Regulatory Competition and the Market for Corporate Law

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Abstract

This article develops an empirical model of firms' choice of corporate laws under inertia. Delaware dominates the incorporation market, though recently Nevada, a state whose laws are highly protective of managers, has acquired a sizable market share. Using a novel database of incorporation decisions from 1995-2013, we show that most firms dislike protectionist laws, such as anti-takeover statutes and liability protections for officers, and that Nevada's rise is due to the preferences of small firms. Consistent with the bonding hypothesis, our estimates indicate that despite inertia, Delaware would lose significant market share and revenues if it adopted protectionist laws.

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1 Introduction

There is a longstanding debate in corporate law and governance over the merit of competition for corporate laws. U.S. firms may choose to incorporate in any state, and each state's corporate laws may embed a different set of corporate governance rules. The debate has traditionally been divided between those who believe competition for charters produces efficient corporate laws that maximize firm value (e.g., Winter, 1977; Romano, 1985; Easterbrook & Fischel, 1991; Romano, 1993), and others who argue that legal regimes produced by state competition benefit managers at the expense of shareholders' interests (e.g., Cary, 1974; Bebchuk, 1992; Bebchuk & Ferrell, 1999; Barzuza & Smith, 2014). Delaware famously dominates the market for incorporations (with more than 60 percent of total incorporations). Proponents of regulatory competition emphasize that Delaware, a state that offers laws that facilitate takeover activity and has a specialized judiciary known for its corporate law expertise, is the winner of this race. Critics on the other hand emphasize that many states manage to retain large domestic corporations by offering anti-takeover laws that protect managers, and point to the recent rise in the market share of Nevada, a state that offers very protectionist laws that exempt managers from liability for breach of fiduciary duties. Finally, skeptics of competition argue that it is impossible for states to compete with Delaware by simply replicating its laws, and that relatively few firms reincorporate from one state to another (Klausner, 1995; Kamar, 1998; Kahan & Kamar, 2002; Bebchuk & Hamdani, 2002; Broughman et al., 2014).

In this article we weigh in on this debate by directly estimating whether firms prefer to be governed by laws that are relatively shareholder-friendly or laws that primarily protect managers' interests. More importantly, we evaluate the intensity of competition by examining whether these preferences are strong enough to generate market shifts when states change their corporate laws. If demand for corporate law is inelastic, then firms care little about whether corporate laws facilitate takeovers or entrench managers, and such laws have a limited effect on firms' incorporation decisions. On the other hand, if firms do express preferences for a particular set of laws, then the question is how strong these preferences are, and whether they can generate market shifts despite the apparent inertia in firms' incorporation decisions. For example, if firms strongly prefer protectionist laws, there is a concern that managers will incorporate in states that offer laws that advance managers' interests at

the expense of shareholder welfare, and that states could attract market share by offering more protection for managers. By contrast, if firms manifest preferences for incorporating under less protectionist laws, then this is evidence that Delaware is subject to pressure on the demand side to provide laws that facilitate takeovers and stricter monitoring of management, and thus regulatory competition generates laws that promote shareholders' welfare.

In order to address these questions, we develop a structural model of firms' incorporation decisions over time, and estimate it using newly formed panel data on public firms' states of incorporation from 1995-2013. The essence of our model is that heterogeneous firms may choose to incorporate in one of 51 states each year, and states' laws are treated as bundles of characteristics, such as anti-takeover statutes and laws that protect managers from liability. There are two main advantages to using a structural empirical model of firms' choices (instead of standard "reduced form" methods). First, it allows firm heterogeneity in size and institutional shareholding to be reflected in firm preferences. Second, it enables us to consider counterfactuals, particularly where firms would decide to incorporate following changes in states' laws.

A key feature of the model is that firms' decisions may be subject to "rational" inertia. Given that most firms tend to stay incorporated in the same state, it is unrealistic to treat every firm year observation as a new decision. Thus, we assume that each firm makes an incorporation decision in the first year in which it appears in the data; this year often corresponds to the year in which the firm goes public, when firms often make reincorporation decisions. In the following years, each firm makes a conscious choice regarding its state of incorporation with only some probability. We estimate this probability from the data. More specifically, firms are subject to inertia in the sense that the probability of choosing increases (and inertia decreases) when firms face alternative laws that are particularly attractive based on firms' characteristics and economic conditions. By adding the inertia element, we identify firms' preferences primarily from those firm year observations in which firms make conscious incorporation decisions, rather than from the decision of staying in the same state.

Our data is novel in two main respects. First, most existing databases do not include accurate historical information on firms' states of incorporation. We address this issue by parsing public disclosure documents (10-Ks, 8-Ks and 10Qs) available on the SEC website to retrieve accurate historical information on all public firms for which we have financial data. Our final database consists of more than 80,000 firm year observations and 8,700 firms.

Second, unlike past studies, we focus not only on anti-takeover laws, but also add indices to capture the level of liability protection for directors and officers under each state's laws. These indices measure the extent to which firms are permitted to exempt and indemnify managers for violating their fiduciary duties. The main motivation for constructing these indices is to assess recent accounts that Nevada has attracted firms by exempting directors and officers from the duty of loyalty.

Our main finding is that inertia in decision-making camouflages the extent to which firms may prefer particular corporate governance provisions. Firms of average size and institutional ownership show strong dislike for protectionist laws, such as anti-takeover statutes, and laws that protect officers from liability. Aversion for these laws is particularly strong for large firms with high institutional shareholding, and it increases when the takeover activity in the relevant industry increases. More importantly, demand for these laws is sufficiently elastic to generate market shifts. Our counterfactual analysis indicates that if Delaware changed its laws to adopt stronger anti-takeover protections, it could lose about 11 percent of its market share and between \$35-\$70 million in franchise taxes per year.

These findings support the "bonding" hypothesis which asserts that managers are willing to commit to stronger shareholder monitoring in order to attract capital. Accordingly, our study is consistent with other studies of regulatory competition, especially studies of cross-listing and bank regulation, that claim that strong shareholder protection or more stringent regulation (as applicable) serves as commitment device to investors (e.g., Stulz, 1999; Coffee, 2002; Doidge et al., 2004; Karolyi, 2015). Our findings go beyond many of these studies in showing that the bonding is in large part driven by legal characteristics, and not only by institutional quality.

We further find that the recent shift of firms to Nevada is mainly due to small firms with low institutional shareholding, which prefer strong liability protections for officers. Therefore, Nevada does not seem to create pressure on Delaware to cater to managerial interests, as Delaware's revenues derive primarily from larger firms that pay higher franchise fees. The results thus support the hypothesis that regulatory competition promotes market segmentation and regulatory diversity by allowing heterogeneous firms to self-select into different corporate governance regimes. While larger firms with high institutional shareholding favor market-oriented laws that give relatively strong protection to shareholders, a segment of small firms have stronger preferences for laws that cater to managerial interests.

To be sure, we do find that there are several factors that make the market for corporate laws relatively static and reduce the likelihood of reincorporations and market share shifts. In particular, Delaware derives much of its market power from unobservable benefits, presumably the quality of its courts and network benefits, which we include in our model as time-invariant fixed effects. Thus, we show in counterfactuals that states cannot compete with Delaware by copying its statutory code, as many skeptics of competition predict. In fact, we even predict that Nevada would lose market share if it adopted Delaware's shareholder-friendly laws. Moreover, we find that firm incorporation decisions are subject to significant inertia, and firms have a strong tendency to incorporate in the state where they are located, presumably to benefit from local influence. However, despite these factors, which make competition somewhat imperfect, our results indicate that there is significant competitive pressure on Delaware to provide adequate protection to shareholders.

Our article contributes more broadly to research on regulatory competition by employing structural estimation to assess the intensity of competition and consider counterfactual firm behavior as a response to legal changes.[1] This methodology allows us to demonstrate empirically both the implicit or latent market pressure on Delaware and the long-held intuition that it is impossible for states to attract firms from Delaware merely by copying its legal regime. In contrast, standard "reduced form" methodology would produce the implausible result that states can attract firms away from Delaware by repealing anti-takeover statutes; a view which is widely rejected by all commentators.

Although this is not our primary endeavor, our article also contributes to a wide literature that shows that institutional shareholders have an impact on corporate governance and mitigating agency costs. For example, there is evidence that institutions are instrumental in passing shareholder proposals (Gillian & Starks, 2000), and that they exercise power over management behind the scenes through the threat of exit (McCahery et al., 2015). Our results with respect to the preferences of firms with high institutional shareholding are robust to specifications that include instrumental variables; specifically, following Aghion et al. (2013), we use inclusion in the S&P index as an instrument for institutional shareholding.

[1]To the best of our knowledge, there has been only one such attempt to date (Cohen, 2012), but it seems to be based on a poorly collected database, fails to control for critical legal characteristics, such as managerial liability protection, and does not account for inertia, which we explain is essential for the analysis.

This suggests that institutional shareholding has a causal effect on the choice of corporate governance laws.

We emphasize that we do not make claims in this article about whether firms' choices or preferences enhance shareholder value. However, the fact that Delaware laws are relatively less protective of managers fits well with evidence that Delaware incorporation is associated with positive abnormal returns (Romano, 1985; Heron & Lewellen, 1998; Bhagat & Romano, 2002) and higher Tobin's Q (Daines, 2001, Eldar, 2016).[2] Moreover, Eldar (2016) shows that Nevada incorporations may increase shareholder value for the type of firms that self-select into Nevada, that is, small firms with low institutional shareholding. Therefore, there is little evidence that regulatory diversity harms shareholder value.

Finally, we note that our results are robust to multiple specifications, including alternative ways for measuring states' level of anti-takeover and managerial liability protection. We further validate our results by showing that the coefficient estimates provide reasonable prediction of states' market share over time in sample and out of sample.

This article proceeds as follows. Section 2 discusses the existing literature and develops several hypotheses. Section 3 discusses in detail the data we use for this research. Section 4 lays out our choice model, compares it to other models of inertia, and explains our identification strategy. Section 5 discusses our main results. Section 6 evaluates different counterfactuals, in particular, the extent to which Delaware would lose market share if it adopted protectionist laws. Section 7 validates our results by showing in-sample and out-of-sample predictions. Section 8 carries out several robustness tests. Section 9 discusses the implications for shareholder value and different policy debates surrounding corporate law.

2 Literature Review and Hypotheses Development

The debate on the desirability of a market for corporate laws consists of several questions. A key question is whether firms care at all about the substance of corporate laws. As is well-known, a majority of firms incorporate in Delaware, and few firms reincorporate into other states. Inertia in market shares arguably suggests that Delaware can maintain its dominant position irrespective of the substance of its laws. An influential literature argues that the

[2]While the association with Tobin's Q has been contested by other studies (Subramanian, 2004; Cremers & Sepe, 2014), it holds true in the sample that we examine in this article (Eldar, 2016).

substance of the law matters relatively little for incorporation decisions. Firms may prefer to incorporate in the same state as other firms to benefit from network externalities, learning benefits (Klausner, 1995; Kahan & Klausner, 1997; Kamar, 1998; Kahan & Kamar, 2002) and familiarity of the law (Broughman et al., 2014). Network externalities include interpretative certainty arising from the likelihood that legal rules will be litigated and clarified in the future, the accumulation of business practice, and the availability of legal advice. Learning benefits emanate from the large body of legal precedents that increase the predictability of the law. Network externalities and learning benefits further make law firms, investors and managers more familiar with Delaware law. On this view, demand for corporate laws is inelastic, and Delaware is bound to maintain its position irrespective of the substance of its laws or the laws of other states.

On the other hand, there are good reasons to believe that demand for corporate law is not as inelastic as some argue. First, there is evidence that Delaware's legislature has been particularly responsive in adapting its corporate laws to business needs (Romano, 1985). There is historical evidence that Delaware attracted incorporations by liberalizing its director liability statute in 1967 and 1986 (Moody, 2004). Recently, Nevada has acquired a small but significant market share of incorporations by offering laws that are substantially more protectionist than Delaware's (Barzuza, 2012; Barzuza & Smith, 2014). Second, as explained below, Delaware's current laws are generally less protectionist and more takeover-friendly than the laws of many other states. If demand is inelastic regarding the content of the law, Delaware could change its laws to afford more protection to managers without losing its dominant position. Although Nevada recently attracted a sizable market share, as discussed below, most firms that incorporate in Nevada tend to be small with low institutional shareholding. Regardless of whether Nevada poses a threat to Delaware, the segmentation of the market into Delaware's market-oriented law and Nevada's protectionist regime suggests that firms do respond to legal changes.

Moreover, accounts of inertia in market shares do not consider another important source of inertia, which is inertia in corporate decision-making. Such inertia may lead managers to respond slowly to legal or other changes that make certain laws more favorable to the firm. Thus, due to inertia in decision-making, firms may fail to express their preferences for particular legal rules. In making incorporation decisions, firms need to bear the costs of (a) seeking legal advice, (b) evaluating changing economic conditions (e.g., whether a

takeover is likely or not), and (c) assessing how different laws would affect the firm (for example, by enabling managers to use certain anti-takeover tactics).[3] Firms are unlikely to bear these costs unless there is an alternative law that is particularly attractive to the firm. By incorporating such inertia into our model, we are able to uncover firms' implicit preferences for corporate law, and show that demand for corporate law is elastic.

To be sure, we do not argue that inertia in market shares emanates exclusively from inertia in decision-making. As stated above, our model controls for unobservable benefits of incorporating in each state, including network externalities, learning benefits, and courts' quality.[4] We show that, despite the presence of a large Delaware effect, firms nonetheless care about the substance of the law.

The second question we address is whether firms prefer to incorporate in states that seek to protect managers' interests, or in less protectionist states. As discussed below, while Delaware courts permit firms to use anti-takeover devices, particularly, the poison pill, it is generally regarded as takeover-friendly compared to other states, such as Nevada, that have adopted many anti-takeover laws and apply a lenient standard of review to anti-takeover devices (Romano, 2006; Barzuza, 2009). Furthermore, states vary in the level of protection they afford to directors and officers. This type of protection can be important, especially when firms engage in transactions, such as mergers, that may expose managers to potential liability in shareholder suits. Delaware was one of the first states to enact a provision that allowed firms to exempt their directors from liability for the duty of care (Romano, 1985; Moodie, 2004). However, other states, such as Nevada, have taken a more protectionist approach by permitting exemptions from liability for the duty of loyalty (Barzuza, 2012).

