THE STATE COMPETITION DEBATE IN CORPORATE LAW*

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Abstract

This paper reviews the literature on state competition for corporate charters. After setting forth the conventional moves in the debate over the efficacy of state competition, it summarizes a transaction cost explanation for Delaware's success in the corporate charter market. It then examines a controversial subset of corporation laws, takeover statutes, whose enactment muddies the debate, and evaluates the empirical literature, which seeks to resolve the debate through financial econometric techniques. The paper takes a final look at the debate with a simple, if not crude, stochastic model of the evolution of a corporate charter market that investigates questions of optimality and stability of the system. It concludes by discussing the implications of this new learning on state competition for public policy.

A perennial issue in corporate law reform is the desirability of a federal system. For notwithstanding the invasive growth of regulation by the national government through the federal securities laws, corporate law is still the domain of the states. While no two state codes are identical, there is substantial uniformity across the states. Provisions typically spread in a discernible S-shaped pattern, as one state amends its code in response to the innovation of another state.[1] The revision process is often analogized in the academic literature to market competition, in which states compete to provide firms with a product, corporate charters, in order to obtain franchise tax revenues.[2] This characterization is the centerpiece of the federalism debate, whether competition, and hence a federal system, benefits shareholders. The hero-- or culprit-- in the debate is the most successful state in the market for corporate charters, Delaware.

Delaware's preeminence and how it impacts on who benefits from competition is the subject of this paper. After a sketch of the conventional moves in the debate on state competition, I put forth a transaction cost explanation for Delaware's success that I have developed elsewhere.[3] I next briefly examine a controversial subset of state laws, antitakeover statutes, and their problematic place in corporation codes, drawing upon my research into the politics behind the adoption of one such statute.[4] Thereafter, I review the findings of empirical studies that have sought to arbitrate the state competition debate by employing financial econometric techniques. I then take a final look at state competition by investigating two important parameters of any legal system, its optimality and stability, through a simple stochastic model of the evolution of a corporate charter market. I conclude with some thoughts on the implications of this new learning on state competition for public policy.

I. The State Competition Literature

A. The Classic Positions Revisited.

The foundation of the federalism debate in corporate law is that revenues derived from franchise taxes provide a powerful incentive to state legislatures to implement corporation codes that will maintain the number of existing incorporations, if not lure new firms to incorporate in their state. All participants in the debate believe that the income produced by the chartering business spurs states to enact laws that firms desire. This behavioral assumption is plausible. There is a positive linear relation between the percentage of total revenues that states obtain from franchise taxes and states' responsiveness to firms in their corporation codes.[5] Namely, the more dependent a state is on income from franchise tax revenues, the more responsive it is in its corporation code. The potential revenue from this tax source can be substantial for a small state: Delaware's franchise tax revenue averaged 15.8 percent of its total revenue from 1960-1980 and, while it is impossible to generate a precise figure, without question, this income considerably outdistances the costs of operating its chartering business.[6]

The assertion that revenues compel states to be responsive to firms' demands for legislation is, as noted earlier, shared by all participants in the state competition debate. The crux of the dispute is therefore whether this responsiveness is for the better. Because of the separation of ownership and control in the management of many large public corporations, when a firm's managers propose a reincorporation or urge the enactment of a statute, no less the adoption of a charter provision, we are concerned over whether they are maximizing the value of the firm. This is the classic agency problem, which goes to the heart of corporation law in a pluralist democracy: how do principals-- shareholders-- ensure that their agents-- managers-- behave faithfully?[7]

Advocates of a national corporation law have termed state competition a "race for the bottom" because they believe that managers' discretion is unfettered, enabling them to promote laws that are detrimental to shareholders' welfare.[8] They base this conclusion on a characterization of the statutes and case law of Delaware, which is the most frequent location for a reincorporation, as excessively permissive, by which they mean tilted toward management. Proponents of the current federal system, however, question this phrasing of the issue, typically viewing the agency problem as trivial. They maintain that the many markets in which firms operate--the product, capital and labor markets--constrain managers to further the shareholders' interest. Accordingly, in their view, conflict between investors and managers over the content of state laws is largely illusory, and the laws that are promulgated can best be explained as mechanisms for reducing transaction costs.

The initial articulation of the market argument in the state competition debate was by Ralph Winter.[9] Responding to William Cary, who launched the first salvo in the modern debate,[10] Winter contended that if management chose a state whose laws were adverse to the shareholders' interest, the value of the firm's stock would decline relative to stock in a comparable firm incorporated in a state with value-maximizing laws, as investors would require a higher return on capital to finance the business operating under the inferior legal regime. This effect in the capital market would impact on managers by jeopardizing their jobs. Either the lower stock price would attract a takeover artist who could turn a profit by acquiring the firm and relocating it in a state with superior laws, or the firm would go bankrupt as it was undercut in its product market by rivals whose cost of capital was lower because they were incorporated in value-maximizing states. In either scenario, managers are compelled, by natural selection, to seek the state with laws most favorable to shareholders to survive in their positions.

