutional infrastructure.

Third, we have shown that, contrary to claims made by supporters of state competition, the empirical evidence does not establish that state competition rewards moderate takeover regimes rather than the amassing of antitakeover statutes. In particular, the claims that Delaware is more hospitable to takeovers than average, and that states hostile to takeovers are penalized in the incorporations market, do not have a solid empirical basis.

Finally, we have discussed a new approach to the empirical study of state competition, based on analyzing the determinants of companies' decisions regarding where to incorporate. An empirical study conducted by us using this approach indicates that, contrary to the beliefs of state competition supporters, this competition provides incentives for states to offer antitakeover protections. States that amass antitakeover statutes fare better both in retaining in-state companies and in attracting out-of-state companies. Indeed, there is scant evidence that states with extreme antitakeover statutes, widely viewed as detrimental to shareholders, have been penalized in the incorporation market.

Our demonstration that the view supportive of state competition in corporate law (as currently structured) does not have the empirical basis believed to exist by supporters has significant policy implications. It calls for a reconsideration of established positions on the merits of state competition and the role of federal law in this area. It also calls for a reassessment of the body of corporate law that has been produced by state competition. In the key areas that directly affect managers' private interests, the rules that have been produced by state competition should not be regarded as presumptively value-enhancing.

In particular, our analysis questions whether the extensive takeover protections currently afforded managers in the United States actually serve shareholders' interests. Contrary to prevailing beliefs, we have shown that state competition does not reward moderation in takeover protection. The proliferation of antitakeover statutes and protections might have been, at least partly, the product of incentives created by the incorporation market. These findings lend support to proposals for federal intervention in the takeover area, either in the form of mandatory federal takeover rules, which one of us supported in earlier work,[85] or in the form of "choice-enhancing" intervention, which we introduced in subsequent joint work.[86]

In sum, more attention needs to be paid to the possibility that state competition might produce adverse incentives in some important areas of corporate law. For this to happen, scholars of corporate law must first recognize that the empirical evidence does not rule out this possibility. We hope that this Article will help bring about such a recognition.

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[85] *See* Bebchuk, *Federalism and the Corporation*, *supra* note 2.

[86] *See* Bebchuk & Ferrell, *A New Approach*, *supra* note 3; Bebchuk & Ferrell, *Federal Intervention*, *supra* note 3.

TABLE 1

The Distribution of Firm Locations among States

State	Number of firms located in state	Percentage
CA	1,254	19.20%
TX	586	8.97%
NY	576	8.82%
MA	360	5.51%
FL	328	5.02%
NJ	311	4.76%
PA	248	3.80%
IL	241	3.69%
MN	212	3.25%
CO	201	3.08%
OH	192	2.94%
GA	178	2.73%
VA	154	2.36%
CT	147	2.25%
WA	131	2.01%
MI	104	1.59%
MD	101	1.55%
MO	101	1.55%
NC	98	1.50%
AZ	91	1.39%
TN	81	1.24%
WI	72	1.10%
OR	70	1.07%
UT	70	1.07%
NV	63	0.96%
Other	560	8.58%
Total	6,530	100%

TABLE 2

The Distribution of Incorporations among States

State	Number of firms incorporate in state	Percentage
DE	3,771	57.75%
CA	283	4.33%
NY	226	3.46%
NV	217	3.32%
MN	178	2.73%
FL	165	2.53%
TX	147	2.25%
CO	132	2.02%
PA	124	1.90%
MA	118	1.81%
OH	112	1.72%
NJ	111	1.70%
GA	83	1.27%
WA	79	1.21%
VA	74	1.13%
MI	60	0.92%
WI	57	0.87%
MD	54	0.83%
OR	54	0.83%
UT	52	0.80%
IN	50	0.77%
NC	46	0.70%
TN	39	0.60%
MO	36	0.55%
IL	32	0.49%
Other	230	3.52%
Total	6,530	100%

TABLE 3

Migration and Emigration in the "Market for Corporate Law"