To be sure, by stating that Delaware is relatively less protectionist, we do not unequivocally claim that anti-takeover statutes necessarily reduce the likelihood of takeovers, and the issue has been subject to debate (see Catan & Kahan, 2014; Karpoff & Wittry, 2015).

[3]This type of inertia is also consistent with behavioral preferences towards status quo, anchoring effects and herd behavior that militate towards inertia (see Kahan & Klausner, 1997).

[4]There is no uniformly good metric of courts' quality in litigating corporate law cases. One measure is State Liabilities Ranking Study. But this measure is not directly related to courts' expertise in corporate law and it has been available only since 2000 with a few missing years. Moreover, studies offer conflicting evidence as to whether this measure is an important factor in firms' incorporation decisions, with Kahan (2006) finding that is weakly important, and Broughman et al. (2014) finding no statistically significant effect.

We discuss the issue in greater detail in section 9.2. While we do show evidence that anti-takeover statutes are consequential, the critical issue for our purposes is that firms view them as such and care about these laws.

To date, no study has shown empirically that firms generally prefer less protectionist environments. Most of the existing literature focuses on anti-takeover laws. Studies have found that firms either like anti-takeover laws (Bebchuk & Cohen, 2003; Subramanian, 2002), are indifferent to them (Kahan, 2006; Broughman et al., 2014), or like only some of them but are indifferent as to others (Daines, 2002). These studies, however, use a relatively limited model of decision-making in which firms either stay in their headquarter states or move to Delaware. In this respect, they do not take into account the menu of options available to different firms. If firms truly prefer strong anti-takeover laws, it seems strange that a large majority of them incorporate in a jurisdiction that is relatively takeover-friendly, even if there are other factors that militate towards that jurisdiction, such as courts' quality or familiarity with the law (Macey & Miller, 1987). Moreover, if firms are indifferent to such laws then we would not expect to see much legislative activity or variation among states' laws.

We recognize that it may well be possible that amassing anti-takeovers statutes increases states' abilities to retain some firms in their jurisdiction by catering to managers' interests (Bebchuk & Cohen, 2003). However, a set-up in which firms make only a binary choice between home state and Delaware may fail to reveal the preferences of the average firm that chooses to incorporate in Delaware. Such an approach also does not control for a general home bias, which is pervasive in firm incorporation decisions. Home bias may be derived from the influence of local law firms in the home state, and the ability of local corporations to influence local legislatures or courts, which may be unrelated to anti-takeover protection.

In addition, most studies neglect the significance of laws that protect managers from liability.[5] Many proxy statements of firms that reincorporate in another state expressly say that the extent to which the new state's law affords adequate protection to managers is one reason for the reincorporation (Heron & Lewellen, 1998; Eldar, 2016). There is evidence that states, particularly Delaware, historically attracted incorporations by allowing firms to exempt directors from the duty of care (Moody, 2004). Recently, the 2001 Nevada law reform

[5]Kahan (2006) takes this factor into account as part of his measure of flexibility, but he only records whether states fail to allow exemption of directors from the duty of care.

which exempted directors and officers from liability for the duty of loyalty arguably triggered a gradual shift of firms towards Nevada (Barzuza, 2012; Barzuza & Smith, 2014). To address this issue, we construct a new index of liability protection that measures the extent to which firms are allowed to exempt directors and officers from liability and indemnify them for such liability. In this respect, we are able to test the hypothesis that states, especially Nevada, can increase their market shares by extending favorable protections to managers.

Perhaps more importantly, most existing studies do not take into account how heterogeneity of firm characteristics, whether firm size or ownership structure, affects firms' preferences for different legal regimes. For example, there is evidence that Nevada firms tend to be relatively small with low institutional shareholdings (Barzuza & Smith, 2014), and as we show below, Delaware's firms tend to be larger and have significant institutional ownership. Accordingly, it seems that large firms generally prefer shareholder-friendly laws, while smaller firms prefer laws that protect managers.

Finally, the preferences for or against protectionism may increase or decrease depending on the takeover environment. In times when the volume of takeovers is large, firms may either prefer to move to a jurisdiction with relatively low anti-takeover protection in order to maximize their chances of receiving bids, or alternatively management may prefer stronger anti-takeover protection in order to stave off takeover attempts. The takeover environment may also affect preferences for liability protections. There is research that shows that the risk of corporate litigation is larger when takeovers take place (Romano, 1990; Krishnan et al., 2012; Cain & Davidoff, 2014). Thus, managers may be particularly vulnerable to liability risk in the context of takeovers, and often seek insurance policies to address this risk (Fleischer & Sussman, 2015). Our study estimates how firms' preferences for different legal regimes interact with the level of takeover activity.

To address all the above issues, this article develops a discrete choice model of firm incorporation decisions in the spirit of models of demand in industrial organization (see Ackerberg et al., 2007). Our model takes into account the divergence among states in legal characteristics, the heterogeneity in firm characteristics, unobservable benefits of incorporating in different states, and a realistic model of decision-making that incorporates rational inertia. Despite the extensive literature on the market for incorporations, there is as yet no comprehensive model that explains firms' choice of corporate laws. Of course, we do not claim that our model considers all aspects of corporate laws, and reducing corporate law to

a list of variables is inevitably imperfect.[6] However, by taking into account the main ones, we create a model that predicts market shares significantly better than other models.

Our model is related to recent models of decision-making that allow for rational inertia. The essence of the model is that firms make incorporation choices every period with only some probability. This probability is not exogenous, but depends on whether the expected benefit of the incorporation decision exceeds an unobservable cost shock. Models in this spirit have recently been proposed in other contexts, such as consumers' inattention with respect to cars' energy efficiency (Sallee, 2014) and choice of Medicare Part D plan (Ho et al., 2015). Given the significant inertia in incorporation decisions, a model of rational inertia is essential for credibly estimating the elasticity of demand for corporate laws and predicting market shifts both in-sample and out-of-sample.

The model enables us to consider counterfactuals about how firms would respond to legal changes, if at all. In particular, we consider whether Delaware's market share would be substantially affected if Delaware enacted stronger anti-takeover provisions or laws that protected officers and directors. If firms prefer such provisions, then Delaware could attract more firms that choose to incorporate in their home states, and also prevent Nevada from gaining market share. This finding would be consistent with the view that incorporation decisions are driven by agency problems. On the other hand, if firms incorporated in Delaware prefer less protectionist laws, Delaware could lose market power and revenues if it enacted such laws. This finding would be consistent with the bonding hypothesis that firms commit to market-oriented laws in order to attract capital.

[6]In particular, we leave Kahan's measure of flexibility outside our inquiry for several reasons. First, there is very little time-series variation in the flexibility index and therefore its effect is likely to be subsumed in our estimates of states' fixed effects. Second, to a certain extent, our measure of director protection overlaps with the measure of flexibility as one component of flexibility is a firm's ability to exempt directors from their fiduciary duty of care. Third, another component of the index which relates to transactions with interested directors has for the most part been preempted by the Sarbanes-Oxley Act since 2002, and is unlikely to be a major factor in incorporation decisions.

3 Data

3.1 State of Incorporation and Firm Characteristics

To identify firms' responses to legal changes in a panel set-up, we need to obtain accurate data on incorporations and reincorporations for every firm-year observation. As described in section 1 of the Internet Appendix, we construct a novel data set of firm incorporations by parsing the states of incorporation from over two million public disclosure documents available on SEC servers from 1994 to 2013. To our knowledge, this is the first database that correctly identifies the state of incorporation over time for largely all public firms active in the period of interest. We match the incorporation data to accounting data from Compustat, and data on institutional shareholding and managerial ownership from Thomson Reuters.[7]

The database has 89,926 firm-year observations from 11,222 firms in the years 1994-2013. Because of the initial condition problem associated with using the first year in our inertia model, we use data from 1995. Similar to Daines (2001) and Subramanian (2004), we exclude all utility and financial firms because the corporate governance of such firms differs as a result of significant federal regulation.

Trends in the market shares of key states are illustrated in Figures 1 and 2. Delaware's share is about 64.15% as of 2013, as compared with 50.57% in 1995. Delaware's market share of firms whose headquarters are located in a state which is not their state of incorporation ("out-of-state incorporations") is even larger: 81.28% as of 2013, as compared with 82.85% in 1995. The most noticeable trend over time is the increase in Nevada's market share of all incorporations from 2.29% in 1995 to 10.43% in 2013, and of out-of-state incorporations from 2.83% to 11.61%. Another interesting trend during the same period is the decline in the market share of New York from 5.36% to 2.30%, and California from 3.98% to 1.6%.

While Delaware and Nevada are the most popular states of incorporation, a large number of corporations incorporate in the state of their headquarters (28.84% of firm-year observations). Moreover, almost 10% of the firms in the database (1,002 firms and 6,029 firm-year observations) choose at some point to incorporate out-of-state, but not in Delaware

[7]Thomson Reuters data on institutional shareholdings is sourced from 13F filings. Thomson Reuters data on managerial ownership is sourced from Forms 3, 4, and 5 filings, using the same method as Panousi & Papanikolaou (2012).

or Nevada. We observe 602 reincorporations, with 588 firms reincorporating at least once. 399 of these reincorporations are into Delaware directly, and 79 are to Nevada (See Table 1). Finally, we drop firms with fewer than three firm-year observations. The final sample includes 81,993 firm-year observations and 8,769 firms.

Table 2 compares the characteristics of Delaware and Nevada firms. Firms incorporated in Delaware are similar to the average firm in the sample in terms of size ($2.04 billion in assets as compared to $1.95 billion for the average firm) and institutional shareholding (39.26% as compared to 34.98% for the average firm). Nevada firms are significantly smaller with an average of $360.04 million in assets and relatively low average institutional ownership of 10.16%. Nevada firms also have a higher percentage of managerial ownership (approximately 6%) as compared to Delaware (approximately 4.27%).[8] As depicted in Figures 3-5, the increase in Nevada's market share is mostly due to small firms with low institutional shareholding and high insider ownership.

3.2 Laws' Characteristics and the Takeover Environment

In this section we discuss the indices for states' legal characteristics, focusing on anti-takeover laws and managerial liability protections. Before embarking on the discussion, we emphasize that it is not necessary for the main claims in our article to show that states' corporate laws are consequential (for example, that anti-takeover statutes actually decrease the likelihood of takeovers). We discuss this issue in greater detail in section 9.2 where we do show some evidence that anti-takeover laws are consequential. However, for our purposes, the critical issue is whether firms view these laws as consequential and take them into account in making incorporation decisions (see Bebchuk & Cohen, 2003).

3.2.1 Anti-takeover laws

Anti-takeover laws are laws that make hostile takeovers difficult and potentially impossible for bidders. In our main specification, we rely on the anti-takeover index developed by

[8]Our figures of managerial ownership are generally consistent with Barzuza & Smith (2014). However, we note that the data from Thomson Reuters Forms 3,4 and 5, does not appear to be accurate and can only be used as a proxy.

Bebchuk & Cohen (2003) that counts the number of anti-takeover statutes in each state. This index has been used in most studies of the demand for corporate law (e.g., Subramanian, 2002; Kahan, 2006; Broughman et al., 2014). Each state gets a score from 0 to 5 if it has one or more of the following statutes: constituency provisions, business combination statutes, control share statutes, fair price statutes, and poison pill validation laws. The definition of each of these laws can be found in Table 2 of the Internet Appendix. We document the *ATS* index score for each state year in our database, using the year in which the statutes were passed.

The *ATS* index has been criticized on the basis that most of the anti-takeover statutes are inconsequential in delaying or preventing takeovers. The reason is that boards are always in a position to adopt a poison pill, which is widely regarded as the most effective anti-takeover device, and once a company has a poison pill in place, other anti-takeover devices become superfluous (Coates, 2000; Kahan, 2006, Catan & Kahan, 2015). When a firm has a poison pill, the shareholders of the target company receive the right to purchase at a discount the stock of the target if the bidder acquires a certain percentage of the target's stock, or the acquirer's shares if the target shares are acquired in a merger. This device can be implemented by the board on short notice without shareholder approval, and it makes it virtually impossible for a bidder to take control of a firm without obtaining the board's consent or replacing the board.

Accordingly, as an alternative specification, we use a dummy for poison pill validation statutes. The essence of these statutes is that they protect standard poison pills from judicial review. Under Delaware law, poison pills are generally permitted, but they can be challenged in courts if they do not satisfy certain legal tests under the *Unocal* and *Revlon* decisions.[9] Briefly stated, under *Unocal*, managers must be able to show that there is a threat to their firm's policy and that the defensive measure in question is proportional to the threat posed. Moreover, under the *Revlon* decision, if a sale or break-up of the company is inevitable, the board is obligated to pick the highest bid for shareholders. This level of scrutiny does not generally apply when a state has a poison pill statute (Barzuza, 2009). We discuss theses

[9]In contrast, Cremers & Ferrell (2014) seem to suggest that the validation of poison pills under Delaware law is equivalent to a poison pill statute. However, this view ignores the fact that poison pills are frequently challenged in Delaware courts, and that courts in states with a poison pill statute tend to be more permissive towards extreme versions of poison pills that make it impossible for bidders to acquire a company; see Romano (1993); Barzuza (2009).

standards in more detail in section 2.2 of the Internet Appendix.

We also add variables that account for extreme forms of anti-takeover protection. First, we use a dummy, *Dead Hand*, for states that have statutes (i.e., Maryland and Virginia) or case law (i.e., Pennsylvania and Georgia) that validate dead hand pills. Although standard poison pills are effective in delaying takeover bids, they can be dismantled if the bidder conducts a proxy fight to replace the board before the the pill threshold is triggered. Dead hand pills, in contrast, cannot be removed even by a new board of directors, thereby making the pill impossible to redeem. Alternatively, we use a dummy, *Extreme*, which is identical to *Dead Hand*, except that it is set to one for states that have laws that impose staggered boards,[10] or in the case of one state (Maryland) allow their adoption even if contrary to the charter. This arguably represents an extreme form of takeover protection because when a firm has a staggerred board (combined with a poison pill), replacing the board can take several years and therefore a bid is more likely to fail (Cohen & Wang, 2013). Again, we discuss these variables in more detail in section 2.2 of the Internet Appendix. We note, though, that the estimation with respect to *Dead Hand* and *Extreme* is likely to be relatively noisy because there is little cross-sectional and time-series variation in these variables.

