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ABSTRACT

This paper empirically investigates the decisions of publicly traded firms where to incorporate. We study the features of states that make them attractive to incorporating firms and the characteristics of firms that determine whether they incorporate in or out of their state of location. We find that states that offer stronger antitakeover protections are substantially more successful both in retaining in-state firms and in attracting out-of-state incorporations. We estimate that, compared with adopting no antitakeover statutes, adopting all standard antitakeover statutes enabled the states that adopted them to more than double the percentage of local firms that incorporated in-state (from 23% to 49%). Indeed, the incorporation market has not even penalized the three states that passed two extreme antitakeover statutes that have been widely viewed as detrimental to shareholders. We also find that there is commonly a big difference between a state's ability to attract incorporations from firms located in and out of the state, and we investigate several possible explanations for this home-state advantage. Finally, we find that Delaware's dominance is greater than has been recognized and can be expected to increase further in the future. Our findings have significant implications for corporate governance, regulatory competition, and takeover law.

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1 Introduction

This paper uses data on firms' incorporation choices to study the market for corporate law in the United States. In particular, the paper focuses on the demand-side of this market, studying the determinants of firms' incorporation decisions. Analyzing these decisions is valuable for understanding the patterns of incorporation and the outcomes of regulatory competition in the corporate area.

A central feature of the US corporate environment is the presence of regulatory competition in corporate law. Corporations are free to choose their state of incorporation, and they are subject to the corporate law of the state in which they have chosen to incorporate. Whether and to what extent this regulatory competition works well has long been one of the most hotly debated questions among corporate law scholars. As European corporations have recently become free to choose their country of incorporation among the EEC countries, this question has also become important in Europe.

According to the view that appears to dominate the current thinking of corporate law academics, state competition produces a "race-toward-the-top" that benefits shareholders (see Winter (1977, 1989), Easterbrook and Fischel (1991), Fischel (1982) and Romano (1993a, 1993b, 1998)). On this view, the desire to attract incorporations induces states to develop and provide corporate arrangements that enhance shareholder value. An alternative view is more skeptical with respect to the incentives provided by state competition (see, e.g., Cary (1974), Bebchuk (1992), Bar-Gill, Barzuzza, and Bebchuk (2001)). On this view, competition encourages states to provide rules that are too favorable to corporate managers and controllers with respect to corporate issues, such as takeover rules, that have a major effect on the private benefits of managers and controllers.

In this debate, most scholars have made similar assumptions about the supply side of the market, namely, that states seek to attract incorporations, but they differed in their views on the demand side, namely, on what type of rules would make states more successful in attracting incorporations. Note, however, that the demand side would be important even if one were to relax the assumption that states seek to maximize the number of incorporations. Even if some or many states selected their corporate rules on the basis of considerations other than such maximization, the demand side would determine the distribution of firms among whatever choices states would provide.

The debate on state competition has stimulated a large body of empirical research. This research has largely focused on analyzing how shareholder wealth is affected by incorporating in Delaware (see Bhagat and Romano (2001), Romano

(2001), and Bebchuk, Cohen, and Ferrell (2002) for surveys of this work). Several studies have suggested that reincorporations to Delaware are associated with abnormal returns (see, e.g., Romano (1985), Heron and Lewellen (1998)). In addition, a recent, influential study by Daines (2001a) suggested that incorporation in Delaware is correlated with a higher Tobin's Q. However, Bebchuk, Cohen, and Ferrell (2002) argue that selection issues make it difficult to infer from existing studies that a Delaware incorporation has a positive effect on shareholder wealth. They also point out that, if such an effect did exist, it would not teach us much about how well state competition works overall; because of the network benefits from incorporating in the dominant state, doing so would be beneficial even in an equilibrium in which state competition does not work well.¹

In any event, the existing empirical work does not examine some significant aspects of the incorporation market on which this paper focuses. Whereas prior work has only examined how the market is divided between Delaware and non-Delaware firms, this paper studies the distribution of incorporations among all states and thus, in turn, how states other than Delaware differ in their performance in the market for incorporations. Furthermore, whereas prior work has taken incorporation decisions as given, we seek to investigate the determinants of these incorporation decisions.

In particular, we investigate which features of corporate law systems make them more and less successful in attracting incorporations. We also study how incorporation choices are influenced by firms' location and, finding such influence, we investigate the reasons for its existence. The results we report are for the set of all non-financial firms; the results for the set of all firms are similar and are reported in an earlier version of this paper (Bebchuk and Cohen (2002)).

We start by providing a full account of the distribution of incorporations among states. Putting aside Delaware, states still differ greatly both in their ability to retain firms headquartered ("located") in them and in their ability to attract out-of-state incorporations. For example, whereas Illinois and California retain only 11% and 22% of the firms located in them respectively, Indiana and Minnesota retain 70% and 75% respectively. As to out-of-state incorporations, 33 states attract less than 10 out-of-state incorporations each, whereas 7 states attract more than 25 out-of-state incorporations each.

¹ Bar-Gill, Barzuza, and Bebchuk (2001) develop a formal model of a race-to-the-bottom equilibrium in which (i) states are induced to provide rules that provide managers with excessive private benefits and (ii) incorporation in the dominant state is associated with a higher shareholder value due to the institutional advantages and network benefits offered by this state.

We next turn to study the characteristics of firms that influence their decisions whether to seek out-of-state incorporation. The location of firms has substantial influence on incorporation decisions: Firms display substantial “home-state preference” in favor of incorporating in the state in which they are located.² States thus enjoy a significant “home-state advantage” in competing for the firms located in them, and they generally have much greater ability to attract incorporations from in-state firms than from out-of-state firms. Even states that are hardly able to attract out-of-state firms (i.e., whose corporate law system is rarely “purchased” by out-of-state “buyers”) generally succeed in retaining a significant fraction of their in-state firms. Thus, in contrast to the conventional picture of state competition, states do not compete on equal footing for all publicly traded firms, and competition is significantly more imperfect than is conventionally assumed.

We also investigate why firms’ location has such an influence on incorporation choices and when the home-state advantage is more and less strong. We find that the home-state bias is weaker, though still significant, among large firms and among firms that went public more recently. We discuss four factors that can lead firms to disfavor out-of-state incorporation, and we find evidence consistent with three stories – ones based on (i) the higher costs of out-of-state incorporations, (ii) the desire of firms to benefit from local favoritism, and (iii) the influence of local lawyers. For example, we find that large firms are more likely to remain in-state when they are located in small states where their clout enables them to obtain some benefits from local favoritism. The evidence, however, is inconsistent with a story based on firms’ having no reason to leave states that have adopted the uniform Model Business Corporation Act; firms located in such states do not exhibit a greater tendency to remain in-state.

We then turn to examine how states’ corporate law systems affect their performance in terms of both retaining in-state firms and attracting out-of-state incorporations. Our focus here is on the effect of states’ antitakeover statutes. As will be discussed, the dominant view among legal scholars, supported by some empirical work, is unfavorable to the proliferation of such state statutes. Supporters of state competition, however, argue that it has not encouraged such proliferation. They believe that the incorporation market does not reward the amassing of antitakeover statutes but rather rewards states that are more resistant to pressure by

² That location might affect choices was suggested by the observation made in Daines (1999) that the majority of firms incorporate either in their home state or in Delaware. In a work in progress, Daines (2002) is conducting a study of firms’ home-state preferences at the time of the IPO. The results of Daines’ study, which is based on IPO-date data, can be expected to complement our examination of this issue, which is based on Compustat data on the stock of all firms existing at the end of 1999.

local firms' managers for antitakeover protection. We test this prediction and find it to be inconsistent with the evidence.

At one end of the spectrum, states with no antitakeover statutes, such as California, do poorly and retain a relatively small fraction of the companies located in them. At the other end of the spectrum, states that amass most or all standard antitakeover statutes are the ones most successful both in retaining in-state firms and in attracting out-of-state firms. More generally, antitakeover protections are correlated with success in the incorporation market; adding antitakeover statutes significantly increases the ability of states to retain their local firms, as well as their ability to attract out-of-state incorporations.

The effect we identify is not only statistically significant but also large in magnitude. Controlling for other firm and state characteristics, we estimate that, had states that currently have all standard antitakeover statutes not adopted them, they would have lost more than half of the incorporations of local firms they currently have (going down from 49% of all firms located in these states to 23% of these firms)). Conversely, adopting all standard antitakeover statutes by states that currently have no such statutes would have more than doubled the percentage of local firms retained by them (from 23% to 50%).

We pay special attention to two types of statutes - the "recapture" or "disgorgement" statute adopted by Pennsylvania and Ohio and the mandatory staggered boards statute adopted by Massachusetts. These statutes have been widely criticized as detrimental to shareholder value, and supporters of state competition have blacklisted them as extreme (see, e.g., Romano (1993), Daines (2001a)). However, we find that, in contrast to the beliefs of state competition supporters, the passage of these statutes has not hurt the states adopting them in the incorporation market.

Thus, the antitakeover protections established by Pennsylvania, Ohio, and Massachusetts do not reach the level that would start discouraging incorporators. In contrast to amassing standard antitakeover statutes, however, having extreme statutes has not increased incorporations in these states. Thus, it might be that the adoption of such statutes is close to the outer limits of how far a state can go in providing antitakeover protections without discouraging incorporations.³

³ In contemporaneous work, Subramanian (2002) also examines the effects of antitakeover statutes on the ability of states to retain their local firms. As will be discussed in Section 4, his conclusions on this issue are consistent with ours 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 incorporations and the overall effect that migration of firms to out-of-state incorporations has on the level of antitakeover protection.

Our findings indicate that it is not possible to maintain, as the dominant view among corporate scholars has done, that (i) state antitakeover statutes largely do not serve shareholders, and (ii) state competition provides states with strong incentives to provide rules that are optimal for shareholders. One or both of these two propositions need to be revised. Whatever position one ultimately adopts, the identified connection between antitakeover statutes and success in the incorporation marketplace has significant implications for the debates on state competition, on takeover law, and on corporate governance in general.

We also find some other features of states that have an effect on how they fare in the incorporation market. For example, states that have more “liberal” culture, which might be associated with judicial activism, are less successful in retaining in-state companies. States that have adopted the Revised Model Business Corporation Act (or its predecessor) are not more successful in attracting incorporations either from local firms or from out-of-state firms. The approach that we put forward can also be used to identify other features of states that make them attractive for incorporators.

We end the empirical analysis by analyzing concentration and market structure in the incorporation market. Recent work by Kamar (1998) and by Kahan and Kamar (2001) highlighted the importance of understanding the sources and consequences of Delaware’s dominance in the incorporation market. Studying Delaware’s dominance in the market, we find that this dominance is stronger than has been recognized and that it is likely to keep growing. Given the presence of home-state bias, we argue, it is useful to evaluate Delaware’s market dominance not only by looking at its share of all incorporations, as had been conventionally done, but also by looking at its share of out-of-state incorporations. In this respect, we find, Delaware’s share of the market for out-of-state incorporations is exceedingly high. We also find that both the fraction of firms that go out-of-state, and Delaware’s fraction of out-of-state incorporations, have been steadily increasing. Thus, if Delaware just maintains its performance with respect to firms from recent cohorts, its share of total incorporations can be expected to continue climbing from current levels.

Our analysis is organized as follows. Section 2 describes the data and provides summary statistics about the patterns of incorporations. Section 3 studies firms’ home-state preferences and the factors that pull firms in the direction of in-state incorporation. Section 4 investigates how states’ corporate law rules, and especially antitakeover statutes, affect their success in attracting incorporations. Section 5 analyzes the division and structure of the incorporation market and Delaware’s

dominance in this market. Section 6 makes concluding remarks and suggests directions for subsequent empirical work on the subject.