Winter's critique is devastating because Cary's analysis completely missed the interaction of markets on managers' incentives. Yet Cary's position cannot be entirely dismissed: more sophisticated proponents of national chartering can move to another line of attack by maintaining that there is a true difference in opinion that turns upon Cary and Winter's assessments of the disciplining effect of markets on managers.

Winter can assume away the agency problem because of his view that the capital market is efficient, such that information concerning the impact of different legal regimes is publicly available and assimilated into stock prices. Support for national chartering presupposes a market that is, at best, only weakly efficient, such that it does not digest information concerning legal rules. In addition, even if stock prices accurately reflect the value of different legal regimes, if product markets are not competitive or the costs of takeovers are substantial, then a manager's livelihood may not be in jeopardy by the choice of a non-value-maximizing incorporation state. When the debate is phrased this way, the disagreement is over an empirical question concerning market efficiency, for which, in principle, there is a clean answer.

To be sure, Cary sees a failure not only in financial and product markets but also in local politics. For his recommendation of national standards for corporations implies that the political process at the national level differs fundamentally from that of the states. Cary considers the flaw in Delaware's code to be a function of that state's desire for revenue and the close personal connections between Delaware legislators, judges and corporate law firms.[11] He contends that national legislation is the solution to this problem. The national government certainly would not be as sensitive to franchise tax dollars as a small state, and practically speaking, there would be no competing sovereigns to attract dissatisfied corporations.

But even if we grant Cary's premise that the states' responsiveness is the source of the problem, the absence of inter-governmental competition is not necessarily the cure. The hitch in Cary's thesis is that he leaves unexplained why national legislators, in pursuit of reelection, would be less susceptible to the political influence of managers for pet statutes than state legislators. For why should diffuse and unorganized shareholders be appreciably better able to communicate their views to Congress when they cannot do so in state legislatures?[12] There are countless pieces of legislation produced by pork barrel politics in Congress-- the tax code is perhaps the most visible example-- and there is no convincing reason to believe that firms would be any less skilled at protecting their interests when it comes to a federal corporation code.[13]

B. <u>An Extension of the Debate: Product Differentiation Stories.</u>

Both Cary and Winter's explanations of state competition predict a trend toward uniformity across state corporation codes. In addition, they imply a process of constant disequilibrium in which the system swings back and forth between corner solutions: As soon as one state innovates with a new provision, all managers should reincorporate in that state in order to increase firm value or to entrench themselves in their positions. Then a second state, to avoid losing revenue, should respond by introducing a further innovation, causing all of the firms to migrate to it, and so forth. But the market for corporate charters is more stable than this picture suggests. While a small number of firms change their incorporation state several times, most businesses that relocate do so only once, some firms never change their incorporation state, and Delaware continues to attract the vast majority of all reincorporations.[14] Accordingly, although the Cary and Winter depiction of the competitive process is intuitively appealing, its solution has the undesirable property that it is a disequilibrium rather than an equilibrium story.[15]

Recognizing this glitch in the classic exposition of the corporate charter market, some scholars posited an alternative explanation of the value-maximizing properties of state competition. Richard Posner and Kenneth Scott, in a short note in their corporate law reader, hypothesized that states differentiate their products by tailoring their codes to attract different types of firms.[16] In particular, they suggest that Delaware specializes in providing charters for large publicly-traded firms. This is an interesting insight but there are serious difficulties with it. First, product differentiation can be achieved within one state's code. Many states, including Delaware, offer different rules for different corporations by the enactment of close corporation statutes.[17] Second, only slightly more than one-half of the largest firms are incorporated in Delaware. Thus, to be useful, Posner and Scott's conjecture must be refined as size alone is not a distinguishing characteristic. But comparison tests across numerous attributes of large public firms incorporated in Delaware and in other states fail to show any statistically significant differences.[18] Consequently, Posner and Scott's speculation is, at best, incomplete.

A specialization story does not provide the normative edge for asserting that state laws are value-maximizing: the welfare implications of product differentiation models are indeterminate, for their equilibrium need not be optimal.[19] A product differentiation story that fits the formal economic models of the Posner and Scott intuition, accordingly, does not have to be attached to the position that state laws are in the interest of shareholders. In fact, Barry Baysinger and Henry Butler have combined a product differentiation explanation with pieces of both sides of the state competition debate.[20] They begin by agreeing with Cary that some state codes, such as Delaware's, are lax and favor managers, while others are strict and favor shareholders. But then the analysis takes an interesting turn. Baysinger and Butler's thesis is that firms will locate in the state whose laws match their shareholders' needs, and in particular, firms with diffuse ownership will select lax states because shareholders can sell their shares if management's performance is poor, while firms with a controlling shareholder or concentrated ownership will choose strict states whose codes facilitate shareholder activism because exit is costly for large shareholders.