3.2.2 Director and Officer Protection

We construct a new index that measures the extent to which state laws protect directors and officers from liability. Managers can be protected in three main ways: exemption from liability, indemnification for liability out of the company's funds, and insurance. Our index focuses on exemption and indemnification because the laws of all states allow firms to insure their directors and officers to largely the same extent. States' laws relating to exemption and indemnification differ substantially across states. In this section, we summarize the basic rationale for the index without detailed legal analysis, which we include in section 2.2 of the Internet Appendix. Because the laws of many states incorporate different standards of liability protection for directors and officers, we construct separate indices for directors (*DIR*) and for officers (*OFF*), as well as a combined index, which simply aggregates the two (*DIROFF*).

[10]Until recently, only Massachusetts had such a statutory provision. More recently Indiana enacted such a law in 2009, Oklahoma in 2010 and Iowa in 2011.

With respect to exemption, the statutes of many states allow firms to exempt directors and/or officers from liability for breaching their duty of care. Duty of care is associated with a gross negligence standard, but is generally protected by the business judgment rule, according to which, courts will not second-guess the business judgment of corporate managers. There are very few cases where courts have found directors or officers liable for breaching their duty of care. Exemptions from the duty of care typically require the firm to adopt a charter provision, which requires shareholder approval. Under the well-known section 102(b)(7) of Delaware Corporate Code, Delaware firms may exempt directors, but not officers, from the duty of care. Other states, such as Maryland, also allow firms to exempt directors and/or officers from liability for the duty of loyalty, as long as there has been no willful or intentional misconduct. Managers breach their duty of loyalty if they advance their own economic benefit by diverting corporate assets or opportunities for personal gain.

Finally, a few states also go further by exempting managers from liability for breaching any fiduciary duty by default, rather than allowing firms to exempt managers through a menu option (which is subject to shareholder approval). Although firms face the same choices under both a menu or default approach, a default exemption is viewed as stronger protection because it is extremely rare for firms to opt out of default provisions, especially those that are favorable to managers (see Ayres, 1992; Romano, 1993; Subramanian, 2002; Listokin, 2009). States' legislatures may also use default rules as a signal to firms and courts about the appropriate level of culpability managers ought to face. For example, prior to 2001, Nevada allowed firms to exempt managers from the duty of loyalty through a menu option, but in 2001, Nevada law was changed such that managers became exempt from fiduciary duties even without shareholder approval. This change arguably accounts for the shift of firms into Nevada (Barzuza & Smith, 2014).

In constructing the index, we rate each state's exemption provisions as follows: We give 1 point if exemption from the duty of care is permitted; 2 points if exemption from the duties of care and loyalty are permitted; and 3 points if managers are exempted from fiduciary duties by default. We carry out a similar process with respect to permissible indemnification, which typically relates to (a) third party lawsuits, and (b) corporate expenses in derivative suits. We give 2 point if indemnification for violating the duties of care and loyalty are permitted, and 1 point if only indemnification for breaching the duty of care is permitted.[11] Virtually

[11]We create two separate scores for indemnification for (a) third party lawsuits and (b) cor-

all states' indemnification provisions are embedded in menu options rather than default laws; however, under some states' laws, the board has sole discretion to indemnify managers (including the directors), whereas other states require shareholder approval. We treat the former as equivalent to default laws because they enable managers to protect themselves; thus, when indemnification for liability for breaching both the duty of loyalty and care are permitted without obtaining shareholder approval, we allocate 3 points.

In building each index, *DIR* and *OFF*, we generally aggregate the exemption and indemnification scores, such that the maximum score for each of *DIR* and *OFF* is 6, and 12 for the combined index, which we call *DIROFF*. However, when the exemption score is higher than the indemnification score, we let the indemnification score be equal to the exemption score; the rationale is that if the managers are exempted from liability, then indemnification becomes irrelevant. As discussed below, our results are overall robust to different weighting of the exemption and indemnification scores.

3.2.3 Summary

Thirteen states have enacted at least one anti-takeover statute between 1995-2013. One fact that emerges from the *ATS* index is that Delaware has only one anti-takeover statute as compared to the state average of 2.94 across time, whereas Nevada has five such provisions (see Table 3). Thus, according to the *ATS* index, Delaware has a relatively pro-takeover regime, whereas Nevada is relatively protectionist. We emphasize that the enactment of poison pill statutes has been the most common legislative change concerning anti-takeover devices between 1995-2013. By 1995, 25 states, including Nevada, had enacted a poison pill statute, and by 2013, 35 had such a statute. We note though that Nevada does not have a law that validates dead hand pills or requires firms to adopt staggered boards, and in this respect, states such as Maryland are even more favorable towards managers.

With respect to liability protections, Delaware and Nevada again stand out as two polar opposite regimes (see Table 3). Whereas Delaware is one of the least protectionist states, Nevada is ranked as the most protectionist. Delaware's *DIROFF*'s score is 2.5 as compared to Nevada's 12. Generally, most states, including Delaware, are less restrictive with respect

porate expenses in derivative suits, and divide the total score by two, such that the maximum indemnification score is three.

to directors' liability than officers' liability. Delaware's *DIR* score is 2 as compared to 6 for Nevada (since 2001), and an average score for all states across time of 2.87. The scores for *OFF* are more divergent and highlight Nevada's protectionist bent. Delaware's 2013 score is 0.5, Nevada is the only state with a score of 6 (since 2001) and the average state score across time is 1.46. Between 1995-2013, 11 and 13 states have increased the protection offered to directors and officers respectively. In 2001, Nevada's *OFF* and *DIR* scores increased from 4 to 6, a change that arguably accounts for the increase in its market share.

Finally, we emphasize that there is positive correlation among the *ATS*, *DIR* and *OFF* indices (see Table 4). States seem to commit to packages of laws that are relatively takeover-friendly, or to protectionist laws that appeal to managers. We do not observe for example states that offer maximal protection on the *DIR* or *OFF* index and low protection on the *ATS* index. All states that rank 6 on *DIR*, namely Indiana, Nevada, Ohio and Wisconsin, also have five anti-takeover statutes. There are, however, states that offer minimal protection on the *OFF* index but have a high *DIR* and *ATS* scores.[12] This probably reflects the notion that anti-takeover statutes and liability protection for directors are viewed as more acceptable than liability protection for officers who are engaged in the day-to-day operation of the firm. We return to this issue when we consider different counterfactuals in section 6.

3.2.4 Interaction with Takeover Environment

In order to take into account changing economic conditions, we interact legal characteristics with variables that measure takeover activity in the economy. We measure the level of takeovers using data from SDC. We construct three measures: (a) the log of the number of takeovers in the industry in the previous year, (b) the log of the dollar volume of takeovers in the industry in the previous year (adjusted by the CPI to 2004 dollars), and (c) a dummy that equals 1 if the four week average premium of takeovers in the industry in the previous year is higher than the industry median. We use the industry median premium dummy for the main specification because it enables us to assess firms' preferences in response to takeovers that increase shareholder value as opposed to how managers react to takeover waves which may not be conducive to shareholder wealth.

[12]Ohio and Indiana for example scores 5 and 6 on the *ATS* and *DIR* indices but only 0.5 and 1, respectively, on the *OFF* index.

Table 5 shows summary statistics with respect to the variables that measure takeover activity between 1995-2013. The mean and median of the number of 100% takeovers in a year at the industry level are 131.2 and 70. The mean and median dollar volume of adjusted industry 100% takeovers are approximately $14.07 billion and $4.48 billion. The average and median 4-week premium at the industry level are 49.82% and 31.38% respectively.

4 Decision-Making under Rational Inertia

4.1 The Model

Before incorporating inertia into the model, we start with a standard multinomial choice model in which firm i, in each year t, can incorporate in any state j. We assume that the indirect utility of incorporation is given by:

$$u_{i,j,t} = \sum_k x_{jt}^k(\beta_k^p + \sum_r w_{it}^r \gamma_r^k) + \xi_j + \varepsilon_{ijt}, \tag{1}$$

where x_{jt}^k is the k'th characteristics of state j at time t, for example, the level of ATS or DIR of Delaware in 2010; w_{it}^r is the r'th characteristic of firm i (e.g., size) at time t; ξ_j is a state-fixed effect, and ε_{ijt} is a random utility shock known to the firm but not to the researcher. We adopt the standard assumption that ε_{ijt} is iid across firms, states and years, and is distributed according to a type I extreme value distribution. The probability that firm i chooses to incorporate in state j at time t is then:

$$\begin{aligned} P_{ijt} &= \Pr\left\{u_{ijt} \geq u_{ikt},\, \forall k \neq j\right\}, \\ &= \frac{e^{\delta_{ijt}}}{\sum_{h\in\mathcal{J}} e^{\delta_{iht}}}, \end{aligned} \tag{2}$$

where $\mathcal{J}$ is the set of all jurisdictions a firm can choose, and

$$\delta_{ijt} = \sum_k x_{jt}^k(\beta_k^p + \sum_r w_{it}^r \gamma_r^k) + \xi_j$$

is the nonrandom part of the utility of firm i from incorporating in state j at time t.

At this point, we introduce inertia to the model. In a model with inertia, firm i makes a choice at time t, with probability π_{it}. We assume that $\pi_{it} = 1$ at time t_i^1, the first period in which the firm is present in the data. Accordingly, the probability of choosing state j in the first period is the same as in equation 2. In subsequent periods (i.e., $t > t_i^1$), we need to adjust this probability by taking inertia into account as follows:

$$\tilde{P}_{ijt} = \begin{cases} \pi_{it} P_{ijt} & if\ j \neq j^*_{(i,t-1)}\ \&\ t > t_i^1 \\ (1 - \pi_{it}) + \pi_{it} P_{ijt} & if\ j = j^*_{(i,t-1)}\ \&\ t > t_i^1 \end{cases} \tag{3}$$

where $j^*_{(i,t-1)}$ denotes the state where the firm was incorporated in the previous period.

This modeling choice reflects the fact that the first period in which a firm appears in our sample typically coincides with the time a firm becomes public. At that time, the firm has to approach shareholders and consult with law firms about the firm's legal documents, and therefore the managers will consider the legal structure of the firm and will be presented with various options by their lawyers. In these circumstances, the costs of attention or learning are likely to be low. There is evidence that firms often reincorporate at the time of the initial public offering (Romano, 1985; Daines, 2001). By contrast, reincorporations after the firm becomes public are much less frequent, and occur only if the firm makes a choice and the choice is different than its state of incorporation in the previous year.

We model the probability of making a choice, π_{it}, as arising from optimizing behavior. We assume that firms (through their legal advisers) know the laws and their own characteristics, but they do not know their own idiosyncratic shocks ($\varepsilon_{i\cdot t}$). The firm chooses to learn this shock, and potentially reincorporate, if the expected benefit from choosing exceeds some costs c_{it}, known to the firm but unobservable to the researcher. The expected benefit from choosing is the expected utility of the best alternative law, given the laws of every state and firm characteristics in time t. Accordingly, π_{it} takes the following form:

$$\pi_{it} = \Pr\left\{ E\left[\max_j u_{ijt} | \delta_{ijt} \right] - E\left[u_{ij^*(i,t-1)t} | \delta_{ij^*(i,t-1)t} \right] \geq c_{it} \right\}, \tag{4}$$

and, as shown by McFadden (1981), our distributional assumptions imply that:

$$E\left[\max_j u_{ijt}|\delta_{ijt}\right] - E\left[u_{ij^*(i,t-1)t}|\delta_{ij^*(i,t-1)t}\right] = \log\left(\sum_{h\in\mathcal{J}} e^{\delta_{iht}}\right) - \delta_{ij^*(i,t-1)t}.$$

The rationale for this set-up is that a firm is more likely to consider its state of incorporation if there is an alternative law that would improve its utility by a sufficient amount. The firm (represented by its managers and legal advisers) presumably knows the law and its own characteristics. However, without exerting some effort, the firm does not know more idiosyncratic factors (represented by the random shock, $\varepsilon_{i\cdot t}$) that could make a different legal system more attractive. Such factors may include the likelihood that the firm will be subject to a takeover bid, legal hurdles the current law of incorporation may pose for the transaction, and whether a different law could facilitate the transaction (or future transactions). Similarly, the firm may need to invest time and money to understand which laws might help its managers to focus on long-term growth and avoid the need for dealing with disruptive bids and frivolous law suits.

We assume that c_{it} is iid according to a logistic distribution with parameters (μ, σ), so that we can use equations 3 and 4 to form the likelihood function of the data, and estimate parameters by maximum likelihood.

4.2 Identification

The major parameters are the coefficients on *ATS, DIR* and *OFF*. These coefficients are identified from the joint distribution of state characteristics, firm characteristics and firm choices. First, there is substantial cross-sectional variation in legal rules, and to a lesser extent, also time-series variation. Legal rules change relatively infrequently, but they do change. As discussed above, 13 states have enacted anti-takeover statutes. Likewise, 11 and 13 states have increased the protection offered to directors and officers respectively. Even if legal rules do not experience very frequent changes over time, firm characteristics and takeover activity provide us with significant time-series variation. The average firm size measured by asset value increased significantly over the years, as did ownership of institutional shareholders.

Second, similar to Handel (2013), we identify firm preferences primarily from periods in which we observe firms making initial incorporation decisions or changing their state of incorporation. Note that firms need not reincorporate immediately in response to legal changes but may do so several years afterwards due to inertia in decision-making. For example, a firm might dislike a protectionist law, but not enough to shift to Delaware. If its characteristics change in the next period (e.g., the percent of institutional ownership increases) it may decide that its dislike for protectionist laws is sufficient to bear the costs of reincorporating. Parameters of the distribution of the cost of choosing are identified mainly by the observed switching patterns.

We further recognize, similar to Kahan (2006), that unobservable state effects could affect the choice of incorporation. To account for such effects, we add a state fixed effect to control for factors other than legal characteristics that we cannot observe in the data. These include network benefits, familiarity with the law and the quality of the courts. Our panel set-up allows us to identify these fixed effects by exploiting time-series variation.

There is a substantive difference between our model and other models of inertia, in particular, models of switching costs and random effects.[13] A simple switching costs model assumes that the costs of switching from state j to state k in every period is equal to the costs of switching from state j to state h in any other period. This is of course unrealistic. In our framework, inertia is related to the presence of better alternatives. When states change the law, the firm characteristics change or takeover activity changes, the firm's utility from different alternative laws changes as well. The intuition is that when a favorable law is introduced the firm is likely to be informed of its presence for example by its counsel or lawyers that seek to attract firms to the state.