2 Data and Summary Statistics

The data set that we use includes all the publicly traded firms 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.⁴ Following Daines (2001a), who argues that financial firms are different in their corporate governance needs and their incorporation decisions are sometimes influenced by some special considerations, we excluded all financial firms and were left with 6,530 publicly traded firms. As already noted, an earlier version of this paper (Bebchuk and Cohen (2002)) reports results for the set of all firms (both financial and nonfinancial) and these results are qualitatively quite similar to the ones reported below.

Table 1 displays how firms are distributed among states of location for all publicly traded firms, for all Fortune 500 firms, and for all firms that went public in the five-year period 1996-2000. By states of location we shall refer throughout the paper to the state where the firm's headquarters are located (which is the only location data provided by Compustat). We shall refer to the fifty-one jurisdictions in the US - the fifty states and the District of Columbia - as states.

Not surprisingly, states that have large populations and big economies have more firms located in them. California, with the biggest population and economy, is home to the headquarters of 19% of all firms. Its share is especially large (27%) among firms that went public in the period 1996-2000, presumably because of the large incidence of Silicon Valley firms going public in these years. New York and Texas come second and third, each with about 9% of the firms. In an unreported regression, we find that the number of firms located in a state is highly correlated with the size of its population.

Table 2 displays the distribution of incorporations among states for all publicly traded firms, for all Fortune 500 firms, and for all firms going public in the five-year period 1996-2000. Comparing Table 2 with Table 1 indicates that the distribution of locations and the distribution of incorporations are quite different. As is well known, Delaware has by far the largest stake of incorporations: 58% of all firms, 59% of Fortune 500 firms, and even a higher percentage - 68% - of firms that went public in the period 1996-2000.

⁴ This point in time was the most recent one for which there was data for the great majority of firms when we did our empirical analysis.

Although no state even comes close to Delaware in terms of the number of incorporations, some states do much better than others. Whereas three states have more than 200 incorporations each, and eight states have between 100 and 200 incorporations each, thirty states have less than 50 incorporations each, with seventeen states having less than 10 incorporations each.

These two tables do not indicate where the firms located in each state choose to incorporate, nor where the firms incorporated in each state are located. Table 3 therefore presents a matrix that indicates for each state how the firms located in it divide their incorporations between this state and all other states. A quite noticeable feature of Table 3 is the concentration of firms in the boxes along the diagonal, which contain the numbers of in-state incorporations for each and every state. The large concentration of firms along this diagonal suggests the possible presence of a significant home-state advantage. Another noticeable and expected feature of Table 3 is the significant concentration of firms in the various boxes of one vertical column – that of Delaware; the column clearly indicates that Delaware is able to attract incorporations from all but one state.

Table 4 presents the total number and percentage of firms incorporated in their home state – among all firms, firms going public during 1991-1995 and during 1996-2000, Fortune 500 firms, and Fortune 100 firms. The table indicates that there is a substantial percentage of in-state incorporation in all groups. The fraction of in-state incorporations is smaller for firms that are large and for firms that went public in the 90's. However, even among Fortune 100 firms, and among firms that went public in the past five years, the fraction of in-state incorporations is significant (about 25% in each case).

Tables 5 displays how each state fares in the “market for corporate law.” The table indicates for each state (i) how many of its in-state firms it retains, both in absolute numbers and as a percentage of all in-state firms; (ii) how many out-of-state firms it attracts, both in absolute number and as a percentage of all out-of-state incorporations; and (iii) its net outflow (inflow) of firms. This table indicates that the large majority of states are net “exporters” of firms. Other than Delaware, which is a huge “importer,” only Nevada has a significant net inflow of firms (154). The table also indicates that states vary greatly in how successful they are in the incorporation marketplace, both in terms of retaining in-state firms and in terms of attracting out-of-state firms.

3 Home-State Advantage and Its Sources

3.1 The Presence of Home-State Advantage

The literature on state competition has generally viewed the incorporation choice of publicly traded firms as a “stand-alone” choice, one that depends only on judgment as to which state’s corporate law system would be best, and that is independent of the state where the firm is located. US firms incorporated in any given state may transact on equal footing in any state. Consequently, being incorporated in any other state is not supposed to affect how a firm’s operations are going to be taxed or regulated. Similarly, the corporate law of any given state, which largely affects the relationship between shareholders and managers, applies equally to all the firms incorporated in that state regardless of where they are located.

For these reasons, the conventional view regards incorporation choices as a “pure” choice of a legal regime, based only on a comparison of states’ corporate law systems and a judgment on which of those systems would be best for the firm. And the corporate law rules that would best fit any given firm might depend on various features of the firm, its shareholders, or its managers, but there is no good reason to expect them to depend on the particular location of the firm’s headquarters. On this view, all states are viewed as “selling” their corporate law system to all publicly traded firms, and not especially to the firms located in them. If this picture were indeed accurate, we could expect some states to be more successful than others in attracting a given type of firm, but we would not expect a state to be more successful (controlling for firm characteristics) in attracting local firms than out-of-state firms.

This conventional picture was put in doubt by the report of Daines (1999) that most firms incorporate either in their home state or in Delaware. Our data confirms the presence of a strong home-state advantage. There is a very heavy concentration of firms along the boxes of the diagonal of Table 3. Tables 5 indicates that states are generally much more attractive to their in-state firms than to out-of-state firms. Even states that do rather poorly with respect to out-of-state firms do succeed in retaining a significant fraction of their own firms.

For example, as Table 5 displays, California, which does relatively poorly on both dimensions, still does far better for in-state firms, retaining 22% of them, than for out-of-state firms, attracting only 0.2% of them - (see Table 5). Altogether, California is the incorporation choice of 273 firms located in California (out of a total of 1,254 firms headquartered in California) but only 10 firms located elsewhere (out of a total of 4,393 incorporated out-of-state). Although California appears unable to “sell” its corporate law system to any significant number of out-of-state firms, it

does have a significant number of incorporations because it starts with a large stock of local firms with respect to which it has some home-state advantage.

To test systematically the difference in states' abilities to attract in-state and out-of-state firms, we ran for each given state that has 10 or more firms located in it the following logit regression. We regressed a dummy variable that has a value of 1 if a company incorporates in the given state and 0 otherwise on (i) various characteristics of the firm - specifically, the company's sales (log), the company's Tobin's Q, the company's return on assets, the company's number of employees, the company's total equity, and dummy variables reflecting whether the company went public in 1996-2000, 1991-1995, or before 1990, and (ii) a dummy variable that has a value of 1 if the company is located in the given state and 0 otherwise. In all the regressions, being located in the state increased the likelihood of incorporating in the state at 99% confidence. To illustrate, Table 6 displays one of these regressions, the one applying to California. The table indicates that the coefficient for being located in California is positive and large (at 99% confidence). Similar results are obtained in the other regressions.⁵

3.2 Factors Pulling toward Remaining In-state

As noted, if firms were paying attention only to the relative quality of the corporate law system offered by states, firms' incorporation decisions would not be influenced by their location. What explains firms' giving preference to incorporating in their home state? Below we will test four other stories that might help explain why firms are pulled in the direction of remaining in-state:

(i) *The Extra Costs Pull*: It might be suggested that the presence of home-state bias emerges from firms' desire to avoid the extra costs that might be involved in going outside the state. Incorporation in Delaware involves a franchise tax and filing fees that are non-negligible, even though not very substantial for most publicly traded firms. Also, incorporating out-of-state might involve some additional transaction costs resulting from the need to retain additional law firms or to conduct legal business at a distance.⁶

⁵ It is worth reminding the reader that by state of location we refer to the state where the firm's headquarters are located which is the only location variable on your Compustat. To the extent that some firms have their main location and their incorporation in a state other than where they are headquartered, the home-state advantage might be even stronger than suggested by our results.

⁶ According to Cumming and MacIntosh (2001), Canadian lawyers whom the authors interviewed note the extra costs involved in out-of-province incorporation as an important reason for incorporating in the province of location.

Because the extra costs of going out of state are unlikely to rise proportionately with firm size, these costs can be expected to weigh more heavily on smaller firms, and smaller firms can be thus expected to display stronger tendencies to incorporate in-state. Note that, because extra costs are likely to be trivial for firms that are very large, and because home-state bias is still present to some extent for Fortune 500 and Fortune 100 firms (see Table 4), the extra costs story cannot provide a *full* explanation for the observed home-state bias; the question is thus only whether the extra costs story plays a significant role.

(ii) *The Uniformity Story*: A complementary story to the extra costs story can be based on the fact that many states have substantially similar corporate law codes that are all based on the Revised Model Business Corporation Act (RMBCA) (or its predecessor, the Model Business Corporation Act).⁷ The Revised Model Act is a sample statute, put together by a committee of corporate scholars and practitioners, that many states have adopted wholesale. For all firms that prefer being subject to the RBMCA and are headquartered in a state that has adopted the RMBCA, so the story goes, even a tiny cost of going out-of-state might serve as a tie-breaker and lead to remaining in their state of headquarters.⁸ A problem with this story is that, even among states that have adopted the RMBCA, there is significant variance in the additional antitakeover statutes (if any) that were adopted. In any event, the prediction of this story is that firms located in states with the RMBCA will show stronger tendencies to incorporate in-state.

(iii) *The Local Favoritism Story*: A third factor that might lead some firms to give preference to in-state incorporation is the hope of getting favorable treatment. Even though a state is supposed to treat all firms incorporated in it in the same way regardless of where they are located, a firm located in a state – especially a large firm located in a small state – might hope that its stature and clout in the state would lead judges or public officials to give it a favorable treatment with respect to some corporate law issues that might arise. Similarly, a firm located in a state might expect that, if it displays “loyal citizenship” by incorporating in the state, it would increase its chances of getting favorable treatment from public officials on issues unrelated to corporate law that might arise in the firm’s dealings with the state.

A testable prediction of the local favoritism story concerns the interaction of firm size and state size. A large firm located in a small state might have a major presence (the big fish in a small pond phenomenon) and can have significant clout

⁷ For a detailed description and a list of the states adopting the RMBCA, and its close predecessor the MBCA, see Section of Business Law of the American Bar Association (1999).

⁸ We are grateful to Frank Easterbrook for suggesting this possible story and for stressing the importance of controlling for the RMBCA factor.

that can enable it to get local favoritism (Sitkoff (2002)). In contrast, a firm of a similar size that is located in a big state will not be able to stand out and thus is unlikely to be able to obtain local favoritism. Thus, the local favoritism story predicts that, for large firms of any given size, those located in a small state will have a greater tendency to remain in-state.⁹

(iv) *The Law Firm Factor*: A fourth factor that might pull some firms in the direction of in-state incorporation is that of agency costs in the market for legal services. Recent work by Coates (2001) demonstrates that agency problems between lawyers and owners-managers might influence choices made at the IPO stage. In particular, it shows that the identity and location of the IPO law firm substantially affect the antitakeover charter provisions chosen by firms going public. Similarly, the identity of the law firm involved in a firm's IPO and/or subsequent corporate affairs – and, in particular, whether the law firm is located in the firm's state of location or elsewhere – might significantly affect the choice of incorporation state. An in-state law firm might be inclined to keep the firm in-state because such in-state incorporation would enable the law firm to handle fully the firm's corporate affairs, avoiding the inconvenience and fees-sharing involved in having to use counsel from another state. Furthermore, in-state incorporation would provide the local law firm with an advantage over out-of-state law firms that might compete for the firm's business, as the local law firm would be likely to have greater familiarity with the home state's corporate law and better connections in the state (see Carney (1998)).