State	Number of firms located in state	Number of firms located and incorporate in state	As percentage of all firms located in this state	Number of firms located elsewhere but incorporate in state	As percentage of all out-of state incorporate
AK	2	1	50.00%	2	0.03%
AL	29	3	10.34%	2	0.03%
AR	20	3	15.00%	0	0.00%
AZ	91	21	23.08%	0	0.00%
CA	1,254	273	21.77%	10	0.19%
CO	201	74	36.82%	58	0.92%
CT	147	17	11.56%	3	0.05%
DC	25	2	8.00%	0	0.00%
DE	27	27	100.00%	3,744	57.57%
FL	328	137	41.77%	28	0.45%
GA	178	71	39.89%	12	0.19%
HI	13	6	46.15%	2	0.03%
IA	25	10	40.00%	4	0.06%
ID	15	2	13.33%	1	0.02%
IL	241	27	11.20%	5	0.08%
IN	56	39	69.64%	11	0.17%
KS	35	11	31.43%	8	0.12%
KY	29	7	24.14%	2	0.03%
LA	45	18	40.00%	4	0.06%
MA	360	108	30.00%	10	0.16%
MD	101	25	24.75%	29	0.45%
ME	10	4	40.00%	0	0.00%
MI	104	58	55.77%	2	0.03%
MN	212	158	74.53%	20	0.32%
MO	101	26	25.74%	10	0.16%
MS	14	4	28.57%	8	0.12%
MT	6	6	100.00%	0	0.00%
NC	98	38	38.78%	0	0.00%
ND	4	0	0.00%	0	0.00%
NE	18	4	22.22%	3	0.05%
NH	28	3	10.71%	0	0.00%
NJ	311	80	25.72%	31	0.50%
NM	9	4	44.44%	3	0.05%
NV	63	45	71.43%	172	2.66%
NY	576	141	24.48%	85	1.43%
OH	192	105	54.69%	7	0.11%
OK	61	22	36.07%	5	0.08%
OR	70	50	71.43%	4	0.06%
PA	248	98	39.52%	26	0.41%
RI	24	6	25.00%	1	0.02%
SC	30	9	30.00%	1	0.02%
SD	7	4	57.14%	0	0.00%
TN	81	33	40.74%	6	0.09%
TX	586	139	23.72%	8	0.13%
UT	70	32	45.71%	20	0.31%
VA	154	56	36.36%	18	0.28%
VT	11	4	36.36%	0	0.00%
WA	131	68	51.91%	11	0.17%
WI	72	52	72.22%	5	0.08%
WV	8	3	37.50%	0	0.00%
WY	9	3	33.33%	12	0.18%
Total	6530	2137		4393	
Average			38.10%		1.33%

TABLE 4
Standard Antitakeover Statutes

State	Number of Statutes	Control Share	Fair Price	No Freezeouts (years prohibited)	Poison Pill Endorsement	Constituencies
Alaska	0	0	0	0	0	0
Alabama	0	0	0	0	0	0
Arkansas	0	0	0	0	0	0
Arizona	4	1	1	3	0	1
California	0	0	0	0	0	0
Colorado	1	0	0	0	1	0
Connecticut	3	0	1	5	0	1
DC	0	0	0	0	0	0
Delaware	1	0	0	3	0	0
Florida	4	1	1	0	1	1
Georgia	4	0	1	5	1	1
Hawaii	3	1	0	0	1	1
Iowa	3	0	0	3	1	1
Idaho	5	1	1	3	1	1
Illinois	4	0	1	3	1	1
Indiana	5	1	1	5	1	1
Kansas	2	1	0	3	0	0
Kentucky	4	0	1	5	1	1
Louisiana	3	1	1	0	0	1
Massachusetts	4	1	0	5	1	1
Maryland	5	1	1	5	1	1
Maine	1	0	0	0	0	1
Michigan	3	1	1	5	0	0
Minnesota	4	1	1	4	0	1
Missouri	4	1	1	5	0	1
Mississippi	3	1	1	0	0	1
Montana	0	0	0	0	0	0
North Carolina	3	1	1	0	1	0
North Dakota	1	0	0	0	0	1
Nebraska	2	1	0	5	0	0
New Hampshire	0	0	0	0	0	0
New Jersey	4	0	1	5	1	1
New Mexico	1	0	0	0	0	1
Nevada	5	1	1	3	1	1
New York	4	0	1	5	1	1
Ohio	5	1	1	3	1	1
Oklahoma	2	1	0	3	0	0
Oregon	4	1	0	3	1	1
Pennsylvania	5	1	1	5	1	1
Rohde Island	4	0	1	5	1	1
South Carolina	3	1	1	2	0	0
South Dakota	5	1	1	4	1	1
Tennessee	5	1	1	5	1	1
Texas	1	0	0	3	0	0
Utah	2	1	0	0	1	0
Virginia	4	1	1	3	1	0
Vermont	1	0	0	0	0	1
Washington	3	0	1	5	1	0
Wisconsin	5	1	1	3	1	1
West Virginia	0	0	0	0	0	0
Wyoming	3	1	0	3	0	1
Average/total	2.7	27	27	33	25	31

TABLE 5

The Division of the Market for Out-of-State Incorporations

State	Number of firms incorporate in state	Percentage
DE	3,744	85.23%
NV	172	3.92%
NY	85	1.93%
CO	58	1.32%
NJ	31	0.71%
MD	29	0.66%
FL	28	0.64%
PA	26	0.59%
MN	20	0.46%
UT	20	0.46%
VA	18	0.41%
GA	12	0.27%
WY	12	0.27%
IN	11	0.25%
WA	11	0.25%
CA	10	0.23%
MA	10	0.23%
MO	10	0.23%
KS	8	0.18%
NC	8	0.18%
TX	8	0.18%
OH	7	0.16%
TN	6	0.14%
Other	49	1.12%
Total	4,393	100%