A simple model with random effects would assume that each firm has a time-invariant idiosyncratic preference for every state of incorporation. In this model, firms would tend to select at the time of first incorporation a state for which they have a high time-invariant shock. Even if they reincorporate elsewhere at a later time (driven by either a high random shock, or a change in characteristics), the persistence of state-specific shocks implies that they would be likely to go back to their original choice. However, firms that reincorporate into another state rarely go back to the former state of incorporation in our data. Rather,

[13]For a model of discrete choice with switching costs and random effects, see for instance Shum (2004).

they virtually always stay in the new state of incorporation throughout the life of the firm. Accordingly, random effect models do not adequately capture the inertia in this particular set-up.

5 Main Results

Our main results are depicted in Tables 6 and 7. The tables are identical, except that Table 6 includes the combined *DIROFF* index, while in Table 7 the *DIROFF* variable is split into the *DIR* and *OFF* indices. The results reveal several important findings.

We find several factors that make the market for corporate laws relatively static and reduce the likelihood of reincorporations and market shifts. To this extent, our results are consistent with claims that the market is not highly competitive (Bebchuk & Hamdani, 2002; Kahan & Kamar, 2002). A salient factor in firms' incorporation decisions is indeed the fixed effect of each state. Most conspicuously, Delaware's fixed effect, which amounts to 7-8 utiles (as defined in equation 1) under different specifications, is substantially larger than the fixed effects of other states. This finding is consistent with the notion that unobservable elements of Delaware law, such as the quality of its judiciary, its responsiveness to business needs, and network benefits, are all primary drivers for incorporating in Delaware. Interestingly, Nevada's fixed effect is also fairly substantial and amounts to 4-5. While Nevada is not known for having a high quality judicial system, Nevada has long tried to attract market share from Delaware (Cary, 1974), and its legislature has been accordingly responsive to business needs, especially the interests of firms' management (Barzuza, 2012). In contrast, states such as California and New York have a low fixed effect, confirming the general view that their legal systems are not adequate for addressing the needs of modern firms.

Second, consistent with past studies, firms also manifest a marked preference for incorporating in the state where they are located. The coefficient on *Home Bias,* a dummy equal to 1 if a firm is incorporated in the state in which it is headquartered, is about 4.44.

Third, as expected, we find that inertia plays a significant role in firms' incorporation decisions. Using the parameter estimates of the distribution of the costs of choosing, we can compute the average probability of making an incorporation choice. That average probability is about 1.2% across specifications, which translates into roughly 20% probability of making one incorporation decision (and potentially, reincorporation) over 20 years.

Our main findings however relate to legal characteristics. Although unobservable fixed effects, home-bias and inertia, significantly affect firms' incorporation decisions, the effects of states' laws are not trivial. We consider counterfactuals in section 6 in greater detail to explain the potential market shifts that legal changes could cause, but for present purposes we focus on the key findings.

First, firms generally dislike anti-takeover statutes. This dislike is strong across different types of firms, and includes large, medium and small firms. This finding casts doubt on the hypothesis that anti-takeover laws enable states to increase their market share of firm incorporations. In addition, as shown in column (2) of Tables 6 and 7, the dislike for anti-takeover statutes is stronger when the average industry takeover premium is above the median. We also examine the preferences of firms with high managerial ownership. As shown in column (3), firms with managerial ownership of at least 15 percent of the stock dislike anti-takeover statutes less. This suggests that managers generally prefer laws that benefit them. However, this result does not hold when the threshold for managerial ownership is 25 percent or above.[14]

Second, unlike anti-takeover statutes, firms seem to prefer some level of protection for their directors and officers. The coefficient on *DIROFF*, the combined measure of managerial liability protection, is approximately 0.22 for the average firm. This coefficient is large especially for small firms with few institutional shareholders. This evidence suggests that Nevada's level of liability protection is mainly attractive to a segment of the market, though all firms like some level of protection. Interestingly, the preference for *DIROFF* increases when the average industry takeover premiums is above the median. This reflects the intuition that managers may be concerned about their liability when there is a higher likelihood of takeovers.

More revealing may be the results of Table 7, which reports estimates for a model that includes separate *DIR* and *OFF* indices. In this case, we see that large firms with high institutional shareholdings actually prefer a relatively high level of director protection (though many of the coefficients on *DIR* and size interactions with *DIR* are not statistically signifi-

[14]The reason might be that managers with very high managerial ownership do not care about anti-takeover statutes since they have control over whether the firm will be acquired or not irrespective of the legal regime. On the other hand, it is important to mention again that data on managerial ownership is noisy, and therefore there are relatively few firms that have more than 25 percent managerial ownership based on forms 3,4 and 5.

cant). However, they dislike liability protection for officers, where the coefficients are about -0.37. In contrast, small firms with low institutional shareholding like high protection for their officers (the coefficients are about 0.33). Directors in large firms may be particularly concerned about potential lawsuits and liabilities. This result is consistent with studies that show that large firms are more likely to face litigation (Brochet & Srinivasan, 2014). Preference for *DIR* also rises when takeover premiums are high, although the coefficient is not statistically significant. On the other hand, small firms where the directors typically also serve as officers are especially interested in liability protection for officers. Thus, the *OFF* index seems to be the primary driver for incorporations in Nevada rather than the *DIR* index.

We do not find that managerial ownership significantly affects preferences for liability protections. The coefficient on the interaction of *DIROFF* and *DIR* with managerial ownership is slightly negative and insignificant. The coefficient on *OFF* and officers' ownership is positive but not statistically significant.

We note that we do not find evidence that home bias is driven primarily by large firms that exert influence on local regulators. In fact, the home bias for larger firms is smaller than that of smaller firms. One explanation may be that large firms tend to hire national law firms, and such firms presumably advise them to incorporate in Delaware, whereas small firms tend to consult local law firms. While some large firms no doubt exert influence on local legislatures, the average large firm is less inclined to incorporate in its home state.

Finally, in unreported regressions we also find that the coefficient on an interaction term between *Home Bias* and *ATS* is positive, but relatively small compared to the coefficient on *Home Bias*. Thus, consistent with Bebchuk & Cohen (2003), there is some evidence that anti-takeover statutes increase states' ability to retain firms in their jurisdictions, although the results suggest that this occurs only at a small scale.

6 Counterfactuals

In order to assess the elasticity of firms' preferences in corporate law, we need to evaluate the extent to which market shares of different states would change following changes to states' laws. We are particularly interested in several counterfactuals in which Delaware becomes more protectionist. In the first counterfactual, we examine the market shift that

would occur if Delaware enacted four anti-takeover statutes in 2006 such that its *ATS* index score were five (see Figure 6). We use all other state and firm characteristics to estimate firm choices between 2007 and 2013, taking into account inertia in decision-making which could delay firm reincorporations. We take a conservative view by not changing Delaware's fixed effect, so we assume that Delaware continues to enjoy a significant advantage over other states irrespective of its laws.

The results show that despite inertia in decision-making, a sizable number of firms would shift away from Delaware. The predicted decline in Delaware's market share in the period 2006-2013 amounts to 11.52%, and the downward trend would continue if we were to iterate the simulation beyond our sample period.[15] Using back of the envelope calculations, the revenue loss to Delaware from franchise taxes in 2013 would be approximately between $35 million and $70 million.[16] Thus, although Delaware has substantial market power, if it adopted laws that signal to the market that it does not view takeovers favorably, it would lose significant market share. Despite Delaware's large fixed effect, many firms would return to their home states. California's market share for example would increase from 2.66% to 4.04%.

Second, we consider changes to market shares if Delaware replicated Nevada and not only enacted more anti-takeover statutes, but also increased the liability protection for both directors and officers (see Figure 7). The results suggest that Delaware would not lose much market share. The reason is that Delaware could attract firms from Nevada due to its large fixed effect. However, if we focus only on relatively large firms with more than $100 million in assets that have more institutional shareholders, the results change dramatically. Such firms would flee from Delaware mainly because they dislike anti-takeover statutes and strong liability protections for officers.

Third, we note that as the coefficient on *DIR* in Table 7 is positive, our estimates suggest that Delaware could gain some market share by increasing the protection it offers to directors, but not to officers, and keep its anti-takeover regime intact. However, we do not think that this scenario is very likely. We emphasize that the coefficient on *DIR* is not statisti-

[15]Note that without inertia Delaware's market share in 2007 would decrease to less than 30%.

[16]The lower bound is based on the assumption that large firms in our sample pay the maximum franchise fee, i.e., $180,000, medium firms pay $130,000, and small firms pay $10,000. The upper bound is simply the product of the predicted decline in market shares (11.52%) and Delaware's revenue from franchise taxes in 2013 ($605.6 million).

cally significant, and therefore there is uncertainty as to whether firms truly prefer higher protection for their directors. Moreover, as discussed above in section 3, there is a positive correlation among our indices for protective or managerialist environments. The reason, we submit, is that states' commitments to shareholder-friendly or manager-friendly rules are not made in isolation with respect to specific laws, but rather as packages of laws that either tilt the balance of power in favor of shareholders or managers (particularly directors in the context of large firms). We therefore consider the case whereby Delaware increases its *ATS* to 5 and *DIR* to 6, while maintaining *OFF* at zero. The result is that Delaware would keep roughly the same market share, as the gains from increasing *DIR* are offset by the loss of increasing *ATS* (see Figure 8). Therefore, it seems that Delaware has limited incentives to shift to a protectionist regime.

Finally, we also consider whether Nevada or any other state could compete with Delaware by replicating Delaware's law (see Figure 9). Our results indeed confirm the view that other states cannot challenge Delaware by merely copying its statutory code (Bebchuk & Hamdani, 2002, Kahan & Kamar, 2002). In fact, as predicted by Barzuza (2012), if Nevada tried to replicate Delaware it would lose significant market share. Nevada attracts incorporations by differentiating itself from Delaware's pro-shareholder regime, but cannot compete with Delaware for larger firms. Leaving Delaware's institutional dominance intact, it is only if Delaware retracted from its relatively pro-shareholder laws that other states could attract a significant share of large firms.

7 Validation

In this section we validate the results by showing that the coefficient estimates provide reasonable predictions of states' market shares. In addition, in section 3 of the Internet Appendix, we compare the inertia model to other choice models that do not account for inertia, and show that the inertia model better fits the data.

7.1 In-Sample Validation

We use the rational inertia model to simulate firms' incorporation choices, and compute states' market shares of incorporations by aggregating individual firms' decisions. In Figure 10, we show the in-sample predictions of the market shares of Delaware and Nevada over the period of our data. While no model can predict market shares perfectly, our model does reasonably well. We use the model in column (2) of Table 7 for the validation exercises, but other specifications yield similar results. We focus on predicting changes in states' market shares of incorporations following changes to state laws, especially the recent rise of Nevada's market share. As Figure 10 shows, our model fits the rise of Nevada reasonably well. We further examine the shift in market shares in four states that enacted anti-takeover statutes, namely Texas, Missouri, Washington and Connecticut. We choose these states because among the states that have enacted anti-takeover statutes, especially poison pill validation statutes, they have the largest market share. The in-sample predictions are presented in Figure 11, and they appear to be relatively accurate.

7.2 Out-of-Sample Validation

In-sample validation is only partial evidence that our model can predict market shares. More importantly, the question is whether the model predicts market shares out-of-sample. In particular, we focus on the market share of Delaware and the increase in Nevada's market share in the 2000s. We estimate the model using the data up to and including 2008, and then predict market shares for 2009-2013 for the firms in our sample. Figure 12 compares the actual market shares of Delaware and Nevada and their predicted values between 2009 and 2013. We use the model in column (2) of Table 7 for the validation exercises, but again other models yield similar results. As shown in Figure 12, the predicted values of the inertia model are reasonably close to the true market shares. For example, the predicted market share of Delaware in 2013 is 62.35% as compared to the actual market share of 62.84%, and the predicted market share of Nevada in 2013 is 7.61% as compared to the actual market share of 9.81%. Accordingly, our model also provides a reasonable prediction of market shares out-of-sample.

8 Robustness

8.1 Alternative Specifications

Our results are robust to several alternative specifications. First, given that most of the time variation in the *ATS* index derives from the adoption of poison pill statutes, we run the model with a *Pill Statute* dummy instead of using the *ATS* index. The results are available in Table 8. Interestingly, the coefficients on *Pill Statute* are negative and relatively very large. In particular, large and medium firms that have a high percentage of institutional shareholders dislike pill statutes substantially more than smaller firms (the coefficient is between -1.2 and -1.4). This dislike is larger when the industry takeover premium is larger than the median.

Moreover, in column (2), we add the dummy variable, *Dead Hand*, for states that either have a statute or case law that validates a dead hand poison pill. We consider this to be an interaction term because all the states where dead hand pills have been validated have pill statutes. This is consistent with the view that a poison pill statute makes it more likely that courts will uphold dead hand pills (Barzuza, 2009). The coefficient on this variable is largely zero, but it becomes negative when interacted with the takeover premium dummy. Finally, in column (3), we use the dummy variable, *Extreme*, instead of *Dead Hand* to also account for states that have a statute that requires firms to adopt staggered board. The results are again very similar. Note that the statistical insignificance of the coefficients on *Dead Hand* and *Extreme* are not surprising given the limited cross-sectional and time-series variation in the data with respect to these variables. Moreover, the coefficients on other variables are all similar to those in Tables 6 and 7.

We also use alternatives variables for measuring states' director and officer liability protections. The results are robust to the following specifications: (1) allocating 0.5 points instead of 1 point for default laws that exempt managers from liability for breaches of the duty of loyalty or allow firms to indemnify managers for such liability without shareholder approval; (2) using a weighted score for both *DIR* and *OFF*, where we give the exemption score 1.5 or 2 times more weight than the indemnification score, instead of assuming that the indemnification score is equal to the exemption score when the latter is larger (as in our main specification); (3) using a dummy variable to proxy for the degree of states' managerial

liability protection, where the dummy equals 1 only when a state exempts managers for breaches of the duty of loyalty by default and/or allows for indemnification in such circumstances without shareholder approval;[17] and (4) using a modified version of *DIR* and *OFF* that takes into account provisions that allow firms to indemnify directors and officers for settlement or liability amounts in derivative suits.[18] We do not report the results obtained using these modified variables, but our findings are unaffected.