Finally, before proceeding, it is worth noting another possible story that can be ruled up-front as inconsistent with the evidence already discussed. On this story, states tailor their corporate law to fit the type of firms located in them. Different types of firms have different needs and states might provide a corporate law system especially fitting for the type of firms most represented in the state. However, The regressions noted above, such as the one displayed in Table 6 for California, control for the firm's industry and for various financial features of it. It is still the case that firms located outside California are on an order of magnitude less likely to incorporate in California than firms located on California that are in the same industry and have the same financial characteristics. Furthermore, under a story in which different states cater to different niches, one would expect that each of the state offering a product that is especially good for certain type of firms would attract a significant number of out-of-state incorporations from firms of this type. However,

⁹ Another implication of this story, whose testing is left for future work, is that firms operating in lines of business which depend more on the state (because their business is either more affected by the state's regulation or by transactions with the state) would be more likely to remain in-state. Yet another implication is that the more concentrated are a company's actual operations in its state of headquarters, the more likely the company to incorporate in this state.

when firms incorporate out-of-state, the great majority of them go the Delaware, which indicates that the heterogeneity among firms in their corporate law needs does not play a key role in this market.

3.3. Empirical Examination

To examine the factors that make firms more likely to remain in-state, we ran two regressions in which the dependent variable was a dummy variable (In-state) that has a value of 1 if the firm remains in-state and 0 if it incorporates elsewhere. In the first regression, which is reported in Table 7, Column 1, the explanatory variables were only firm characteristics and state dummies used to control for state fixed effects. The firm characteristics included in this regression were the firm's sales (log), the firm's Tobin's Q, the firm's return on assets, the firm's number of employees, the firm's total equity, dummy variables indicating whether the firm went public in 1991-1995 or in 1996-2000, and industry dummies.

In the second regression, whose results are reported in Column 2 of Table 7, we replaced the state dummies with various characteristics of the state in which the firm is located. In particular, we included:

(i) State demographic characteristics -- the size of the state's population (log), the number of local firms, and the per capita income;

(ii) An interaction term of the size of the firm (as measured by the log of its sales) and the size of the state's population (as measured by the log of the state's population);

(iii) The State's regional location (northeast, south, mid-west, or west);

(iv) A dummy variable indicating whether the state has adopted the RMBCA or the MBCA; and

(v) Various legal and political characteristics of the state (which will be the focus of the analysis in Section 4 and which are listed in Table 10 to be discussed later on).¹⁰

The results indicate that larger firms are less likely to remain in-state. The number of employees variable has in both regressions a coefficient that is negative and statistically significant (at 95% confidence). In the first regression, where log sales is included without the interaction term between it and the state size, it also has a negative and statistically significant coefficient (at 90% confidence). Because some of the extra transaction costs involved in out-of-state incorporation are fixed or

¹⁰ The regression reported in the second column of Table 7 is the same as the one reported in the first column of Table 10; each of these tables displays only the variables that are of interest for the discussion in the relevant Section of the paper.

at least do not grow proportionately with firm size, these costs have lower weight for large firms. This finding is thus consistent with the extra costs story. To the extent that large firms are more likely to use a national law firm, this finding might also be explained by the local lawyer story.

The results in both regressions also indicate that newer firms are more likely (at 99% confidence) to incorporate out-of-state. Firms going public in recent years might have been more likely to use out-of-state law firms, as the market for legal services has become more national. High-tech firms, which were substantially represented among firms going public in the 90's, often had significant holdings by venture capitalists and financial intermediaries connected to legal advisers from national financial centers. Thus, this finding could point toward the local lawyers story.

There is one result that is clearly consistent with the local favoritism factor and does not appear explainable by any of the other stories. As is indicated by the negative sign of the interaction term in the second regression, large firms are more likely (at 95% confidence) to incorporate in-state when their home state is small than when it is large. Large firms are more likely to be able to benefit from local favoritism in small states, where they can stand out and have significant clout, than in large states.

In unreported regression, we use both sales and sales to the power of two as independent variables instead of $\log(\text{sales})$. Consistent with the above finding, we obtain a negative coefficient on sales and a positive coefficient on sales to the power of two. This indicates that, even though large firms are more likely to incorporate out of state than small firms, this effect is weakened once we look at very large firms, which are the ones that have most clout and thus are most likely to benefit from local favoritism.

Interestingly, the regional location of states appears to make a significant difference (we use the division into regions used by the US Census). In particular, firms located in the Northeast are more likely (at 99% confidence) to incorporate out-of-state. Firms located in the Northeast are more likely to use New York City lawyers engaged in national practice, and we suspect that such lawyers tend to use Delaware incorporations. The relevance of regional location might thus be due to the law firm factor.

Both regressions indicate that adopting the RMBCA (or its close predecessor the MBCA) does not have a statistically significant effect on a state's ability to retain firms. This enables us to reject the story that the presence of a large number of home state incorporations results from firms located in RMBCA states that prefer an

RMBCA statute and use staying at their home state as a tie-breaker among a large set of states with such a statute.

3.4 Choosing to Incorporate in Delaware

Thus far, we have examined which characteristics make firms more likely to incorporate out-of-state. It might be of interest to examine in particular which characteristics make firms more likely to incorporate in Delaware, the dominant jurisdiction used in out-of-state incorporations.

Table 8 presents the results of a logit regression in which we regressed a dummy variable that has a value of 1 if the firm incorporated in Delaware and 0 otherwise on the characteristics of firms used in earlier regressions. Not surprisingly, the factors that make firms more likely to be incorporated in Delaware are quite similar to those that make firms more likely to be incorporated out-of-state in general. Firms are more likely to incorporate in Delaware when they are large (at 99% significance) and when they went public during the 90's (again, at 99% significance).

Interestingly, we do not find an association between Delaware incorporation and a higher Tobin' Q. This association, which is reported by Daines (2001a) to hold for the 80's and early 90's, apparently does not hold in 1999.¹¹

Daines tried to infer from the association he found that Delaware's law is better for shareholders. A problem of drawing such an inference even for the years in which the association existed is the likely presence of a selection effect; the selection of firms that have Delaware incorporation is far from random. The results reported in Table 8 indicate that the firm characteristics available from the Compustat database, which is the data used both by us and by Daines, can explain only a very small part of the selection of firms that incorporate in Delaware. There are clearly some omitted variables with respect to firms (such as, for example, the identity of the firm's law firm) that have substantial influence on their incorporation choices. Identifying these omitted variables is an important task for future research. In the meantime, however, correlations between Delaware incorporation and shareholder

¹¹ Subramanian (2002, fn 70) reports that his work-in-progress found that the correlation between Delaware incorporation and a higher Tobin's Q largely disappears after 1996. Bebchuk, Cohen, and Ferrell (2002) point out that even during the 1981-1996 period studied by Daines, the correlation existed only in some years but not in others. They also argue that the fact that the correlation does not exist in some years, and that it comes and goes, indicates both that the correlation is not a general and persistent phenomenon and, furthermore, that its existence in some years is likely to result from a selection effect.

value cannot be used as a reliable basis for drawing inferences concerning the effect of Delaware law on shareholder value.¹²

4 Antitakeover Protection and Incorporation Choices

We have thus far examined what factors other than states' corporate law systems affect incorporation choices. We now turn to examine the features of states' corporate rules that influence these decisions and, in turn, how states fare in the market for incorporations.

Prior empirical analysis has focused on examining the wealth effects of incorporating in Delaware versus incorporating elsewhere. Instead of focusing on differences between Delaware and all other states taken as a group, this paper unpacks the large group of states other than Delaware. As documented earlier, states vary considerably in their ability to retain in-state firms and to attract out-of-state firms. These differences enable us to explore what factors make states more or less attractive for firms choosing a state of incorporation. To the extent that states seek to attract incorporations, such an analysis can identify what incentives competition provides to states. In particular, we will focus on using such an analysis to investigate how offering antitakeover statutes affects states' attractiveness in the incorporation marketplace.

4.1 Antitakeover Protections

One of the most important and hotly debated subjects in corporate law has been the regulation of hostile takeovers. Unlike the British City Code, which bans all defensive tactics and facilitates takeover bids, most US states have developed a large body of antitakeover protections over the last twenty-five years. One primary source of antitakeover protections has been the adoption of state antitakeover statutes. Antitakeover protections have also been provided by the development in the Delaware courts (whose decisions were subsequently followed by courts in other states) of doctrines that permit managers to engage in defensive tactics and, in particular, to use poison pills.

The body of academic opinion has largely viewed state takeover law as providing excessive protections against takeovers. Researchers who generally support state competition have been among those viewing state antitakeover statutes as excessive (see, e.g., Easterbrook and Fischel (1991), Romano (1993a,

¹² See Bebchuk, Cohen, and Ferrell (2002) for further discussion of this issue.

1993b)). The many scholars who believe that antitakeover statutes do not serve shareholders find support for their view in the empirical evidence on the effects of such statutes. The overwhelming majority of the event studies done on the adoption of state antitakeover statutes found either no price reactions or negative price reactions.¹³ Furthermore, researchers have also found evidence that state antitakeover statutes have operated to increase agency costs.¹⁴

While researchers have generally taken the view that the antitakeover protections developed by state corporate law are largely excessive, they have differed on the role of state competition in this area. The proliferation of antitakeover statutes is consistent with the view that state competition provides adverse incentives with respect to issues, such as the level of antitakeover protections, that have a substantial effect on the private benefits of managers (see Bebchuk (1992), Bebchuk and Ferrell (1989, 2001) and Bar-Gill, Barzuza, and Bebchuk (2001)). However, the proliferation of state antitakeover statutes might present a problem for those holding the dominant view that state competition is generally beneficial. Supporters of this view have sought to reconcile it with their belief that state antitakeover statutes do not serve shareholders by arguing that state competition does not encourage, and is thus not responsible for, the adoption of antitakeover statutes (see, e.g., Easterbrook and Fischel (1991), Romano (1993a, 2001)).

On this view, amassing strong antitakeover statutes is likely to decrease rather than increase the number of incorporations. Most of these statutes were still adopted, so the argument goes, because the adopting states could not resist the lobbying or political pressure of some managers concerned about the threat of a takeover. As Winter (1993, at xi) puts it: "The problem [with antitakeover statutes] is not that states compete for charters but that too often they do not." Thus, on this view, state competition has operated not to encourage the adoption of antitakeover statutes but rather to discourage and moderate it.

In support of this view, supporters of state competition have argued that Delaware, the most successful state, has adopted fewer and milder antitakeover statutes, especially compared with states such as Pennsylvania, Ohio, and Massachusetts (see, e.g., Romano (2001)). It is far from clear, however, that Delaware offers less antitakeover protection than most states. Although there are states that

¹³ See, e.g., Karpoff and Malatesta (1989). For surveys of these many studies, see Romano (1993a) and Gartman (2000).

¹⁴ Bertrand and Mullinathan (1998) found that the adoption of state antitakeover statutes resulted in increased extraction of rents through executive compensation. Bertrand and Mullinathan (1999) found that the adoption of antitakeover statutes reduced managers' incentives to minimize labor costs.

have more antitakeover statutes than Delaware, there are also states that have no antitakeover statutes. Furthermore, unlike other states, Delaware has a very large and developed body of case law on takeovers, which makes the absence of some statutes practically irrelevant. For example, because Delaware has a large body of judge-made law upholding the indefinite use of poison pills, the absence in Delaware of some state antitakeover statutes, such as a statute endorsing poison pills, is practically irrelevant.¹⁵

In contrast, the adoption of state antitakeover statutes did have practical significance in other states. No state other than Delaware has a developed case law on defensive tactics. Indeed, a Lexis search indicates that most states do not have even a single case on poison pills. In these states, the adoption of pill endorsement statutes and constituency statutes provided managers with the confidence, notwithstanding the absence of precedents in these states thus far, that indefinite use of poison pill would be permitted. In some states (e.g., New Jersey), the adoption of a pill endorsement statute served to override an earlier case ruling against the validity of poison pills. The adoption of antitakeover statutes by a state without a developed takeover case law, especially the adoption of several types of statutes, might have conveyed a message that the state's corporate law is committed to providing substantial protections from takeovers, a message which in Delaware was in large part supplied by case law.