We further use other measures of takeover intensity instead of the average takeover premium in the industry. We use the log of the number of 100% completed takeovers in the industry in the previous year, and the log of the adjusted dollar amount of 100% completed takeovers in the industry in the previous year. The results are generally robust to these alternative specifications. In particular, firms, especially large ones, dislike anti-takeover statutes more when the number or volume of takeovers in the industry is higher.

Finally, in the main specification we omit firms that have less than three observations in the data. The results are overall robust to including all firms, even those with only one observation, or alternatively including only firms with at least five observations.

8.2 Instrumental Variable for Institutional Investors

While it is possible that that firm characteristics, primarily institutional shareholding, may be correlated with unobserved firm specific variables, this type of endogeneity is not likely to present a serious concern for our findings. Our findings that firms with high institutional shareholdings dislike protectionist laws support the bonding hypothesis, whether institutional owners cause firms to choose shareholder-friendly laws or choose to invest in firms incorporated in jurisdictions with such laws. More importantly, our counterfactuals relate to legal changes rather than changes in firm characteristics, and therefore endogeneity

[17] We employ two main alternative specifications: (a) a dummy that equals 1 only if a state exempts managers from the duty of loyalty by default; and (b) a dummy that equals 1 not only if there is such an exemption, but also when a state allows firms to indemnify managers for such liability without shareholder approval.

[18] The indemnification score is either (a) an average of the indemnification score for direct suits, corporate expenses in derivative suits and the settlement amounts in derivative suits, or (b) a weighted average whereby 50% of the score is based on the score in direct suits, 25% on corporate expenses in derivative suits and 25% with respect to the settlement amounts.

concerns do not materially affect the counterfactuals. Moreover, since we do not heavily rely on a causal interpretation of the correlation between firms' choices and institutional shareholding, this variable may be viewed as a proxy that accounts for unobserved market-orientation, such as a desire to be acquired or retaining a national law firm.

In any event, we show that our results are robust when using inclusion in the S&P index as an instrument for institutional shareholding (following Aghion et al., 2013). Inclusion in the S&P 500 index is plausibly exogenous because it does not depend on a firm's governance and performance, but rather on whether a firm is deemed representative of its industrial sector. Moreover, inclusion in the S&P 500 is positively correlated with institutional ownership, as fund managers are more likely to invest in stocks that are part of the index. This correlation persists even when controlling for firm size.

Since our model is nonlinear, we rely on a control function approach to implement the instrumental variable analysis (Imbens and Newey, 2009; Blundell and Powell, 2004). In the first stage, we regress the endogenous variable on exogenous firm characteristics and instruments. We assume that the error term in the first stage, ν_{jt}, and ε_{ijt}, i.e., the error terms in each firm's utility function (i.e., u_{ijt} in equation 1) are jointly independent of the exogenous variables and instruments, such that , ε_{ijt} is independent of institutional ownership conditional on ν_{it}.

We estimate the first stage with OLS, and include the estimated residuals $\hat{\nu}_{it}$ in the specification of u_{ijt}. Following Petrin & Train (2010), we impose the parametric assumption that the distribution of ε_{ijt} conditional on the realizations of ν_{it} is iid type I extreme value, and then estimate the model with maximum likelihood estimation as in our main specification.

The results of the instrumental variable analysis in Table 9 suggest that the preferences of firms with high institutional shareholding for certain legal regimes are even stronger than those in our main specification. For example, firms with high institutional shareholding dislike anti-takeover statutes (column (1)). This dislike is even stronger when we use *Pill Statute* dummy instead of using the *ATS* index (column (2)); this is consistent with accounts that institutions tend to object to poison pill provisions in the charter (Gillan & Starks, 2000; Kahan & Rock, 2014). Similarly, as in the main specification, institutional shareholding is associated with higher *DIR* and lower *OFF*, but the magnitudes are larger. In fact, when using instruments for institutional shareholding, the size of the firm does not appear to be correlated at a statistically significant level with preferences for legal regimes, and

institutional shareholding seems to be the critical factor. This suggests that institutional shareholding has a causal effect on the choice of corporate governance laws.

9 Discussion of Results

9.1 Is there Competition for Corporate Law?

The central finding of this study is that Delaware faces competitive pressure to adopt laws that are relatively more shareholder friendly than those of other states. If Delaware aggressively sought to favor managerial interests it would lose revenue and market share, especially among large firms. To be sure, our empirical strategy confirms many of the claims of influential writers on competition for corporate charters, including the ideas that (a) Delaware's power is derived from unobservable quality, network externalities and familiarity with the law; (b) firms exhibit strong home bias in incorporation decisions; (c) firms' incorporation decisions tend to be sticky due to inertia in decision-making; (d) it is impossible to compete with Delaware merely by copying its statutory code. However, if managerial favoritism were a main driving force in this market, we would find that firms prefer strong anti-takeover protections as well as laws that protect officers from liability, but nonetheless choose to incorporate in Delaware because of its strong fixed effect. In contrast, we find that states that have increased the level of their takeover protection lost market share over the time frame that we examined.

We emphasize that we do not argue that states actively and vigorously compete for incorporations. Thus, the insight by Kahan & Kamar (2002) that states' bureaucracies are not profit maximizing and face political obstacles in seeking to attract outside firms is consistent with our findings. Similarly, network externalities and investment in institutional infrastructure might make it difficult to compete with Delaware (Bebchuk & Hamdani, 2002). In such circumstances, states might prefer to cater to the interests of the managers of local corporations by enacting laws that enable those managers to resist the influence of outside investors that might threaten local interests. Our results, however, indicate that the average effect of such policies is not to attract market share, but in fact to reduce it.

The emerging equilibrium that we observe is thus one of market differentiation (Barzuza,

2009; Gilson et al., 2013). Delaware offers market-oriented laws that are relatively favorable to shareholders, while the laws of most of other states cater primarily to local interests, such as those of employees and local merchants. Within this equilibrium, a third alternative has emerged for small firms that presumably have limited local influence, but seek a system that is responsive to the needs of small firms with high insider ownership and strong managers. The regulatory framework of corporate law in the United States may be viewed as a system of complementary laws that provide for the needs of different forms of business, and in particular large public firms that seek capital from widely dispersed shareholders and institutions.

Finally, we do not argue that Delaware pursues policies that are dismissive of managerial interests, nor that Delaware would increase its market share if it further curtailed the interests of firms' managers, for example by barring classified boards or poison pills. We only argue that in relative terms, Delaware has committed to a regime that is relatively more sensitive to the interests of shareholders. Delaware entrusts its judiciary with the task of balancing the interests of shareholders and managers through a process of judicial review, which affords managers a heavy dose of deference, but also subjects their actions to judicial scrutiny which goes beyond the business judgment rule. While there is some concern that through its case law Delaware has become more protective of managers in recent years (Bebchuk & Jackson, 2013), anti-takeover devices remain heavily litigated in Delaware. Such litigation likely affects managers' behavior even if in equilibrium managers tend to avoid legal sanction.

9.2 The Effect of Corporate Law

One potential criticism of the empirical strategy we use is that corporate law does not materially affect outcomes. In particular, it might be argued that anti-takeover statutes do not affect the probability of takeovers. On this view, Delaware's case law is highly protective of management because it validates the poison pill, and the level of judicial review is viewed by some as minimal (Kahan, 2006; Catan & Kahan, 2014; Cremers & Ferrell, 2014). Similarly, it could be argued that Nevada's liability protections are not materially more protective of management, either because other states already allow firms to exempt managers from the duty of loyalty through a menu option (as opposed to Nevada's default rules) or because directors and officers are also heavily protected by insurance policies and rarely pay out of pocket (Black et. al, 2006).

The question then is what explains the robustness of the results we obtain. One explanation is that corporate laws do affect outcomes, at least to some extent. Delaware law is generally associated with a higher takeover probability (Daines, 2001). While Delaware case law has validated the poison pill, it also subjects it to judicial review under the *Unocal* and *Revlon* standards. On the other hand, it may be argued that Delaware's favorable takeover environment stems primarily from the presence of an expert judiciary that resolves disputes efficiently, and not from the lack of anti-takeover statutes, especially a pill validation statute.

To test these claims we run logit regressions where the dependent variable is a 50% completed takeover, and the coefficients of interest are the coefficients on the *ATS* index or *Pill Statute*. We use standard controls used by Cremers et al. (2009), such as the lagged industry adjusted Tobin's Q and return on investment, as well as the number of takeovers in the industry in the previous year. The results reported in columns (1) and (2) in Table 10 show that the probability of takeover is negatively related to the *ATS* index and *Pill Statute*. When alternatively we use a Delaware dummy as a coefficient of interest (column (3) of Table 10), the results re-affirm the result in Daines (2001) that Delaware law is associated with higher takeover probability. When we include both the *ATS* index and the Delaware dummy (column (4) of Table 10), the coefficient on *ATS* remains negative and the coefficient on the Delaware dummy remains positive. However, when we use *Pill Statute* instead of *ATS*, the coefficient on the Delaware dummy becomes statistically insignificant, while the coefficient on *Pill Statute* is negative and statistically significant (see column (5) of Table 10). Thus, takeover statutes, especially pill validation statutes, are negatively correlated with higher takeover probability even when controlling for Delaware incorporation; therefore, this suggests that takeover statutes do matter.[19]

Similarly, it may be argued that Nevada liability protections do make a significant difference. In principle, Nevada firms that wanted to exempt their officers from the duty of

[19]These results are robust to using 30% or 100% completed takeovers, except that for 100% completed takeovers the negative coefficient on *ATS* in the specification of column (4) of Table 10 is not statistically significant. Following Daines (2001), we also repeat these regressions using only mature firms with at least five years in the sample and without firms that reincorporated at some point in the sample period. The results are generally robust, except that in the specifications in columns (4) and (5) of Table 10, the negative coefficients on *ATS* and *Pill Statute*, respectively, are not statistically significant. Note though that the Delaware incorporation dummy does not only control for Delaware's quality but it also encompasses the lack of anti-takeover statutes.

loyalty could have done so before the 2001 law reform, because Nevada law already allowed firms to do so through a menu option. Additionally, such a menu option has been available under the laws of several other states (e.g., Maryland and Virginia). However, as discussed above in section 3, research shows that firms do not always adopt menu options, whereas firms virtually never opt out of default provisions that benefit managers (Listokin, 2009). Moreover, in a sample of 106 firms incorporated in Nevada in 2001, 35 firms did not protect their managers from liability to the fullest extent permitted under Nevada law (Eldar, 2016). Firms' adoption of corporate governance provisions itself may be subject to rational inertia, and firms therefore may be sluggish in amending their charters to benefit from corporate menu options.

A second explanation is that even if the laws by themselves do not have a direct effect on outcomes, they signal a commitment to firms that the legislature will protect certain interests, whether they are those of shareholders, managers or local constituencies. Romano (2006) points out that Delaware's takeover-friendly environment is reflected in the legislature's reluctance to adopt many anti-takeover statutes. In fact, Bebchuk & Cohen (2003) justify the use of the *ATS* index not by insisting that it is consequential, but rather by arguing that anti-takeover statutes are viewed as potentially consequential by those making incorporation decisions. Barzuza (2009) surveyed state anti-takeover laws and showed that the strength of poison pill statutes and constituency statutes increase the likelihood that the courts would uphold a dead hand pill. Thus, it is no surprise that Georgia and Pennsylvania, two states with five anti-takeover statutes, also have case law that validates the dead hand pill, whereas Delaware has rejected its validity. Similarly, Nevada's decision to make liability limitations the default rule might be a signal to small firms that their interests will be protected under Nevada law. This signal may even be viewed as part of a marketing campaign to attract firms to Nevada (see Barzuza, 2012).

This explanation is also consistent with Kahan & Rock (2015) who argue that corporate governance has symbolic value. Firms have adopted many pro-shareholder policies in recent years, such as increasing shareholder access to the proxy, even though they arguably have a trivial effect on the quality of governance. Consistent with our counterfactual analysis, a scenario in which Delaware enacted many anti-takeover statutes is equally likely to trigger fierce opposition by institutional investors because if anything, such statutes surely have symbolic value in delineating the balance of power between shareholder and mangers.

9.3 Shareholder Value

Whether competition for corporate governance laws is welfare enhancing depends on whether firms' choices are conducive to shareholder value. As shown by Daines (2001), Litvak (2013) and Barzuza & Smith (2014), incorporation in Delaware is correlated with higher Tobin's Q. While some have contested this finding (e.g., Subramanian, 2004), the results hold in the sample used in this study (Eldar, 2016). Moreover, largely all event studies have shown that incorporation in Delaware is associated with positive, albeit small, abnormal returns (Bhagat & Romano, 2002). Consistent with our findings, the main explanation for this is that Delaware incorporation facilitates takeover activity (Romano, 1985; Daines, 2001).

Nonetheless, there remains a possibility that Nevada's protectionist laws are value decreasing. Barzuza & Smith (2014) argue that incorporation in Nevada is correlated with a slightly higher risk of financial restatements. However, most studies have shown that incorporation in Nevada is also correlated with higher Tobin's Q (Litvak, 2014; Eldar, 2016). Eldar (2016) shows, using both standard regression analysis and matching estimators, that the correlation of Nevada incorporation and Tobin's Q is limited to small firms with less than $100 million in assets. But, since most Nevada corporations are small (as shown in Table 2), the result suggests that firms that choose to incorporate in Nevada tend to be those firms for whom Nevada incorporation is value enhancing. Eldar (2016) further conducts an event study of firm incorporation in Nevada between 1996-2013 and finds that such incorporations are associated with positive abnormal returns, although the effect is not usually statistically significant. One explanation for the positive effect of Nevada law is that it reduces the costs of corporate governance through takeovers and litigation for small firms with a high percentage of insider ownership (Kobayashi & Ribstein, 2012; Eldar, 2016).

Taken together, these findings suggest that the system of regulatory competition induces different types of firms to sort themselves into corporate governance systems that overall benefit their shareholders.