Thus, in examining the question whether competition rewards stronger antitakeover protections, little can be learnt from observing that Delaware has fewer antitakeover statutes than some states – both because other states vary considerably in this regard and because Delaware's takeover law is in large part provided by its developed case law. We therefore propose to approach this question by unpacking the group of all states other than Delaware and studying the cross-state differences within this group. The position taken by supporters of state competition implies that states adopting more antitakeover statutes would not do better, and indeed would do worse, in the market for incorporations. This prediction will be tested below.

¹⁵ As long as the pill is in place, any additional defense is superfluous, as the pill by itself completely blocks a bidder from proceeding. And if a bidder overcomes the pill by taking control of the board in a proxy contest, a control share acquisition statute and fair price statute, which are generally applicable only to offers the board does not approve, would be irrelevant as well.

4.2 Standard Antitakeover Statutes

Table 9, taken from Gartman (2000), indicates the antitakeover statutes that each state has. The first six columns stand for “standard” types of antitakeover statutes. We define the following dummy variables:

(1) Control share: equal to 1 if the state has a control share acquisition statute and to 0 otherwise;¹⁶

(2) Fair price: equal to 1 if the state has a fair price statute and to 0 otherwise;¹⁷

(3) NoFreezeouts (1-3), which is equal to 1 if the state has a business combination statute that prevents a freezeout for up to three years after a takeover and to 0 otherwise;¹⁸

(4) NoFreezeouts (4-5), which is equal to 1 if the state has a business combination statute that prevents a freezeout for a period longer than three years after a takeover (the longest period adopted by some states is 5 years) and to 0 otherwise;

(5) Poison Pill Endorsement, which is equal to 1 if the state has a statute endorsing the use of a poison pill and to 0 otherwise;¹⁹ and

(6) Constituencies, which is equal to 1 if the state has a statute allowing managers to take into account interests of non-shareholders in defending against a takeover and to 0 otherwise.²⁰

¹⁶ A control share acquisition statute essentially requires a hostile bidder to put its offer to a vote of the shareholders before proceeding with it. If a bidder does not do so and purchases a large block of shares, it runs a very serious risk of not being able to vote these shares at all and thus not be able to gain control despite its large holdings.

¹⁷ A fair price statute requires a bidder that succeeds in gaining control and then proceeds with a second-step freezeout (a transaction removing remaining shareholders) to pay the remaining minority shareholders the same price as it paid for shares acquired through its bid. This prevents bidders from using the threat of a second-step freezeout at a low price as a mechanism for pressuring the shareholders into tendering.

¹⁸ Business combination statutes prevent a bidder that gains control from merging the target with its own assets for a specified period of time (unless certain difficult-to-meet conditions are satisfied). Such a constraint might make it more difficult for successful bidders to realize gains from synergy following a takeover and this, by reducing the potential profits from a takeover, might discourage potential buyers from bidding.

¹⁹ Poison pills are warrants or rights issued by the company which are triggered and entitle their holders to get significant value in the event that any buyer obtains a significant block without the approval of the board. As long as they are not redeemed, poison pills make a takeover prohibitively costly. Delaware courts have approved the use of pills in a series of well-known cases, starting with Moran vs. Household International in 1985. Other states have found it necessary to ground the use of poison pills in legislation either because of the absence of such cases or in a few instances to reverse court rulings against poison pills.

Altogether, control share acquisition statutes were passed in 27 states, fair price statutes in 27 states, business combination statutes (of both types) in 33 states, pill endorsement statutes in 25 states, and constituencies statutes in 31 states. Of these 143 statutes, 135 statutes were adopted in the period 1985-1991.²¹

As noted above, antitakeover statutes are possibly important not only in what they actually do but also in what they signal. They send an antitakeover message and signal that the state is likely to provide in the future antitakeover protections that will be valuable for firms. Therefore, how many statutes have been adopted by a given state might be important. Adopting the full arsenal of standard antitakeover statutes sends a clear antitakeover message to state courts and to potential and existing incorporators. We therefore will use, as an alternative to using dummies for each of the statutes, an antitakeover protection index (using a similar approach to that LaPorta et. al. (1998) used to study cross-country differences in shareholder protection).

Our antitakeover protection index, INDEX, attaches to each state a score from 0 to 5 that is equal to the number of standard antitakeover statutes that it has. (Because each state can have either a freezeout statute with up to 3 years moratorium or one with a 4- or 5-year moratorium (but of course not both), the maximum number of standard antitakeover statutes that a state can adopt is 5.) We also run a regression in which we seek to avoid imposing linearity on the effects of any given increase in the index score, and to this end we define five dummy variables - INDEX1, INDEX2, INDEX3, INDEX4, INDEX5 - each representing the set of states with the relevant number of statutes.

4.3 Extreme Statutes

In addition to the standard statutes, there are three “notorious” states that adopted unusual and more restrictive statutes. Pennsylvania and Ohio adopted statutes that enable the “disgorgement” or “recapture” of all the short-term profits made by a hostile acquirer, thus discouraging potential hostile bidders. Massachusetts adopted a statute that mandated a staggered board, which has a

²⁰ Such statutes are regarded as antitakeover statutes because allowing the managers to take into account how a takeover would affect, say, employees or debtholders provides managers with extra reasons for opposing the takeover and makes it more difficult for courts to scrutinize such decisions.

²¹ Two statutes were adopted earlier and six statutes were adopted in 1997-99. We ran all our regressions excluding the six statutes adopted in 97-99 and obtained similar results.

strong antitakeover force,²² even for firms that did not have a provision to this effect in their charter.

These two types of statutes and these three states have earned the universal scorn of commentators. Commentators have generally regarded these statutes as especially excessive and detrimental to shareholders. Indeed, several event studies found that the statutes passed by these three states had a substantial negative effect – higher than the effects found for the passage of other antitakeover statutes – on the stock value of firms incorporated in these states.²³

Supporters of state competition have used these three states to support their position that state competition rewards moderation in the provision of antitakeover protections. For example, Daines (2001a) and Romano (1993a, 1993b, 2001) use Pennsylvania, Ohio, and/or Massachusetts as prime examples for their view that Delaware’s law is relatively hospitable to takeovers.

Supporters of state competition have also directed some of their empirical work to these three states. Daines (2001a) reports that firms in these three states have a lower Tobin’s Q. Note, however, that this finding is at most an indication that the statutes hurt shareholder wealth, consistent with the findings of the event studies. This finding however, does not at all indicate that the statutes discouraged incorporations in these states and hurt the states adopting them in the incorporation market.

Romano (1993) reports that most Pennsylvania firms opted out of the Pennsylvania statute, and she views this opting out as an indication that state competition works well. On her view, the opting out indicates that the adoption of the statute was not welcome to managers. Such a conclusion, however, cannot be drawn from this finding. Because the opt-out procedure was rather simple, the managers of Pennsylvania firms that chose to opt out of the statute were hardly hurt by its passage. In contrast, the adoption of the statute could have benefited considerably those managers that did not opt out of it and who obtained antitakeover protections that they could not have obtained otherwise. Thus, managers who opted out of the statute were largely indifferent to its adoption, but

²² Bebchuk, Coates, and Subramanian (2002) analyze the special antitakeover power of staggered boards and present evidence that staggered boards indeed have such an effect. Staggered boards are shown to increase substantially the likelihood that a target receiving a hostile bid would remain independent.

²³ Szewczyk and Tsetsekos (1992), Karpoff and Malatesta (1990), and Swartz (1996) all found that passage of the Pennsylvania statute was accompanied by a substantial reduction in the value of Pennsylvania firms. Ryngaert and Netter (1990) reached a similar conclusion with respect to the passage of the Ohio legislation. Finally, Daines (2001b) obtained similar findings with respect to the passage of the Massachusetts legislation.

managers who did not opt out of it might well have viewed its adoption quite favorably. The substantial incidence of opting out does not therefore imply that the passage of the statute was viewed by the managers of Pennsylvania firms as a negative development. In any event, the opting out by firms that remained incorporated in Pennsylvania in no way indicates that this state has been hurt in the incorporation market.

Surprisingly, supporters of state competition have not tried to test directly whether the actions of Pennsylvania, Ohio, and Massachusetts have substantially hurt these states in the incorporation market. To explore this question, we defined two additional dummy variables:

(i) Recapture, which is equal to 1 if the state has a statute enabling the recapture of profits and to 0 otherwise;²⁴ and

(ii) Staggered, which is equal to 1 if the state has a statute imposing staggered boards and to 0 otherwise.²⁵

Recapture is essentially a dummy variable standing for Pennsylvania or Ohio and Staggered is essentially a dummy variable standing for Massachusetts.

4.4 What Helps States Retain In-State Firms?

(1) *A First Look*: Looking at the summary statistics in Table 5, we observe that states without antitakeover statutes seem to be doing poorly in terms of the fraction of their local firms that they are able to retain. Whereas 38% of all firms remain in-state, most of the states with no antitakeover statutes retain a much lower fraction; California, for example, retains only 22% of the firms located in it. Observe also that states that have all the standard antitakeover statutes generally retain a larger-than-average fraction of their in-state firms. For example, Indiana and Wisconsin, each of which offers a “royal flush” set of five standard antitakeover statutes, retain 70% and 72% respectively of the firms located in them. More generally, the fraction of local firms that each state retains is correlated with the number of antitakeover statutes that the state has.

The summary statistics in Table 5 also do not display any apparent strong adverse effect on the three states adopting extreme statutes. We observe that

²⁴ Recapture statutes prevent bidders that gained control from making any short-term profits by requiring that such profits be given to the acquired company.

²⁵ The staggered board statute adopted by Massachusetts changed the default: instead of allowing a staggered board only if the company opts into such an arrangement, the statute imposes such an arrangement unless the company opted out of it, and the opting out requirements were ones that were difficult to obtain for the shareholders of existing Massachusetts firms.

Pennsylvania and Ohio, which have the notorious disgorgement statute, retain a larger-than-average fraction of their local firms, and that the third “misbehaving” state, Massachusetts, retains a lower-than-average fraction of its local firms.

We ran the following (unreported) regression on the set of all states other than Delaware with 10 or more firms located in them.²⁶ We regressed the fraction of local firms that each state succeeds in retaining in-state on the number of standard antitakeover statutes that the state has, on dummy variables indicating whether the state has one of the two types of extreme statutes, and on all the demographic and other characteristics of the state used in the regression reported in Table 7. The results indicate that increasing the number of antitakeover statutes increases (at 95% significance) the fraction of local firms that incorporate in-state.

Not to assume that increasing the number of antitakeover statutes has a linear effect, we also ran the above regression using instead of the number of statutes five dummy variables indicating whether the state has 1, 2, 3, 4, or 5 antitakeover statutes respectively. The results indicate that having three, four, or five antitakeover statutes increases (also at 95% confidence) the fraction of local firms retained. Compared with having no antitakeover statutes, having all five standard antitakeover statutes increases the fraction of local firms retained by 0.26, a very large increase indeed.

(2) *Taking Firm Characteristics into Account:* The above regressions do not control for the possibility that states might vary in the characteristics of the firms located in them. To address this concern, we conducted a test controlling for firm characteristics. We regressed on the set of all firms a dummy variable that is equal to 1 if the firm incorporates in its home state and to 0 otherwise on:

(i) The antitakeover protections that are offered by the state, as described below;

(ii) A dummy variable indicating whether the state has adopted the RMBCA/MBCA;

(iii) The percentage of the voters choosing the Democratic candidate in the 2000 election;

(iv) All the characteristics of firms (including industry dummies) and demographic and regional characteristics of states examined in Section 3 (see Table 7, second column).

With respect to (i), the antitakeover protection, we used three different specifications for states’ antitakeover protections. We accordingly ran three regressions whose results are all reported in Table 10. The regression reported in Column 1 of Table 10 uses the score of each state in the antitakeover protection

²⁶ Only Arkansas, Montana, and North Dakota have less than 10 firms each.

index to stand for the state's antitakeover protection. The regression reported on Column 2 also relies on the index but, in order not to impose linearity on the influence of the index, uses five dummy variables representing the groups of states with index levels of 1, 2, 3, 4, and 5. The regression reported in Column 3 uses dummy variables for each of the standard antitakeover statutes. All three regressions use dummy variables for the extreme statutes, the recapture (disgorgement) statute present in Pennsylvania and Ohio and the staggered boards statute present in Massachusetts.

All the three regressions control for all the characteristics of firms and characteristics of states discussed in connection with Table 7. The coefficients of these characteristics are already reported in Table 7; we therefore do not report them again in Table 10 in order to focus on the parameters of interest in this section. It is also worth noting that, for robustness check, we have run the three regressions with respect only to the firms that went public during 1996-2000, and we obtained similar results to the ones obtained for the set of all firms that we now turn to discuss.

(3) *Standard Antitakeover Statutes*: All the regressions reported in Table 10 indicate that standard antitakeover statutes make a state more likely to retain local firms. The first regression indicates that having a higher score on the antitakeover index increases the fraction of retained firms (at 99% confidence). The second regression, which uses dummies for each of the index levels, indicates that having 3 or more statutes is especially helpful for retaining in-state firms (at 99% significance). The third regression, using separate dummies for different standard statutes, indicates that the statutes that are most helpful to have (all at 99% confidence) are a control share acquisition statute, a business combination statute with a long (4-5 years) moratorium period, and a pill endorsement statute.

Calculating the marginal effects from the logit regressions, we found that the effect of antitakeover statutes is not only highly significant but also substantial in magnitude. To provide a sense of the magnitude of the identified effects, we derived two estimates using the results of the regression on the antitakeover index reported in Column 1. First, we have derived prediction for the choices that all the firms located in the 8 states that currently have no antitakeover protection would have made had their states adopted all five standard antitakeover statutes. This provided us with an estimate that, if these 8 states had adopted all five antitakeover statutes, the percentages of these firms that remain in-state would have more than doubled – increasing from the current level of 23% to 50%.

Conversely, we estimated in the same way what would have happened if the 9 states that currently have five standard antitakeover statutes had not adopted such statutes. To this end, we used our regression to predict how the change would have

affects the choices of all the firms located in these 9 states. This provided us with an estimate that, without the antitakeover statutes, these 9 states would have lost more than half of the firms currently located in them, with the percentage of firms' remaining in-state declining from the current level of 49% of all local firms to 23%.

(4) *Extreme Statutes*: In all three regressions reported in Table 10, having a recapture statute has a positive but not statistically significant effect on states' attractiveness for their in-state firms. Thus, as far as retaining local firms is concerned, the evidence does not support the belief that adopting a recapture statute has hurt Pennsylvania and Ohio in the incorporation market. To be sure, some local firms opted out of the adopted statute according to the findings reported by Romano (1993b). There is no evidence, however, that the adoption of the statute has led firms located in Pennsylvania and Ohio to incorporate elsewhere, which is the critical test for determining success in the market for incorporations.

As to the staggered board statute, the results are mixed. A staggered board statute helps in retaining firms (at 99% confidence) in two regressions but has a negative effect (at 90% confidence). The results for both the staggered boards statute and the recapture statute are the same when the regressions are run only on the firms that went public during 1996-2000.

Whereas our results that amassing standard antitakeover statutes helps states attract local firms are generally consistent with those of Subramanian (2002), he concludes that the recapture and staggered boards statutes have hurt the ability of the states adopting them to retain firms. However, he uses one dummy variable to stand for the presence of either a recapture or a staggered board statute, and he controls only for firm characteristics but not for state characteristics other than their antitakeover statutes. When we ran the same regressions as he did, we obtained similar results to his. However, in order to allow for the possibility that the incorporation market did not treat recapture and staggered boards statutes in the same way, we 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. And once we controlled for state demographic and regional characteristics, the staggered board statute no longer had a negative effect on the state adopting it.

We should caution, however, against drawing from our findings any firm conclusions with respect to the effects of the adoption of extreme statutes. The dummy for recapture statute is essentially a dummy for Pennsylvania and Ohio, and the staggered board dummy is essentially a dummy for Massachusetts, and these three states might have some other special features. It would be fair to say, however, that the existing evidence does not enable accepting the belief of

supporters of state competition that adopting extreme antitakeover statutes is penalized in the incorporation market.

(5) *Liberal Political culture*: It is interesting to note that, in all three regressions, states that are strongly Democratic are less successful (at 99% confidence) in retaining local firms. For any given set of statutory corporate provisions, judges in states that are strongly Democratic might be expected to be more willing to intervene, which might be unattractive to those making incorporation decisions.²⁷

4.5 What Makes States Attractive for Out-of-State Firms?

We now turn to examine what makes states other than Delaware more or less attractive to out-of-state incorporations. Looking first at the summary statistics in Table 5, we find that, out of the 10 states with more than 15 out-of-state incorporations each, 8 states have four or five antitakeover statutes.

To examine this issue more systematically, we ran the regressions reported in Table 11. In these regressions, the dependent variable is log of (1 + the number of out-of-state incorporations) for all states other than Delaware.²⁸ For the covariants we used the same firm characteristics and the same state characteristics (including the alternative specifications of antitakeover protections) that we used in the earlier regressions reported in Tables 10.

Starting with state demographic characteristics, a higher per capita income helps attracting out-of-state incorporations (at 99% confidence in all three regressions). It might be that, once firms go out-of-state, they prefer a state with a relatively developed legal infrastructure, whose presence might be correlated with a higher per capita income.

The ideological leaning toward Democrats does not have any statistically significant role. It might be that, once a firm goes out-of-state, it will tend to choose a state with certain clear positions on corporate law issues, and those positions will make the general ideological leaning of the state less significant.

Turning to antitakeover protection, the results clearly indicate that offering a stronger antitakeover protection is also helpful in attracting out-of-state incorporations. The first regression (Column 1) indicates that having a higher score on the antitakeover index makes a state more attractive (at 99% confidence) to out-of-state incorporations. The second regression (Column 2), which uses dummies for

²⁷ Different observers might interpret this link in different ways. The desire to avoid judicial intervention might be rooted in shareholder value considerations (a positive interpretation) or in agency problems (a negative interpretation).

²⁸ Having the dependent variable be equal to the number of out-of-state incorporations yields similar results.

each of the score levels, also finds such a link. Finally, the third regression (Column 3) indicates that the statutes most helpful to attracting out-of-state incorporations are a control share acquisition statute and a pill endorsement statute (at 95% confidence and 90% confidence respectively); business combinations statutes, which were the third type of statute that we identified as helpful for retaining in-state firms, are not statistically significant in attracting out-of-state incorporations.

Finally, as to the two types of extreme statutes, in all three regressions, both a staggered board statute and a recapture statute do not have a statistically significant effect on states' ability to attract out-of-state incorporations. The evidence, again, does not enable concluding that the incorporation market penalizes states adopting such statutes.

4.6 The Overall Effects of Corporate Migration on Antitakeover Protections

We finally turn to examine the overall effect of the migration of firms from their states of location to states other than Delaware on the takeover rules governing them. Does this migration overall operate to increase antitakeover protections?

To study this question, let us first look at some summary statistics. Table 12A displays, for each level of the antitakeover index, (i) how many of the migrating firms had this index level at the home state that they left, and (ii) how many of the migrating firms had this index level at their state of incorporation. The table indicates that most migrating firms either strengthened or retained their level of antitakeover protections. 60% of the migrating firms moved to a state that have more antitakeover statutes than the state where they are located. Furthermore, whereas 23% of the firms move to a state that has the same number of antitakeover statutes, 87% of these cases are of firms whose state of location already had 4 or 5 statutes.

Table 12B reports results on the distribution of changes caused by migration. Within the group of firms not located or incorporated in Delaware, the migration of firms to out-of-state incorporation increases (at 95% confidence) the level of the antitakeover index that governs these firms. Furthermore, for each of the standard antitakeover statutes, this migration increases (at 95% confidence) the likelihood that any given migrating firm will be governed by such a statute. Thus, this migration operates unambiguously to increase the overall levels of antitakeover protection enjoyed by these firms or, more accurately, their managers.

5 Delaware's Dominance of the Market

We now turn to explore the incorporation market's structure and Delaware's dominance of it. In most markets where a firm has market power, a major concern is that this firm would reduce output to raise prices. In contrast, in the market for corporate law that we study, output reduction is not a problem. However, assessing the strength of competition in this market is still quite important for understanding how it operates and how the dominant player in it makes quality and price choices.

Let us look back at Table 2, which displays Delaware's market share. Delaware has incorporations of 58% of all firms and 59% of the incorporations of Fortune 500 firms. This division of the market represents a substantial market concentration. Using the Herfindahl index (see Tirole (1988, at 221), Hovenkamp (1999, at 512-16)), we calculate that its value is 3,435 in the market for incorporations and 3,638 in the market for incorporations of Fortune 500 firms.²⁹

The above paragraph has considered Delaware's market share among all incorporations or Fortune 500 incorporations, which is how Delaware's dominant position is commonly measured (see e.g. Gartman (2000)).³⁰ Although the numbers reported in the preceding paragraph already indicate a large degree of market concentration, they do not provide the full picture concerning Delaware's market power.

To start with, it is useful to consider not only Delaware's fraction of the total incorporation market but also its fraction of out-of-state incorporations. As we have seen, many firms' choices display a home-state advantage. There is no reason to think that all of these firms are exactly on the fence – that is, that they prefer to incorporate in their home state rather than in Delaware by only a very small margin. A state that marginally improved on Delaware's product could hope to capture fully the market for out-of-state incorporations; in contrast, such a state could not hope to attract those firms that currently prefer in a significant way in-state incorporation over Delaware incorporation. Thus, in assessing Delaware's position, it is useful to consider not only Delaware's share of all incorporations but also its share of all out-of-state incorporations.

²⁹ According to the 1992 Justice Department guidelines, for example, mergers may be examined for possible challenge if the post-merger Herfindahl index is above 1000 (see Hovenkamp (1999), at 516).

³⁰ See also the web site of the Delaware Division of Corporations, www.state.de.us/corp, which indicates that about 50% of all public corporations and 60% of the Fortune 500 are incorporated in Delaware.

Table 13 displays the division of the market for out-of-state incorporations. Delaware has 85% of total out-of-state incorporations, 83% of the out-of-state incorporations of Fortune 500 firms, and 90% of the incorporations of firms that went public in 1996-2000. The concentration of the market for out-of-state incorporations is very large. We calculate that the Herfindahl index has a value of 7,287 in the market for all out-of-state incorporations and a value of 8,159 in the market of out-of-state incorporations of firms that went public in recent years.

Furthermore, it is important to examine not only Delaware's current shares of total incorporations and total out-of-state incorporations, but also to consider how these shares have been evolving over time. Table 14 divides all the firms not located in Delaware (almost all firms) into three groups: those firms that went public before 1991, those that went public during 1991-1995, and those that went public during 1996-2000.

The results of the regressions reported in Table 7 indicate that firms that went public in the past decade are more likely to be incorporated out-of-state. Consistent with this result, Column 1 of Table 14 shows that the percentage of firms incorporating out-of-state is higher for more recent cohorts: this percentage is 50% for firms that went public before 1991, 59% for firms that went public during 1991-1995, and 67.5% for firms that went public in 1995-2000.