9.4 Policy Implications

The broader policy question is whether there is a need for federal regulation. Some scholars argue that takeovers should be federally regulated. Bebchuk & Ferrell (2001) advocate federal rules that would effectively prohibit the use of most defensive tactics utilized after a bid is made. Barzuza (2009) argues that federal regulation should impose a minimum standard for judicial review of poison pills and anti-takeover devices. To be sure, Delaware law may indeed be imperfect. For example, in some cases additional restrictions on the use of poison pills may be advantageous. Likewise, Delaware's adoption of a business combination statute in 1988 seems like a redundant policy (Romano, 1987). However, it is highly doubtful that the federal government would do better than Delaware.

The key problem with proposals for federal regulation is that they are based on a questionable empirical premise, which is that Delaware's pro-shareholder approach is due *exclusively* to fear of federal intervention and that firms as a whole tend to choose laws that favor managerial interests. Our findings suggest that this premise is not founded in the data. Rather, Delaware faces pressure from the demand side to enact laws that facilitate takeovers relative to other states, even if imperfectly. In contrast, a federal regulator may be subject to the politics of other interest groups not well versed with business needs and pursue populist policies that do not necessarily benefit shareholders, such as unduly curtailing managers' power to negotiate bids. Criticism of recent federal regulation, such as Sarbanes-Oxley and Dodd-Frank, are a case in point (Romano, 2005; Romano, 2014). Thus, a system whereby Delaware courts with ample expertise in corporate transactions defer to management, but reserve the tools to protect shareholders, appears to be the preferable regulatory approach.

Finally, federal regulation could impose a one-size-fits-all approach to corporate governance on all firms. But the evidence suggests that there is scope for regulatory diversity. Even if laws that delay or prevent takeovers are on average value decreasing, firms may benefit from such laws in particular circumstances. Accordingly, there seems to be little reason to impose uniform laws through federal regulation.

10 Conclusion

We develop in this article a model of firm choice of corporate laws under rational inertia. We show that such a model can generate critical insights for the debate over the desirability of regulatory competition in the market for corporate laws. While elasticity in the demand for corporate laws is limited by unobservable quality, home bias, and inertia in decision-making, there is evidence that corporate law does matter and can generate market shifts in firm incorporation decisions. In particular, we find that Delaware faces competitive pressures to adopt corporate laws that are relatively shareholder-friendly. Consistent with the bonding hypothesis, our counterfactual analysis indicates that if Delaware enacted highly protectionist laws, large public firms would leave Delaware. While such a scenario is unlikely to transpire at present, it would be similar to events that led to the fall of New Jersey as the dominant state of incorporation for U.S. firms in the early twentieth century (Butler, 1985). The enactment of protectionist anti-trust laws by the New Jersey legislature triggered a mass migration of companies to Delaware, which copied New Jersey's corporate code and created the infrastructure for serving modern business corporations. Similarly, we believe that if Delaware enacted laws that harmed shareholders, other states have strong incentives to pick up the slack, especially small states that need new sources of revenues.[20] Thus, even if competition for corporate law is imperfect, it militates in favor of a corporate governance regime that is conducive to shareholder interests.

[20]This observation is consistent with Baumol's theory that incumbents are disciplined by the threat of entry (Baumol, 1982; Romano, 2002).

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Appendix

Definitions of the Main Variables

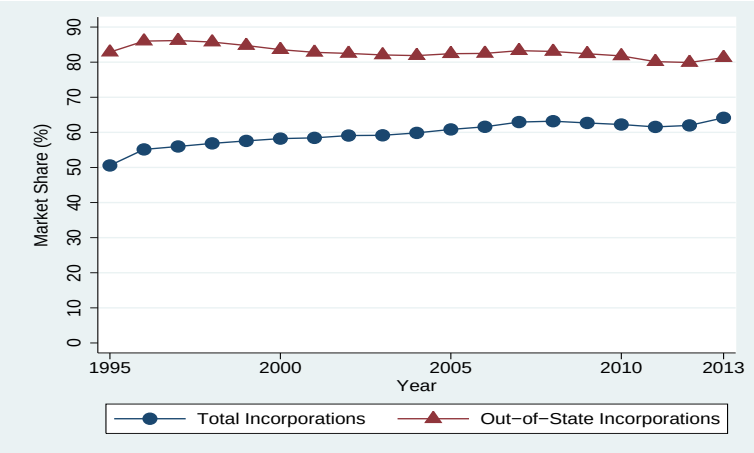
ATS	An index of anti-takeover statutes that counts the number of anti-takeover statutes for every state for every year at the year the statute was passed. Anti-takeover statutes are described in Table 2 of the Internet Appendix. The index ranges from 0 to 5.
Dead Hand	A dummy equal to 1 if a state has a statute that validates dead-hand poison pills or has case law that holds such pills to be valid. For discussion, see section 3.2.1 and section 2.2 of the Internet Appendix.
DIROFF	A combined measure of DIR and OFF (described below), i.e., DIROFF = DIR + OFF. The measure ranges from 0 to 12.
DIR	A measure of each state's protection of directors from monetary liability based on liabilty exemption and indemnification provisions permitted under state law. The meausre ranges from 0 to 6. For discussion, see section 3.2.2 and section 2.3 of the Internet Appendix.
Extreme	A dummy equal to 1 if Dead Hand is equal to 1 or if the state has a statute that requires firms implement a staggered board. For discussion, see section 3.2.1 and section 2.2 of the Internet Appendix.
Home Bias	A dummy equal to 1 if a firm incorporates in the state in which it is headquartered.
OFF	A measure of each state's protection of officers from monetary liability based on liabilty exemption and indemnification provisions permitted under state law. The meausre ranges from 0 to 6. For discussion, see section 3.2.2 and section 2.3 of the Internet Appendix.
Pill Statute	A dummy equal to 1 if a state has a poison pill validation statute descibed in Table 2 of the Internet Appendix. For discussion, see section 3.2.1 and section 2.2 of the Internet Appendix.

Definitions of the Interacted Variables

Small	The firm has less than $100 million in assets adjusted using the CPI index to 2004 dollars.
Medium	The firm has more than or equal to $100 million in assets but less than $1 billion adjusted using the CPI index to 2004 dollars.
Institutional Ownership	The fraction of shares held by institutional shareholders sourced from Thomson Reuters 13F filings.
Ind. Premium $>$ median$_{t-1}$	A dummy equal to 1 if the average takeover premium in the industry in year $t-1$ is greater than the median industry takeover premium across industry-years using the Fama French 49 industries. Data on takeover premiums is sourced from from SDC.
# Industry Takeovers$_{t-1}$	The number of 100% completed takeovers in the industry in year $t-1$ using the Fama French 49 industries. Data on takeovers is sourced from SDC.
$ Industry Takeovers$_{t-1}$	The dollar volume of 100% completed takeovers in the industry in year $t-1$ using the Fama French 49 industries. Dollar amounts are converted to 2004 dollars using the CPI. Data on takeovers is sourced from SDC.
Manager $>$ 15%	A dummy equal to 1 if managers (both directors and officers) hold more than 15% of the stock of the company. Data on managerial shareholding is sourced from Thompson Reuters forms 3,4 and 5.
Director $>$ 15%	A dummy equal to 1 if directors hold more than 15% of the stock of the company. Data on managerial shareholding is sourced from Thompson Financial forms 3,4 and 5.
Officer $>$ 15%	A dummy equal to 1 if officers hold more than 15% of the stock of the company. Data on managerial shareholding is sourced from Thompson Financial forms 3,4 and 5.

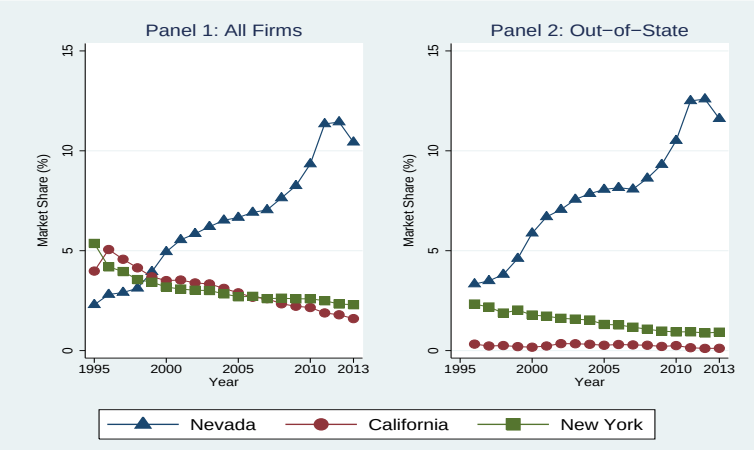
Figures

Figure 1: Market Shares of Delaware



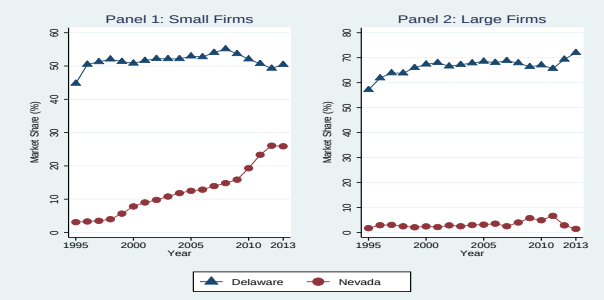
This figure shows the trends in the market share of Delaware between 1995 and 2013 among all firms and among firms that incorporate out of their home state.

Figure 2: Market Shares of Nevada, California and New York



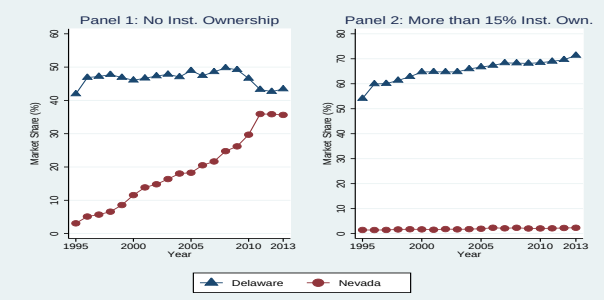
This figure shows the trends in the market shares of Nevada, California and New York between 1995 and 2013. In panel 1, the market share is computed using all firms, and in panel 2, the market share is computed using only firms that incorporate out of their home state.

Figure 3: Market Shares of Delaware and Nevada for Small and Large Firms



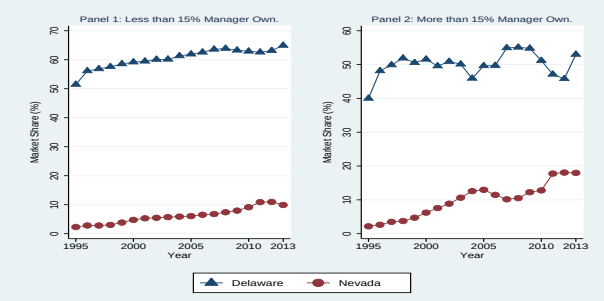
This figure shows the trends in Delaware and Nevada market shares between 1995 and 2013 among large and small firms. In panel 1, the market share is computed using only firms with less than $100 million in total assets. In panel 2, the market share is computed using only firms with more than $1 billion in total assets.

Figure 4: Market Shares of Firms with Low and High Institutional Ownership



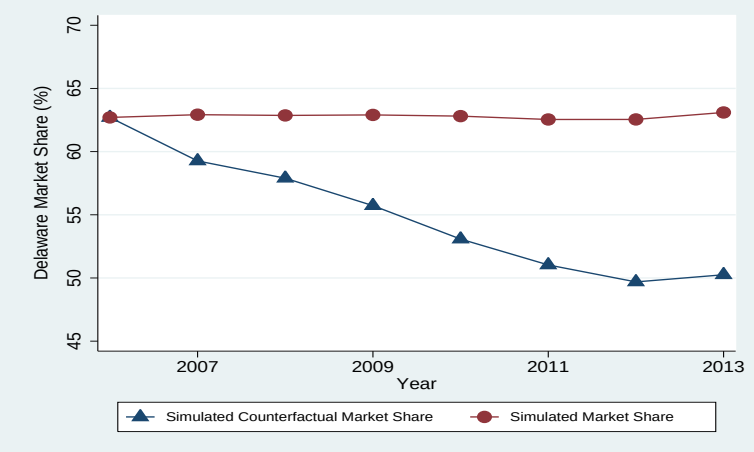
This figure shows the trends in Delaware and Nevada market shares between 1995 and 2013 among firms with high and low institutional ownership. In panel 1, the market share is computed using only firms with no institutional ownership. In panel 2, the market share is computed using only firms with at least 15% institutional owners.

Figure 5: Market Share of Firms with Low and High Managerial Ownership



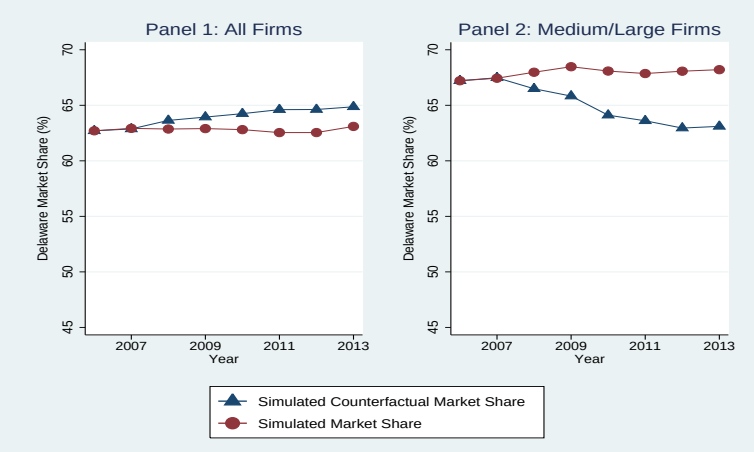
This figure shows the trends in Delaware and Nevada market shares between 1995 and 2013 among firms with high and low managerial stock ownership. In panel 1, the market share is computed using only firms with less than 15% managerial ownership. In panel 2, the market share is computed using only firms with at least 15% managerial ownership.