Column 2 of Table 14 indicates that Delaware captures the lion's share of out-of-state incorporations for firms of different vintages and, furthermore, that its share has been trending upwards in the past decade. Delaware captures 80% of all of out-of-state incorporations by firms that went public before 1991, 88% of all such incorporations by firms that went public during 1991-1995, and 90% of all such incorporations by firms that went public during 1996-2000.

Both factors – the higher fraction of out-of-state incorporations in recent cohorts and Delaware's higher share of out-of-state incorporations in recent cohorts – combine to make Delaware's share of total incorporations higher for firms from recent cohorts. As Column 3 of Table 14 indicates, Delaware captures only 62% of the incorporations of firms that went public before 1991, 67% of the incorporations of firms that went public during 1991-1995, and 75% of the incorporations of firms that went public during 1996-2000. This implies that, if Delaware simply maintains with respect to firms going public in the future its performance with recent cohorts, its total share of incorporations can be expected to climb in the future, as new firms enter the market and old ones leave it in one way or another.

The very substantial concentration in the market for corporate law does not by itself imply that Delaware has a market power that it can use to make supra-competitive returns. Even a seller that has a market share close or equal to 1 would

have little ability to make supra-competitive profits if the market were perfectly contestable and any attempt to make such profits could be expected to immediately trigger a challenge by a new entrant.

In the case of the market for corporate law, however, there are reasons to believe that the market is far from perfectly contestable. Delaware makes, and has long made, substantial supra-competitive profits that far exceed the state's expenses on the firms incorporated in it (see Kahan and Kamar (2001)). Delaware's franchise tax revenues in 2001 are about \$600 million, constitute a substantial fraction of the state's annual budget, and amount to \$3,000 for each household of four. Furthermore, Delaware derives additional benefits from the substantial profits made (and taxes paid) by its relatively large legal services sector.

The presence of such supra-competitive returns, and their persistence over time, indicate the likely presence of some substantial barriers to entry. The incumbent in this market might obtain advantages from the presence of network externalities (see Klausner (1995), Kahan and Kamar (1997)), from Delaware's sunk investments in legal infrastructure (such as a specialized and effective court system – see Romano (1985), Black (1990), Fisch (2001)), or from the incumbent's ability to match and out-do any serious attempt to unseat it (see Bebchuk and Ferrell (2001)). Bar-Gill, Barzuza, and Bebchuk (2001) develop a formal model of some of the factors that might provide Delaware with market power and enable it to make supra-competitive returns. Bebchuk and Hamdani (2002) attempt to provide a full analysis of these factors.

As already emphasized, Delaware's market power and dominance does not give rise to the traditional concerns associated with monopoly power in other markets, that is, the deadweight loss due to output reduction. Rather, it is relevant for a better analysis of Delaware's behavior and its choices with respect to the design and pricing of its product. Researchers have already examined how Delaware's dominance might lead it to make its law more unpredictable and litigation-intensive (Kamar (1998), Kahan and Kamar (2001)), to engage in price-discrimination (Kahan and Kamar (2001)), and to seek to discourage challenges to its dominance by charging firms less than the value to them of Delaware's network and institutional advantages (Bar-Gill, Barzuza, and Bebchuk (2001)). The analysis in this section suggests that more work in this direction would be worthwhile.

6 Concluding Remarks

This paper has taken a different approach to the empirical study of state competition than prior work. Whereas prior work has focused on the wealth effects

of Delaware incorporation, taking incorporation decisions as exogenous, this paper has focused on investigating the factors that influence and explain incorporation decisions. Furthermore, whereas prior work has largely put all states other than Delaware in one group, this paper has used cross-state differences to identify what makes states more and less successful in attracting incorporations.

The evidence indicates that a significant home-state advantage is at work in the market for corporate law. In contrast to the conventional picture of state competition, firms' incorporation choices are not solely based on comparing states' corporate law systems but are significantly influenced by the firm's location. States are substantially more successful in "selling" their corporate laws to firms located in them than to firms headquartered elsewhere. This home-state advantage is especially strong with respect to smaller and older firms, a pattern consistent with several explanations for the presence of such advantage. The evidence is consistent, we have found, with firms induced to remain in-state by the desire to save costs, by the hope to benefit from local favoritism, or by the influence of local counsel. The evidence is inconsistent, however, with the possibility that the home-state advantage is a product of the widespread adoption of the RMBCA or of states' tailoring their corporate law system to the type of firms located in them.

Although all states have some success in retaining firms located in them, and although none of the other states comes even close to Delaware in terms of attracting out-of-state incorporations, states greatly differ in how they fare in the incorporation market. We have used cross-state differences to study the legal and other features of states that make them attractive to incorporating firms. Among other things, we have found that states that have a heavily Democratic electorate, and thus are more likely to have activist judges, are less successful in attracting firms. States that have adopted the Revised Model Business Corporations Act or its predecessor are not more successful in attracting incorporations. Demographic characteristics and location of the state also play a role.

Addressing the long-standing debate on whether state competition has encouraged the proliferation of antitakeover statutes, we have found that amassing antitakeover statutes makes states more successful in the incorporation market -- both in retaining in-state firms and in attracting out-of-state incorporations. States that offer all or most of the standard antitakeover statutes do especially well, and states that offer no such statutes do especially poorly. Our estimates of the identified effect of antitakeover statutes indicate that it is quite large in magnitude.

Indeed, in contrast to the beliefs of supporters of state competition, the evidence does not indicate that the incorporation market has penalized even those three states that passed statutes universally regarded as detrimental to shareholders.

These statutes thus did not bring the states adopting them to the point where antitakeover protections drive away firms. Because these statutes did not help the adopting states attract more firms, however, this point might not be far away from the one reached by these states.

Our findings on antitakeover protection and state competition call for reconsidering a widely held view that is both negative on antitakeover statutes and positive on state competition. Those who hold this view should revisit at least one of the elements of their position. At this stage, researchers that held this view can reasonably take different positions on how it should be revised in light of our findings.³¹ What is important, however, is that the established link between state antitakeover statutes and incorporations be taken into account in subsequent analysis of state competition and takeover law.

Delaware's market dominance, we have shown, is even greater than has been previously recognized. The fraction of firms going out of state has been steadily increasing, and Delaware's dominance of the market for out-of-state incorporations has also been increasing. Both factors have made Delaware's share of total incorporations among recent corporate cohorts substantially greater than in the pool of all incorporations. Thus, even if Delaware merely maintains for future cohorts its performance for recent cohorts, Delaware's share of total incorporations is expected to increase substantially over time. The levels of concentration in the market for corporate law, combined with the substantial profits consistently made by Delaware, suggest that the market is best analyzed as one with a monopoly seller and significant barriers to entry. Subsequent work on the market for corporate law should investigate how these features of the market affect the decisions of the dominant player and other market participants.

Our analysis can provide both basis and questions for subsequent empirical work. Much more work can be done on the factors that pull firms to remain in-state. Also, our approach for studying how incorporation choices are affected by cross-state differences can be used with respect to other features of corporate law that vary across states. Future work could examine how incorporation choices are

³¹ Our own view is that some state antitakeover statutes are likely beneficial or neutral. Control share acquisition statutes, for example, can address the problem of pressure to tender and facilitate undistorted shareholder choice (Bebchuk and Hart (2001), Bebchuk (2002)). However, poison pills can produce excessive protection from takeovers when they are coupled with staggered boards (Bebchuk, Coates, and Subramanian (2002)). As a result, the wide latitude granted to managers to use poison pills by poison pill endorsement statutes and stakeholder statutes is likely to produce excessive protection in many cases. Thus, our view is that, although some antitakeover statutes are beneficial or neutral, others are not, and that the incorporation market provides states with excessive incentives to restrict takeovers.

affected by elements of corporate law other than those on which we have focused. Such work could help complete the picture with respect to the determinants of firms' incorporation decisions and, in turn, with respect to the incentives that state competition provides.

Finally, whereas our work has taken as given the existing differences in takeover law among states, it would be worthwhile to investigate what explains these differences – an inquiry of the supply side of the market. Given that amassing antitakeover statutes helps attract incorporations, why don't all states amass such statutes? The reason, at least in part, is presumably that not all states focus on the goal of maximizing the number of incorporations.³² Although the conventional assumption in the literature on state competition is that all states are guided by this goal, the findings of this paper indicate that this is clearly not the case; after all, many states do not take some easy steps (i.e., adopt more antitakeover statutes) that would likely increase the number of incorporations these states attract. Exploring what makes some states focus on attracting incorporations but not others, as well as what differences among states produce their varied decisions on antitakeover statutes, is an important question for future research.

³² Some states (especially large states) might not care about how many firms incorporate in them, and some states might have preferences about the substantive content of its corporate law and not only in how this law would affect incorporations. (New York or California, for example, might have among their citizens a significant fraction of the shareholders of many public firms.) Cumming and MacIntosh (2001) suggest that, in the Canadian market for corporate law, the behavior of provinces is inconsistent with the view that they seek to maximize the number of (or revenues from) incorporations.

References

- Bar-Gill, Oren, Michal Barzuza and Lucian Bebchuk (2001), "The Market for Corporate Law," Working Paper, Harvard Law School, available on www.papers.ssrn.com/abstract=275452.
- Bebchuk, Lucian Arye (1992), "Federalism and the Corporation: The Desirable Limits on State Competition in Corporate Law," 105 *Harvard Law Review* 1435-1510.
- Bebchuk, Lucian Arye (2002), "The Case Against Veto Power in Corporate Takeovers," 69 *University of Chicago Law Review* _ (2002), available on <http://papers.ssrn.com/abstract=314703> .
- Bebchuk, Lucian, John Coates IV, and Guhan Subramanian (2002), "The Special Antitakeover Power of Staggered Boards: Theory, Evidence, and Policy," 54 *Stanford Law Review* _ (2002), available on <http://papers.ssrn.com/abstract=304388>.
- Bebchuk, Lucian Arye, and Alma Cohen, "Firms' Decisions where to Incorporate," Discussion Paper No. 351, February 2002, Harvard Olin Center, available on [www.law.harvard.edu/ programs/olin_center](http://www.law.harvard.edu/programs/olin_center).
- Bebchuk, Lucian Arye, Alma Cohen, and Allen Ferrell (2002), "Does the Evidence Favor State Competition in Corporate Law?" 90 *California Law Review* _ (2002), available on www.papers.ssrn.com/abstract=303417.
- Bebchuk, Lucian Arye and Allen Ferrell (1999), "Federalism and Corporate Law: The Race to Protect Managers from Takeovers," 99 *Columbia Law Review* 1168-1199.
- Bebchuk, Lucian Arye and Allen Ferrell (2001), "A New Approach to Takeover Law and Regulatory Competition," 87 *Virginia Law Review* 111-164.
- Bebchuk, Lucian Arye and Assaf Hamdani (2002), "Vigorous Race or Leisurely Walk: Reconsidering the Debate on State Competition in Corporate Law" *Yale Law Journal* (forthcoming).
- Bebchuk, Lucian Arye and Oliver Hart (2001), "Takeover Bids vs. Proxy Fights in Contests for Corporate Control," NBER Working Paper No. 8633, available on <http://papers.ssrn.com/abstract=290584>.
- Bertrand, Marianne and Sendhil Mullainathan (1999), "Executive Compensation and Incentives: The Impact of Takeover Legislation," NBER Working Paper No. 6830.

- Bertrand, Marianne and Sendhil Mullainathan (1999), "Is There Discretion in Wage Setting? A Test Using Takeover Legislation," 30 *Rand Journal of Economics* 535-554.
- Bhagat, Snajai and Roberta Romano (2001), "Event Studies and the Law: Part II - Empirical Studies of Corporate Law," Yale ICF working paper no. 00-33.
- Black, Bernard S. (1990), "Is Corporate Law Trivial? - A Political and Economic Analysis," 84 *Northwestern University Law Review* 542-597.
- Bradely, Michael, and Cindy A. Schipani (1989), "The Relevance of the Duty of Care Standard in Corporate Governance," 75 *Iowa Law Review* 1-82.
- Carney, William (1998), "The Production of Corporate Law," 71 *Southern California Law Review* 715-780.
- Cary, William (1974), "Federalism and Corporate Law: Reflections upon Delaware," 83 *Yale Law Journal* 663 - 701.
- Coates, John (2001), "Explaining Variation in Takeover Defenses," 89 *California Law Review* 1301-1422.
- Cumming, Douglas J. and Jeffrey G. MacIntosh (2000), "The Role of Interjurisdictional Competition in Shaping Canadian Corporate Law," 20 *International Review of Law and Economics* 141- 186.
- Cumming, Douglas J. and Jeffrey G. MacIntosh (2001), "The Rationale Underlying Reincorporation and Implications for Canadian Corporations," mimeo, University of Alberta and the University of Toronto.
- Daines, Robert (1999), "Does Delaware Law Improve Firm Value?" Working Paper CLB-99- 011, New York University, available on SSRN.
- Daines, Robert (2001a), "Does Delaware Law Improve Firm Value?" 40 *Journal of Financial Economics* 525-558.
- Daines, Robert (2001b), "Do Staggered Boards Affect Firm Value? Massachusetts and the Market for Corporate Control," mimeo, NYU Law School.
- Daines, Robert (2002), "How Firms Choose Corporate Law Rules: Some Evidence on Law, Lawyers, and the Market for IPO charters, Work in Progress, New York University.

- Easterbrook, Frank H. and Daniel R. Fischel (1991), *The Economic Structure of Corporate Law*.
- Fisch, Jill (2000), "The Peculiar Role of the Delaware Courts in the Competition for Corporate Charters," 68 *University of Cincinnati Law Review* 1061-1100.
- Fischel, Daniel R. (1982), "The 'Race to the Bottom' Revisited: Reflections on Recent Developments in Delaware's Corporation Law," 76 *Northwestern University Law Review* 913-945.
- Gartman, Grant A. (2000), *State Antitakeover Laws* (Investor Responsibility Research Center, Washington D.C).
- Heron, Randall and Wilbur Lewellen (1998), "An Empirical Analysis of the Reincorporation Decision," 33 *Journal of Financial and Quantitative Analysis* 549-568.
- Hovenkamp, Herbert (1999), *Federal Antitrust Policy*.
- Kahan, Marcel and Michael Klausner (1997), "Standardization and Innovation in Corporate Contracting (or 'The Economics of Boilerplate')," 83 *Virginia Law Review* 713-770.
- Kahan, Marcel and Ehud Kamar (2001), "Price Discrimination in the Market for Corporate Law," 86 *Cornell Law Review* 1205-1256.
- Kamar, Ehud (1998), "A Regulatory Competition Theory of Indeterminacy in Corporate Law," 98 *Columbia Law Review* 1908-1959.
- Karpoff, Jonathan and Paul Malatesta (1989), "The Wealth Effects of Second-Generation State Takeover Legislation," 25 *Journal of Financial Economics* 291-322.
- Karpoff, Jonathan and Paul Malatesta (1990), "Pennsylvania Law: State Antitakeover Laws and Stock Prices," 46 *Financial Analyst Journal*.
- Klausner, Michael (1995), "Corporations, Corporate Law, and Networks of Contracts," 81 *Virginia Law Review* 757-852.
- LaPorta et al. (1998), "Law and Finance," 106 *Journal of Political Economy* 1113-1155.
- Macey, Jonathan R. and Geoffrey P. Miller (1987), "Toward an Interest-Group Theory of Delaware Corporate Law," 65 *Texas Law Review* 469-523.
- Romano, Roberta (1985), "Law as a Product: Some Pieces of the Incorporation Puzzle," 1 *Journal of Law, Economics, and Organization* 225-283.

Romano, Roberta (1993a), *The Genius of American Corporate Law*.

Romano, Roberta (1993b), "Competition for Corporate Charters and the Lesson of Takeover Statutes," 61 *Fordham Law Review* 843-864.

Romano, Roberta (1998), "Empowering Investors: A Market Approach to Securities Regulation," 107 *Yale Law Journal* 2359-2430.

Romano, Roberta (2001), "The Need for Competition in International Securities Regulation," 2 *Theoretical Inquiries in Law* 387.

Section of Business Law of the American Bar Association (1999), *Model Business Corporation Act Annotated*.

Sitkoff, Robert (2002), "Corporate political Speech, Political Extortion, and the Competition for Corporate Charters," *University of Chicago Law Review* (forthcoming).

Swartz, L. Mick (1996), "The 1990 Pennsylvania Antitakeover Law: Should Firms Opt Out of Antitakeover Legislation?" 11 *Journal of Accounting, Auditing, and Finance* 223-245.

Subramanian, Guhan (2002), "The Influence of Antitakeover Statutes on Incorporation Choice: Evidence on the 'Race' Debate and Antitakeover Overreaching," Harvard Business School Working Paper, forthcoming *University of Pennsylvania Law Review*.

Szewczyk, Samuel H. and George P. Tsetsekos (1992), "State Intervention in the Market for Corporate Control: The Case of Pennsylvania Senate Bill 1310," 31 *Journal of Financial Economics* 3-23.

Tirole, Jean (1988), *The Theory of Industrial Organization*.

Winter, Ralph K. (1977), "State Law, Shareholder Protection, and the Theory of the Corporation," 6 *Journal of Legal Studies* 251-292.

Winter, Ralph K. (1989), "The 'Race for the Top' Revisited: A Comment on Eisenberg," 89 *Columbia Law Review* 1526-1529.

Winter, Ralph K. (1993), "Foreword," in Roberta Romano, *The Genius of American Corporate Law*.

TABLE 1

The Distribution of Firms' Locations among StatesAll publicly traded
firms

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%

Fortune 500
firms

State	Number of firms located in state	Percentage
CA	41	11.08%
TX	36	9.73%
NY	32	8.65%
IL	31	8.38%
PA	22	5.95%
OH	21	5.68%
NJ	18	4.86%
MI	14	3.78%
MO	14	3.78%
VA	13	3.51%
FL	12	3.24%
GA	12	3.24%
MN	10	2.70%
CT	9	2.43%
NC	8	2.16%
WA	8	2.16%
MA	7	1.89%
MD	5	1.35%
TN	5	1.35%
WI	5	1.35%
AL	4	1.08%
AR	4	1.08%
AZ	4	1.08%
CO	4	1.08%
DE	4	1.08%
Other	27	7.30%
Total	370	100%

Firms going
public during 1996-2000

State	Number of firms located in state	Percentage
CA	549	27.31%
TX	172	8.56%
NY	165	8.21%
MA	137	6.82%
FL	113	5.62%
CO	67	3.33%
NJ	66	3.28%
GA	62	3.08%
PA	60	2.99%
IL	56	2.79%
WA	55	2.74%
VA	51	2.54%
MN	48	2.39%
CT	44	2.19%
MD	40	1.99%
NC	29	1.44%
OH	29	1.44%
AZ	27	1.34%
MI	23	1.14%
MO	23	1.14%
TN	21	1.04%
UT	17	0.85%
NV	15	0.75%
LA	13	0.65%
OR	13	0.65%
Other	115	5.72%
Total	2,010	100%

TABLE 2

The Distribution of Incorporations among States

All publicly traded firms

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%

Herfindahl index = 3435

Fortune 500 firms

State	Number of firms incorporate in state	Percentage
DE	220	59.46%
NY	22	5.95%
OH	13	3.51%
PA	12	3.24%
NJ	11	2.97%
VA	9	2.43%
MD	8	2.16%
FL	7	1.89%
IN	6	1.62%
CA	5	1.35%
GA	5	1.35%
MI	5	1.35%
NC	5	1.35%
NV	5	1.35%
MN	4	1.08%
MO	4	1.08%
TX	4	1.08%
WA	4	1.08%
WI	4	1.08%
IL	3	0.81%
KS	3	0.81%
KY	2	0.54%
MA	2	0.54%
OR	2	0.54%
HI	1	0.27%
Other	4	1.08%
Total	370	100%

Herfindahl index = 3638

Firms going public during 1996-2000

State	Number of firms incorporate in state	Percentage
DE	1,364	67.86%
CA	90	4.48%
NV	72	3.58%
FL	58	2.89%
TX	45	2.24%
CO	37	1.84%
MN	36	1.79%
WA	34	1.69%
GA	30	1.49%
MA	27	1.34%
NY	22	1.09%
PA	22	1.09%
OH	19	0.95%
MD	16	0.80%
VA	15	0.75%
NJ	13	0.65%
MI	12	0.60%
TN	12	0.60%
OR	11	0.55%
UT	11	0.55%
NC	10	0.50%
WI	9	0.45%
LA	7	0.35%
MO	7	0.35%
IN	6	0.30%
Other	25	1.24%
Total	2,010	100%

Herfindahl index = 4673

TABLE 4

In-State and Out-of-State Incorporations

	Number of In-state Incorporations	Percentage of Total Incorporations	Number of Out-of-state Incorporations	Percentage of Total Incorporations	Total Number of Incorporations
All firms	2137	32.7%	4393	67.3%	6530
Went public Pre-91	1213	37.3%	2036	62.7%	3249
Went public 91-95	417	32.8%	854	67.2%	1271
Went public 96-00	507	25.2%	1503	74.8%	2010
Fortune 500	110	29.7%	260	70.3%	370
Fortune 100	18	25.3%	53	74.7%	71

TABLE 5

Migration and Emigration in the "Market for Corporate Law"

State	Number of firms located in state	Number of firms located and incorporated 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 incorporations	Net outflow
AK	2	1	50.00%	2	0.03%	-1
AL	29	3	10.34%	2	0.03%	24
AR	20	3	15.00%	0	0.00%	17
AZ	91	21	23.08%	0	0.00%	70
CA	1,254	273	21.77%	10	0.19%	971
CO	201	74	36.82%	58	0.92%	69
CT	147	17	11.56%	3	0.05%	127
DC	25	2	8.00%	0	0.00%	23
DE	27	27	100.00%	3,744	57.57%	-3744
FL	328	137	41.77%	28	0.45%	163
GA	178	71	39.89%	12	0.19%	95
HI	13	6	46.15%	2	0.03%	5
IA	25	10	40.00%	4	0.06%	11
ID	15	2	13.33%	1	0.02%	12
IL	241	27	11.20%	5	0.08%	209
IN	56	39	69.64%	11	0.17%	6
KS	35	11	31.43%	8	0.12%	16
KY	29	7	24.14%	2	0.03%	20
LA	45	18	40.00%	4	0.06%	23
MA	360	108	30.00%	10	0.16%	242
MD	101	25	24.75%	29	0.45%	47
ME	10	4	40.00%	0	0.00%	6
MI	104	58	55.77%	2	0.03%	44
MN	212	158	74.53%	20	0.32%	34
MO	101	26	25.74%	10	0.16%	65
MS	14	4	28.57%	8	0.12%	2
MT	6	6	100.00%	0	0.00%	0
NC	98	38	38.78%	0	0.00%	60
ND	4	0	0.00%	0	0.00%	4
NE	18	4	22.22%	3	0.05%	11
NH	28	3	10.71%	0	0.00%	25
NJ	311	80	25.72%	31	0.50%	200
NM	9	4	44.44%	3	0.05%	2
NV	63	45	71.43%	172	2.66%	-154
NY	576	141	24.48%	85	1.43%	350
OH	192	105	54.69%	7	0.11%	80
OK	61	22	36.07%	5	0.08%	34
OR	70	50	71.43%	4	0.06%	16
PA	248	98	39.52%	26	0.41%	124
RI	24	6	25.00%	1	0.02%	17
SC	30	9	30.00%	1	0.02%	20
SD	7	4	57.14%	0	0.00%	3
TN	81	33	40.74%	6	0.09%	42
TX	586	139	23.72%	8	0.13%	439
UT	70	32	45.71%	20	0.31%	18
VA	154	56	36.36%	18	0.28%	80
VT	11	4	36.36%	0	0.00%	7
WA	131	68	51.91%	11	0.17%	52
WI	72	52	72.22%	5	0.08%	15
WV	8	3	37.50%	0	0.00%	5
WY	9	3	33.33%	12	0.18%	-6
Total	6530	2137		4393		
Average			38.10%		1.33%	