Figure 6: Counterfactual 1 - Delaware Adopts Maximum ATS



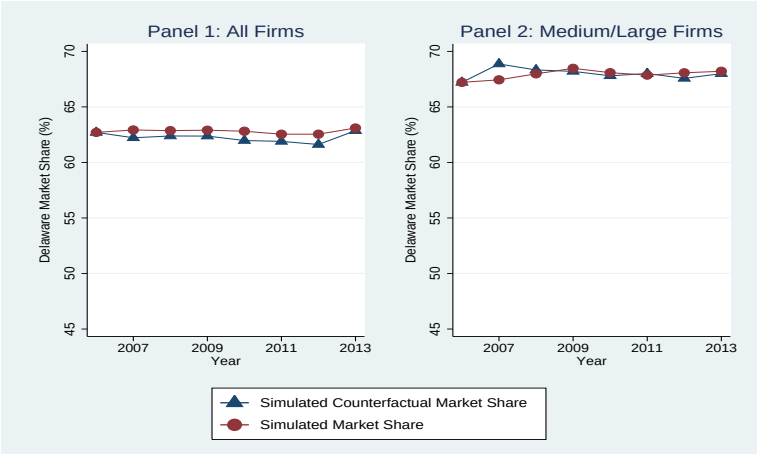
This figure compares Delaware's simulated market share given the state and firm characteristics observed in the sample to Delaware's simulated market share in the counterfactual scenario in which Delaware changes its laws in 2007 to increase the ATS index to its maximum level (i.e., ATS=5).

Figure 7: Counterfactual 2 - Delaware Adopts Maximum ATS, DIR and OFF



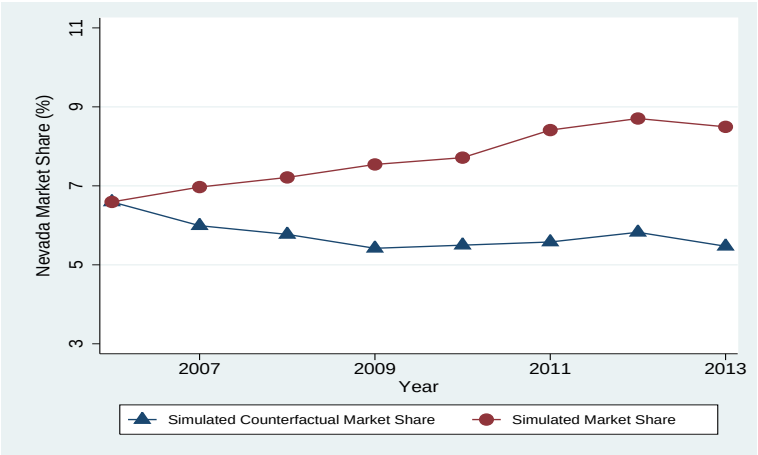
This figure compares Delaware's simulated market share given the state and firm characteristics observed in the sample to its simulated market share in the counterfactual scenario in which Delaware changes its laws in 2007 to increase the ATS, DIR and OFF indices to their maximum levels (i.e., ATS=5, DIR=6 and OFF=6). In panel 1, the market share is computed using all firms in the sample. In panel 2, the market share is computed using only firms with more than $100 million in total assets (i.e., medium and large firms).

Figure 8: Counterfactual 3 - Delaware Adopts Maximum ATS and DIR



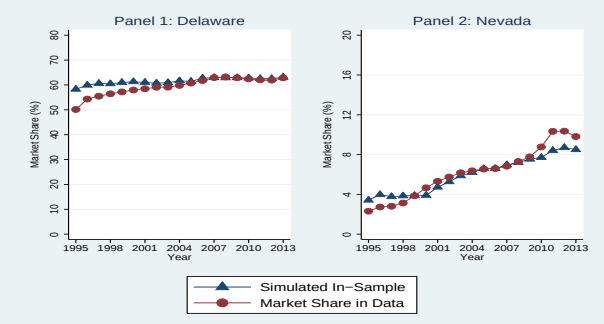
This figure compares Delaware's simulated market share given the state and firm characteristics observed in the sample to its simulated market share in the counterfactual scenario in which Delaware changes its laws in 2007 to increase the ATS and DIR indices to their maximum levels (i.e., ATS=5 and DIR=6). In panel 1, the market share is computed using all firms in the sample. In panel 2, the market share is computed using only firms with more than $100 million in total assets (i.e., medium and large firms).

Figure 9: Counterfactual 4 - Nevada Adopts Delaware Law



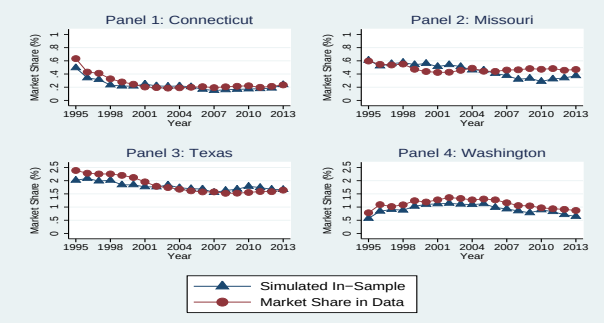
This figure compares Nevada's simulated market share given the state and firm characteristics observed in the sample to its simulated market share in the counterfactual scenario in which Nevada changes its laws in 2007 such that its ATS, DIR and OFF indices will have the same values as those of Delaware law (i.e., ATS=1, DIR=2, and OFF=0.5).

Figure 10: In-Sample Predictions - Delaware and Nevada



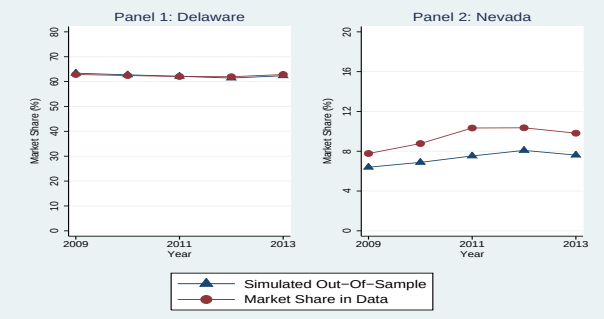
This figure compares the actual market shares of Delaware and Nevada and the in-sample predicted market shares of Delaware and Nevada.

Figure 11: In-Sample Predictions



This figure compares the actual market shares of Connecticut, Missouri, Texas and Washington to their respective in-sample predicted market shares.

Figure 12: Out Of Sample Predictions



This figure compares the actual market shares of Delaware and Nevada and their predicted out-of-sample market shares for the period 2009-2013. Predicted market shares are obtained from estimating a model using the sample period 1995-2008.

Tables

Table 1: Summary of Reincorporations

For each state, column (2) presents the total number of reincorporations into the state. Column (3) reports the number of firms that migrate away from the state and reincorporate in another state. Columns (4) and (5) report the number of firms that migrate away from the state and reincorporate in Delaware and Nevada respectively.

(1)	(2)	(3)	(4)	(5)
State	Total Reincorporations In	Total Reincorporations Out	Total Reincorporations in DE	Total Reincorporations in NV
AK	0	1	1	0
AL	0	4	4	0
AR	0	1	1	0
AZ	0	6	4	1
CA	6	104	96	5
CO	7	55	34	11
CT	0	4	3	0
DC	0	0	0	0
DE	386	105	0	28
FL	27	31	22	6
GA	7	5	4	0
HI	0	1	1	0
IA	0	3	3	0
ID	0	6	6	0
IL	5	5	5	0
IN	5	2	2	0
KS	1	1	1	0
KY	0	2	1	0
LA	1	1	1	0
MA	1	12	9	0
MD	10	2	2	0
ME	0	1	1	0
MI	4	5	5	0
MN	4	23	16	3
MO	0	4	2	2
MS	1	1	0	1
MT	1	0	0	0
NC	1	2	2	0
ND	1	1	0	1
NE	0	1	0	0
NH	0	1	0	1
NJ	0	21	14	2
NM	0	3	1	1
NV	72	56	48	0
NY	0	46	42	1
OH	5	9	7	0
OK	4	5	2	0
OR	2	4	3	0
PA	8	8	5	2
RI	0	0	0	0
SC	0	0	0	0
SD	0	1	1	0
TN	5	3	3	0
TX	6	11	11	0
UT	2	14	10	2
VA	2	3	3	0
VT	1	0	0	0
WA	9	8	6	2
WI	3	3	3	0
WV	0	0	0	0
WY	4	6	1	3
Total	591	591	386	72

Table 2: **Summary Statistics of Firm Characteristics**

	Mean	Std. Dev.	Min	Median	Max	N
Panel A: All Firms						
Total Assets ($ millions)	1,953.8	13,246.74	0	128.27	797,769	86,598
Sales ($ millions)	1,737.42	9,734.23	0	121.52	474,259	86,437
# of Employees (1000s)	7.17	36.3	0	0.6	2,200	84,097
Market Value ($ millions)	2,500.51	14,785.03	0	137.73	626,550.35	68,592
Institutional Ownership (%)	34.975	32.99	0	26.92	100	87,755
Managers Ownership > 15%	0.1	0.3	0	0	1	87,755
Directors Ownership > 15%	0.09	0.28	0	0	1	87,755
Officers Ownership > 15%	0.07	0.25	0	0	1	87,755
Panel B: Delaware Firms						
Total Assets ($ millions)	2,038.55	10,317.37	0	180.16	304,594	51,467
Sales ($ millions)	1,857.36	9,946.1	0	160.76	474,259	51,389
# of Employees (1000s)	7.63	42.21	0	0.73	2,200	50,331
Market Value ($ millions)	2,500.22	11,855.19	0	209.07	376,370.28	41,372
Institutional Ownership (%)	39.26	33.45	0	34.57	100	52,034
Managers Ownership > 15%	0.08	0.27	0	0	1	52,034
Directors Ownership > 15%	0.07	0.26	0	0	1	52,034
Officers Ownership > 15%	0.06	0.23	0	0	1	52,034
Panel C: Nevada Firms						
Total Assets ($ millions)	360.04	1,689.04	0	7.13	22,725.9	5,040
Sales ($ millions)	295.01	1,461.07	0	3.61	24,545.2	5,026
# of Employees (1000s)	1.88	8.95	0	0.03	125.95	4,613
Market Value ($ millions)	379.46	2,177.82	0	16.9	64,571.11	4,453
Institutional Ownership (%)	10.16	22.44	0	0	100	5,347
Managers Ownership > 15%	0.13	0.34	0	0	1	5,347
Directors Ownership > 15%	0.12	0.33	0	0	1	5,347
Officers Ownership > 15%	0.1	0.3	0	0	1	5,347

Table 3: **Summary of States' Laws Indices**

This table reports the scores for the ATS, DIR and OFF indices for Delaware and Nevada in 2013 and the state average between 1995-2013.

	ATS Index	DIR Index	OFF Index
Delaware	1	2	0
Nevada	5	6	6
Average	2.94	2.87	1.46

Table 4: **Correlation Table of States' Laws Indices**

This table reports the correlation matrix of the ATS, DIR and OFF indices in the period 1995-2013.

	ATS Index	DIR Index	OFF Index
ATS Index	1		
DIR Index	0.412***	1	
OFF Index	0.234***	0.575***	1

*** indicates statistical significance at a level $p = 0.01$.

Table 5: **Annual Industry Takeover Data**

This table reports summary statistics on takeover activity over the sample period 1995-2013, and across Fama French 49 industries. The "# Ind. Takeovers" refers to the number of 100% completed takeovers in the industry. Data on industry takeovers values are reported in billions of dollars. The four-week industry takeover premium is reported in percentage points. All dollar figures are converted to 2004 values using the Consumer Price Index. Source: SDC.

	Mean	**Std. Dev.**	**Min.**	**Median**	**Max.**	**N**
# Ind. Takeovers	131.2	204.1	0	70	1568	836
Ind. Takeovers Value ($ billions)	14.066	29.834	0	4.48	422.048	836
Ind. 4-week Premium (%)	49.82	160.439	-97.33	31.38	2,982.803	827

Table 6: **Rational Inertial Model with DIROFF**

	(1)	(2)	(3)
ATS	-0.4053***	-0.3664***	-0.3694***
	(0.0878)	(0.0889)	(0.0890)
ATS × Small	0.0107	0.0131	0.0025
	(0.0390)	(0.0396)	(0.0398)
ATS × Medium	0.0026	0.0047	-0.0024
	(0.0350)	(0.0355)	(0.0355)
ATS × Institutional Ownership	0.0185	0.0179	0.0190
	(0.0389)	(0.0394)	(0.0397)
ATS × Industry Premium$_{t-1}$ > median		-0.07103***	-0.0713***
		(0.0212)	(0.0213)
ATS × Manager > 15%			0.0824**
			(0.0320)
Average ATS	-0.3929	-0.4013	-0.4035
- Small firms	-0.3922	-0.4023	-0.4049
- Medium firms	-0.3935	-0.4008	-0.4032
- Large firms	-0.3933	-0.4003	-0.4009
DIROFF	0.2757***	0.2498***	0.2513***
	(0.0296)	(0.0316)	(0.0316)
DIROFF × Small	0.1228***	0.1205***	0.1223***
	(0.0232)	(0.0234)	(0.0235)
DIROFF × Medium	0.0091	0.0072	0.0086
	(0.0240)	(0.0242)	(0.0242)
DIROFF × Institutional Ownership	-0.2977***	-0.2984***	-0.3001***
	(0.0248)	(0.0251)	(0.0253)
DIROFF× Ind. Premium$_{t-1}$ > median		0.0400***	0.0402***
		(0.0131)	(0.0132)
DIROFF × Manager > 15%			-0.0160
			(0.0182)
Average DIROFF	0.2243	0.2240	0.2248
- Small firms	0.3622	0.3629	0.3639
- Medium firms	0.1368	0.1357	0.1365
- Large firms	0.0832	0.0825	0.0827

	(1)	(2)	(3)
Home Bias	4.4198***	4.4163***	4.4181***
	(0.1094)	(0.1101)	(0.1104)
Home Bias × Small	0.9028***	0.9040***	0.9030***
	(0.1072)	(0.1078)	(0.1080)
Home Bias × Medium	0.6019***	0.6031***	0.6043***
	(0.1099)	(0.1105)	(0.1107)
DE Fixed Effect	7.5641***	7.5672***	7.5690***
	(0.1871)	(0.1870)	(0.1872)
NV Fixed Effect	4.7165***	4.7432***	4.7389***
	(0.4416)	(0.4444)	(0.4445)
CA Fixed Effect	1.0160***	1.0124***	1.0127***
	(0.1868)	(0.1866)	(0.1869)
NY Fixed Effect	2.7577***	2.7627***	2.7647***
	(0.3730)	(0.3742)	(0.3746)
Average π	1.18%	1.18%	1.18%

Standard Errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

This table reports maximum likelihood estimates of the parameters of the rational inertia model. The dependent variable is a categorical variable that indicates the state of incorporation. The parameter estimates reflect the effect of one unit of each variable on the latent utility index of firms in the sample. All variables not defined herewith are defined in the Appendix. The table reports in bold firm utility with respect to one unit of each legal characteristic by firm size, given average firm characteristics (i.e., institutional ownership and managerial ownership) and parameter estimates. All specifications include state fixed effects, here reported for Delaware, Nevada, California and New York. The average π is the mean across firms-years of the probability that a firm makes an incorporation choice in any given year, obtained according to the formula in equation 4. The standard errors reported are computed using the Huber-White formula; see Train (2009). Firms with less than three observations are not included. The number of firm-year observations is 81,993, and there are 8,769 firms in the sample.