TABLE 6

Attractiveness of California Incorporation: In-State vs. Out-of-State Firms

Logit regression:

Dependent variable:	Incorporated in California	Incorporated in California
Located in California	4.96 (0.34) ^{***}	5.47 (0.40) ^{***}
log (sales)	-0.04 (0.04)	-0.11 (0.05) ^{**}
Tobin's Q	-0.001 (0.002)	-0.001 (0.002)
Return to assets	0.014 (0.02)	0.02 (0.02)
Number of employees	-0.10 (0.04) ^{***}	-0.13 (0.05) ^{***}
Total equity	0.0002 (0.0001) ^{**}	0.0003 (0.0001) ^{**}
Went public in 1991-1995	-0.02 (0.18)	0.05 (0.20)
Went public in 1996-2000	-0.70 (0.18) ^{***}	-0.69 (0.2) ^{***}
Constant	-5.69 (0.36) ^{***}	
2-digit industry dummy	NO	YES
Number of observations	5382	4651
Adjusted R ²	0.4027	0.4405

^{*}, ^{**}, ^{***} Significant at 10%, 5%, and 1% confidence interval, respectively.

TABLE 7

Factors Inducing Firms to Remain In-State

Logit regression:

Dependent variable:

In-state dummy

	1	2
<u>Firm characteristics:</u>		
log(Sales)	-0.025 (0.015)*	0.37 (0.24)
Tobin-Q	-1.0e-04 (7.0e-04)	0.0003 (0.0007)
Return on assets	-0.0006 (0.007)	-0.001 (0.007)
Number of employees	-0.004 (0.002)**	-0.004 (0.002)**
Going public between 91-95	-0.26 (0.08)***	-0.26 (0.08)***
Going public between 96-00	-0.52 (0.08)***	-0.52 (0.08)***
<u>State Demographic Characteristics:</u>		
log(Population)		0.18 (0.13)
Number of firms located		-3.0e-04 (3.0e-04)
Per capita income		-1.8e-06 (1.7e-05)
<u>Interaction:</u>		
log(Sales)*log(Population)		-0.03 (0.015)**
<u>State region:</u>		
Northeast		-0.58 (0.13)***
South		-0.36 (0.12)***
West		0.31 (0.14)**
<u>Uniformity of laws:</u>		
RMBCA		-0.05 (0.10)
<u>Legal & Political State Characteristics:</u>		
(see Table 10 column 1)		YES
State Dummy	YES	
2-digit industry dummy	YES	YES
Number of observations	5315	5325
Pseudo R ²	0.1219	0.0777

*, **, *** Significant at 10%, 5%, and 1% confidence interval, respectively.

TABLE 8

Which Firms Migrate to Delaware?

Logit regression

Dependent variable:	In-Delaware Dummy coef.
Log(sales)	0.11** (0.014)
Tobin-Q	-2.0e-05 (0.0007)
Return on assets	-7.0e-04 (0.007)
Number of employees	0.0004 (0.001)
Going public between 91-95	0.43** (0.08)
Going public between 96-00	0.72** (0.08)
State dummies	YES
2-digit SIC dummies	YES
Number of observations	5340
Pseudo R ²	0.1092

*, **, *** Significant at 10%, 5%, and 1% confidence interval, respectively.

TABLE 9

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
Rhode 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 10

What Makes States Attractive for In-State Firms?

Logit regression:

Dependent variable:

In-state dummy

	1	2	3
<u>Standard Antitakeover statutes:</u>			
Control share			0.85 (0.11)***
Fair Price			-0.24 (0.17)
No freezeouts (1-3 years)			-0.04 (0.10)
No freezeouts (4-5 years)			0.74 (0.13)***
Poison Pill Endorsement			0.50 (0.10)***
Constituencies			-0.04 (0.11)
Index	0.26 (0.04)***		
Index1		0.42 (0.24)*	
Index2		0.41 (0.31)	
Index3		1.26 (0.26)***	
Index4		1.23 (0.22)***	
Index5		1.65 (0.26)***	
<u>Extreme statutes:</u>			
Staggered board	0.49 (0.15)***	0.5 (0.16)***	-0.47 (0.27)*
Recapture	0.16 (0.16)	0.08 (0.22)	0.04 (0.18)
<u>RMBCA</u>	-0.05 (0.10)	-0.07 (0.12)	0.05 (0.10)
<u>"Liberal" political culture:</u>			
Percentage of Democrats	-2.36 (0.86)***	-3.06 (1.25)***	-2.64 (0.99)***
Firms characteristics (see Table 7)	YES	YES	YES
State Demographic and legal characteristics (see Table 7)	YES	YES	YES
2-digit industry dummy	YES	YES	YES
Number of observations	5325	5323	5323
Pseudo R ²	0.0777	0.0791	0.0904

* , ** , *** Significant at 10% , 5% , and 1% confidence interval, respectively.

TABLE 11

What Makes States Attractive for Out-of-State Incorporations?

OLS regression:

Dependent variable: log of
(1+number of out-of-state
incorporation)

	1	2	3
<u>State statutes:</u>			
Control share			0.95 (0.4)**
Fair Price			-0.17 (0.51)
No Freezeouts (1-3 years)			-0.01 (0.44)
No Freeze outs (4-5 years)			0.38 (0.51)
Poison Pill Endorsement			0.70 (0.37)*
Constituencies			0.33 (0.42)
Index	0.33 (0.09)***		
Index1		0.99 (0.57)*	
Index2		1.87 (0.67)***	
Index3		1.14 (0.50)**	
Index4		1.68 (0.48)***	
Index5		1.87 (0.55)***	
<u>Extreme statutes:</u>			
Staggered board	-0.21 (1.15)	-0.155 (1.16)	-0.03 (1.4)
Recapture	-0.03 (0.85)	0.16 (0.93)	0.58 (0.95)
<u>RMBCA</u>	-0.53 (0.32)*	-0.66 (0.37)	-0.34 (0.36)
<u>"Liberal" political culture:</u>			
Percentage of democrats	-5.72 (2.14)**	-4.26 (2.30)*	-3.42 (2.47)
<u>State Demographic characteristics:</u>			
Population	7.1e-08 (1.0e-7)	-8.8e-08 (1.0e-07)	-1.1e-07 (1.2e-07)
Located	-0.001 (0.003)	-0.005 (0.003)	0.004 (0.003)
Per capita income	1.8e-04 (5.4e-05)***	1.8e-04 (5.5e-05)***	1.6e-04 (6.5e-05)**
<u>State region:</u>			
Northeast	0.09 (0.52)	0.06 (0.54)	0.30 (0.62)
South	0.64 (0.40)	0.75 (0.41)*	0.98 (0.47)**
West	0.80 (0.45)*	0.98 (0.47)**	0.45 (0.50)
Number of observations	50	50	50
Adjusted R ²	0.4453	0.4483	0.4666

*, **, *** Significant at 10%, 5%, and 1% confidence interval, respectively.

TABLE 12A

Antitakeover Index Governing Firms Before and After Migration

Index of Headquarters state	Index of Incorporation state						Total
	0	1	2	3	4	5	
0	1 1.03%	14 14.43%	8 8.25%	6 6.19%	22 22.68%	46 47.42%	97 100%
1	6 5.71%	13 12.38%	10 9.52%	13 12.38%	22 20.95%	41 39.05%	105 100%
2	0 0%	9 30.00%	2 6.67%	0 0%	6 20.00%	13 43.33%	30 100%
3	1 1.54%	7 10.77%	2 3.08%	3 4.62%	33 50.77%	19 29.23%	65 100%
4	3 1.09%	18 6.52%	13 4.71%	21 7.61%	106 38.41%	115 41.67%	276 100%
5	3 3.95%	8 10.53%	1 1.32%	4 5.26%	37 34.82%	23 30.26%	76 100%
Total	14 2.16%	69 10.63%	36 5.55%	47 7.24%	226 34.82%	257 39.6%	649 100%

TABLE 12B

The Effects of Corporate Migration on Antitakeover Protection

Number of observations: 649

	Before	After	Increase	95% conf. interval
Antitakeover Index	2.84	3.81	0.97	0.8-1.13
Control Share	0.41	0.63	0.22	0.16-0.28
Fair Price	0.59	0.77	0.18	0.13-0.22
No freezeouts	0.69	0.79	0.10	0.05-0.014
Poison Pill Endorsement	0.56	0.86	0.29	0.25-0.35
Stakeholders	0.58	0.76	0.18	0.13-0.23

TABLE 13

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

All publicly traded firms			Fortune 500			Firms going public during 1996-2000		
State	Number of firms located elsewhere but incorporated in state	As percentage of all out-of-state incorporation	State	Number of firms located elsewhere but incorporated in state	As percentage of all out-of-state incorporation	State	Number of firms located elsewhere but incorporated in state	As percentage of all out-of-state incorporation
DE	3,744	85.23%	DE	216	83.08%	DE	1,356	90.22%
NV	172	3.92%	NY	9	3.46%	NV	61	4.06%
NY	85	1.93%	NV	5	1.92%	CO	18	1.20%
CO	58	1.32%	MD	4	1.54%	FL	11	0.73%
NJ	31	0.71%	NJ	4	1.54%	MD	6	0.40%
MD	29	0.66%	IN	3	1.15%	UT	6	0.40%
FL	28	0.64%	KS	3	1.15%	NY	5	0.33%
PA	26	0.59%	PA	3	1.15%	PA	4	0.27%
MN	20	0.46%	NC	2	0.77%	TX	4	0.27%
UT	20	0.46%	OH	2	0.77%	GA	3	0.20%
VA	18	0.41%	VA	2	0.77%	KS	3	0.20%
GA	12	0.27%	FL	1	0.38%	MN	3	0.20%
WY	12	0.27%	GA	1	0.38%	NC	3	0.20%
IN	11	0.25%	HI	1	0.38%	WA	3	0.20%
WA	11	0.25%	KY	1	0.38%	IN	2	0.13%
CA	10	0.23%	MA	1	0.38%	NJ	2	0.13%
MA	10	0.23%	TN	1	0.38%	OR	2	0.13%
MO	10	0.23%	UT	1	0.38%	TN	2	0.13%
KS	8	0.18%	Total	260	100%	CA	1	0.07%
NC	8	0.18%				IL	1	0.07%
TX	8	0.18%				LA	1	0.07%
OH	7	0.16%				MI	1	0.07%
TN	6	0.14%				MO	1	0.07%
Other	49	1.12%				Other	4	0.27%
Total	4,393	100%				Total	1,503	100%

Herfindahl index = 7287

Herfindahl index = 6929

Herfindahl index = 8159

TABLE 14

Delaware's Market Shares Over Time

<u>Years firms went public</u>	<u>Fraction of Firms Going Out-of-state</u>	<u>Delaware's Fraction of Out-of-state Incorporations</u>	<u>Delaware's Fraction of all Incorporations</u>
Pre 1991	62.6%	80.4%	50.4%
1991 - 1995	67.2%	87.9%	59.1%
1996 - 2000	74.8%	90.2%	67.5%