Table 7: **Rational Inertial Model with DIR and OFF Indices**

	(1)	(2)	(3)
ATS	-0.4455***	-0.4078***	-0.4099***
	(0.0959)	(0.0971)	(0.0971)
ATS × Small	0.0671	0.0693	0.0613
	(0.0450)	(0.0456)	(0.0458)
ATS × Medium	0.0206	0.0229	0.0173
	(0.0423)	(0.0428)	(0.0429)
ATS × Institutional Ownership	-0.0458	-0.0464	-0.0464
	(0.0425)	(0.0430)	(0.0433)
ATS × Industry Premium$_{t-1}$ > median		-0.0696***	-0.0698***
		(0.0223)	(0.0223)
ATS × Manager > 15%			0.0624**
			(0.0310)
Average ATS	-0.4256	-0.4342	-0.4360
- Small firms	-0.3840	-0.3943	-0.3960
- Medium firms	-0.4477	-0.4551	-0.4573
- Large firms	-0.4752	-0.4824	-0.4831
DIR	0.4695	0.4365	0.4371
	(0.5539)	(0.5471)	(0.5487)
DIR × Small	-0.1362 ***	-0.1382**	-0.1360**
	(0.0332)	(0.0649)	(0.0652)
DIR × Medium	-0.0642	-0.0672	-0.0651
	(0.0645)	(0.0573)	(0.0574)
DIR × Institutional Ownership	0.1816 ***	0.1814***	0.1839***
	(0.0569)	(0.0668)	(0.0671)
DIR× Ind. Premium$_{t-1}$ > median		0.0564	0.0561
		(0.0374)	(0.0375)
DIR × Director > 15%			-0.0233
			(0.0425)
Average DIR	0.4534	0.4573	0.4582
- Small firms	0.3554	0.3611	0.3612
- Medium firms	0.4956	0.4977	0.4995
- Large firms	0.5869	0.5899	0.5914

	(1)	(2)	(3)
OFF	0.1176	0.0960	0.0960
	(0.51711)	(0.5080)	(0.5094)
OFF× Small	0.3097 ***	0.3072***	0.3031***
	(0.0513)	(0.0514)	(0.0516)
OFF× Medium	0.0649	0.0639	0.0618
	(0.0524)	(0.0524)	0.0526
OFF× Institutional Ownership	-0.7512 ***	-0.7522***	-0.7593***
	(0.0612)	(0.0615)	(0.0624)
OFF× Ind. Premium$_{t-1}$ > median		0.0280	0.0288
		(0.0290)	(0.0291)
OFF× Officer > 15%			0.0421
			(0.0336)
Average OFF	0.0027	-0.0014	-0.00321
- Small firms	0.3359	0.3319	0.3314
- Medium firms	-0.1908	-0.1950	-0.1974
- Large firms	-0.3678	-0.3721	-0.3755
Home Bias	4.4519***	4.4491***	4.4493***
	(0.1136)	(0.1144)	(0.1147)
Home Bias × Small	0.8355***	0.8363***	0.8359 ***
	(0.1148)	(0.1154)	(0.1157)
Home Bias × Medium	0.6251***	0.6265***	0.6282***
	(0.1187)	(0.1193)	(0.1196)
DE Fixed Effect	7.5981***	7.6014***	7.6033***
	(0.1897)	(0.1897)	(0.1901)
NV Fixed Effect	4.8737***	4.9066***	4.9020***
	(0.9140)	(0.9033)	(0.9043)
CA Fixed Effect	1.2084	1.2098	1.2111
	(0.8821)	(0.8734)	(0.8760)
NY Fixed Effect	2.8222***	2.8281***	2.8311
	(0.4023)	(0.4037)	(0.4043)
Average π	1.2%	1.2%	1.2%

Standard Errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

This table reports maximum likelihood estimates of the parameters of the rational inertia model. The dependent variable is a categorical variable that indicates the state of incorporation. The parameter estimates reflect the effect of one unit of each variable on the latent utility index of firms in the sample. All variables not defined herewith are defined in the Appendix. The table reports in bold firm utility with respect to one unit of each legal characteristic by firm size, given average firm characteristics (i.e., institutional ownership and managerial ownership) and parameter estimates. All specifications include state fixed effects, here reported for Delaware, Nevada, California and New York. The average π is the mean across firms-years of the probability that a firm makes an incorporation choice in any given year, obtained according to the formula in equation 4. The standard errors reported are computed using the Huber-White formula; see Train (2009). Firms with less than three observations are not included. The number of firm-year observations is 81,993, and there are 8,769 firms in the sample.

Table 8: **Rational Inertial Model with Poison Pill Statute Dummy**

	(1)	(2)	(3)
Pill Statute	-0.7603***	-0.7357***	-0.7488***
	(0.2011)	(0.2017)	(0.2017)
Pill Statute× Small	0.6293***	0.6334***	0.6328***
	(0.1465)	(0.1676)	(0.1674)
Pill Statute× Medium	-0.0226	-0.0221	-0.0228
	(0.1665)	(0.1665)	(0.1664)
Pill Statute× Institutional Ownership	-0.6825***	-0.6843***	-0.6820***
	(0.1465)	(0.1465)	(0.1465)
Pill Statute× Industry Premium$_{t-1}$ > median	-0.2232***	-0.2069***	-0.1885***
	(0.0734)	(0.0743)	(0.0768)
Dead Hand		-0.0171	
		(0.2614)	
Dead Hand × Industry Premium$_{t-1}$ > median		-0.2586	
		(0.2117)	
Extreme			-0.0331
			(0.2156)
Extreme × Industry Premium > median$_{t-1}$			-0.2309
			(0.1637)
Average Pill Statute Preference	-0.8947	-0.8577	-0.8577
- Small firms	-0.3750	-0.3349	-0.3350
- Medium firms	-1.2734	-1.2382	-1.2384
- Large firms	-1.3445	-1.3107	-1.3105
DIR	0.4792	0.4580	0.4621
	(0.4210)	(0.4142)	(0.4123)
DIR × Small	-0.2024***	-0.2063***	-0.2065***
	(0.0641)	(0.0642)	(0.0643)
DIR × Medium	-0.0390	-0.0417	-0.0417
	(0.0575)	(0.0642)	(0.0576)
DIR × Institutional Ownership	0.2857***	0.2854***	0.2848***
	(0.0659)	(0.0659)	(0.0662)
DIR× Ind. Premium$_{t-1}$ > median	0.0506	0.0534	0.0484
	(0.0365)	(0.0367)	(0.0366)
Average DIR	0.5156	0.4936	0.494
- Small firms	0.3480	0.3249	0.3251
- Medium firms	0.6164	0.5944	0.5948
- Large firms	0.6962	0.6767	0.6772

	(1)	(2)	(3)
OFF	0.1105	0.1044	0.1262
	(0.3822)	(0.3890)	(0.3733)
OFF× Small	0.3017***	0.3031***	0.3034***
	(0.0526)	(0.0529)	(0.0529)
OFF× Medium	0.0717	0.0732	0.0734
	(0.0537)	(0.0539)	(0.0539)
OFF× Institutional Ownership	-0.7378***	-0.7403***	-0.7401***
	(0.0623)	(0.0627)	(0.0629)
OFF× Ind. Premium$_{t-1}$ > median	0.0155	0.0165	0.0161
	(0.0292)	(0.0295)	(0.0295)
Average OFF	0.0100	0.02738	0.0266
- Small firms	0.3336	0.3519	0.3512
- Medium firms	-0.1741	-0.1566	-0.1574
- Large firms	-0.3564	-0.3409	-0.3417

Standard Errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

This table reports maximum likelihood estimates of the parameters of the rational inertia model. The dependent variable is a categorical variable that indicates the state of incorporation. The parameter estimates reflect the effect of one unit of each variable on the latent utility index of firms in the sample. All variables not defined herewith are defined in the Appendix. The table reports in bold firm utility with respect to one unit of each legal characteristic by firm size, given average firm characteristics (i.e., institutional ownership and managerial ownership) and parameter estimates. Controls for Home Bias and states' fixed effects are included but not reported. The standard errors reported are computed using the Huber-White formula; see Train (2009). Firms with less than three observations are not included. The number of firm-year observations is 81,993, and there are 8,769 firms in the sample.

Table 9: **Rational Inertial Model with IV for Institutional Shareholding**

(1)		(2)	
ATS	-0.2983***	Pill Statute	0.0484
	(0.1087)		(0.2358)
ATS × Small	-0.0110	Pill Statute× Small	0.0051
	(0.0604)		(0.1858)
ATS × Medium	-0.0086	Pill Statute× Medium	-0.2523*
	(0.0452)		(0.1452)
ATS × Institutional Ownership	-0.2119**	Pill Statute× Institutional Ownership	-1.9146***
	(0.0918)		(0.2724)
ATS × Industry Premium$_{t-1}$ > median	-0.0668***	Pill Statute× Industry Premium$_{t-1}$ > median	-0.2078***
	(0.0229)		(0.0663)
DIR	0.2499	DIR	0.2302
	(0.1751)		(0.1705)
DIR × Small	0.0018	DIR × Small	-0.0108
	(0.0948)		(0.0886)
DIR × Medium	-0.0141	DIR × Medium	0.0327
	(0.0590)		(0.0544)
DIR × Institutional Ownership	0.4762***	DIR × Institutional Ownership	0.6711***
	(0.1645)		(0.1561)
DIR× Ind. Premium$_{t-1}$ > median	0.0339	DIR× Ind. Premium$_{t-1}$ > median	0.0270
	(0.0392)		(0.0371)
OFF	0.5951***	OFF	0.5808***
	(0.1628)		(0.1614)
OFF× Small	-0.1163	OFF× Small	-0.0952
	(0.0799)		(0.0795)
OFF× Medium	-0.0950*	OFF× Medium	-0.0788
	(0.0514)		(0.0513)
OFF× Institutional Ownership	-1.4961***	OFF× Institutional Ownership	-1.4305***
	(0.1358)		(0.1353)
OFF× Ind. Premium$_{t-1}$ > median	0.0654**	OFF× Ind. Premium$_{t-1}$ > median	0.0519*
	(0.0315)		(0.0312)

Standard Errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

This table reports second stage maximum likelihood estimates of the parameters of the rational inertia model using the control function to implement the instrumental variable analysis. In the first stage (unreported), the endogenous variable, Institutional Shareholding, is regressed on the instrument, a dummy that equals 1 if a firm is included in the S&P 500 index in the relevant year, and the other exogenous variables. The dependent variable in the second stage is a categorical variable that indicates the state of incorporation. The parameter estimates reflect the effect of one unit of each variable on the latent utility index of firms in the sample. All variables not defined herewith are defined in the Appendix. Controls for Home Bias and states' fixed effects are included but not reported. The standard errors reported are computed using formulas for two-steps extremum estimators (Newey and McFadden, 1994). Firms with less than three observations are not included. The number of firm-year observations is 81,993, and there are 8,769 firms in the sample.

Table 10: **Takeover Probability Logit Regressions**

	(1)	(2)	(3)	(4)	(5)
ATS	-0.120***			-0.0574*	
	(0.0206)			(0.0343)	
Pill Statute		-0.469***			-0.337**
		(0.0717)			(0.133)
DE			0.419***	0.271**	0.148
			(0.0670)	(0.111)	(0.124)
Q	-0.0333***	-0.0325***	-0.0321***	-0.0324***	-0.0322***
	(0.0113)	(0.0110)	(0.0110)	(0.0111)	(0.0110)
ln(Cash)	-0.645***	-0.649***	-0.640***	-0.651***	-0.652***
	(0.209)	(0.208)	(0.208)	(0.208)	(0.208)
Leverage	0.136***	0.133***	0.131***	0.132***	0.132***
	(0.0237)	(0.0234)	(0.0233)	(0.0235)	(0.0234)
ROA	0.0310	0.0314	0.0327	0.0318	0.0317
	(0.0324)	(0.0323)	(0.0324)	(0.0325)	(0.0324)
# Ind. Takeovers	0.0127	0.0121	0.0117	0.0118	0.0118
	(0.00861)	(0.00862)	(0.00861)	(0.00862)	(0.00862)
Institutional Ownership	-0.138	-0.155	-0.162	-0.156	-0.160
	(0.161)	(0.161)	(0.161)	(0.161)	(0.161)
ln(Mkvalt)	0.0213	0.0183	0.0159	0.0172	0.0169
	(0.0221)	(0.0221)	(0.0221)	(0.0222)	(0.0222)
Year dummies	Yes	Yes	Yes	Yes	Yes
Pseudo - R^2	0.0176	0.0183	0.0179	0.0182	0.0185

Standard Errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

This table presents results of the maximum likelihood estimates of the logit model for the total sample excluding observations with missing variables. The dependent variable is a dummy (target) equal to 1 if the company is target of a 50% completed takeover. All variables not defined herewith are defined in the Appendix. DE is a dummy equal to 1 if the company is incorporated in Delaware. Q is the ratio of market-to-book value of assets, where market assets are defined as total assets plus market value of common stock minus book common equity and differed taxes. ROA is the return on assets. Leverage is the book debt to asset ratio. ln(Cash) is the natural log of cash and short-term investments to assets ratio. ln(Mkvalt) is the natural log of market value. # Industry Takeovers is equal to the number of 50% completed takeovers in the industry in the previous year, based on the Fama-French 49 industry classification. Q, ROA, and ln(Cash) are all industry adjusted and (together with ln(Mkvalt)) winsorized at the 1% level. All independent variables are measured at the end of the fiscal year previous to the takeover event. Robust standard errors are reported in parentheses. The number of firm-year observations is 64,376, and there are 8,443 firms in the sample.