Baysinger and Butler sought support for their self-selection thesis by examining the ownership concentration of firms in states with strict and lax laws. They compared the mean holdings of various types of shareholders across firms that had stayed and firms that had left, for four states that were classified as strict, and found that the holdings were significantly smaller in firms that had left. Unfortunately, their definition of strictness is unsatisfactory: Rather than derive the classification from the content of state corporation codes, upon which the point of the exercise is premised, they defined a strict state to be a state from which headquartered firms migrate. This migration index of strictness is a noisy signal because some states have larger firm populations than others, which generates some movement independent of the relative differences in legal regimes. While Baysinger and Butler alleviate the problem by using percentages rather than absolute numbers of firms per state, the criterion still is an inaccurate proxy for what they want to measure. One of the four states they identified as strict by the migration criterion, New York, is, in fact, a relatively permissive state, and a number of states with high corporation retention rates that are permissive under their definition, such as South Dakota, are strict states.[21] This objection is not trivial: Because the sample for testing their thesis consisted of an equal number of firms from each of the four states they classified as strict, the misclassification of one state renders one-quarter of the observations questionable, and we cannot be sure what effect this has on their results.[22]

More important, Baysinger and Butler's explanation is problematic because it calls for behavior that we do not observe. If legal regime and shareholder concentration are paired as they maintain, then when firms are taken over and ownership becomes more concentrated, they should move to strict states. Yet this is rarely done. In the few cases where we see a change in incorporation state at the same time or shortly after a merger, the destination state is typically Delaware, the most "lax" state.

In addition, reincorporation patterns raise a further question concerning the results. Because corporations that reincorporate are those planning to undertake specific types of transactions for which legal rules matter,[23] the power of their test, which is derived from a classification of firms as stayers and leavers, would be weakened if there is a systematic relation between the transaction types and ownership concentration, for there would be an omitted variable problem. The type of legal regime, strict or permissive, would actually be related to the transaction motivating the reincorporation and not to the ownership pattern. For example, when firms go public they frequently reincorporate in Delaware.[24] While this datum superficially appears to further Baysinger and Butler's thesis because the firm is moving to a lax state as ownership is becoming less concentrated, in fact, it underscores a difficulty in testing their explanation, for the transaction of interest coincides with a change in ownership pattern, and thus confounds the test.

It is misleading, however, to characterize firms that have gone public as having diffuse ownership, even though their ownership has become less concentrated-- for when they go public the original owners retain, at minimum, working control. This phenomenon is therefore an additional difficulty for the thesis: Since there are still large controlling shareholders, the firm should not have moved to a permissive state. For in no case does the holding drop to a sufficiently small number of shares such that the difficulty of selling the stock that Baysinger and Butler posit would disappear.[25] Indeed, most of the statistically significant differences in ownership that they found in their sample, given conventional wisdom, would not make a difference for the shareholders' control of the firm.[26] Furthermore, the mean holding in the leaving firms of all of the types of shareholders for which the difference across firms was statistically significant is still a very substantial block of stock. Accordingly, these investors do not have the ability to sell shares easily in either case, casting further doubt on Baysinger and Butler's explanation of state competition.

Given these factors, the more plausible explanation for the ownership pattern in conjunction with migration is not that large shareholders prefer strict laws, but rather, that the initial legal regime is irrelevant to such shareholders. The corporation code does not have the monitoring role that Baysinger and Butler ascribe to it because for firms with controlling shareholders that move upon going public, as well as for the average firm in their sample, it is not helpful to talk about separation of ownership and control. In short, some other factor must be driving corporations to Delaware. While

Baysinger and Butler offer an elegant twist, corporate self-selection, to the state competition debate, the data do not satisfactorily accord with their thesis.

C. A Transaction Cost Explanation of the Market for Corporate Charters.

The feature in Cary and Winter's analysis that generates instability is the assumption that there are no transaction costs of moving. If there are costs to reincorporating, which there are,[27] then it is less likely that a corner solution will develop. The importance of transaction costs has a role in both of the product differentiation explanations that emphasize variety in corporation codes. It is explicit in the Posner and Scott size hypothesis-- they suggest that only large firms can afford to relocate in Delaware. And while it may not be crucial to Baysinger and Butler's thesis, they maintain that it is information costs that prevent all firms from choosing the most liberal state and then tailoring their charters to meet shareholder preferences.

My explanation of the corporate charter market also relies on transaction costs. It is a transaction cost explanation of state competition with two prongs: one concerns the reasons why firms move, and the other concerns the persistence of Delaware's extraordinary market share. Unlike the product differentiation stories, it predicts substantial uniformity in state laws, in keeping with the classic positions of Cary and Winter, as well as the more salient characteristic of corporation codes. Under this explanation, variety in corporation codes is primarily a function of diffusion--the differential in time by which innovations are enacted by legislatures across the states-- rather than of the preferences of firms.[28]

1. **Why do firms reincorporate?** I expected that reincorporations would accompany changes in business operation and organization that could be undertaken more cheaply under a different legal regime. The cost reduction could involve direct costs-- for instance, where the legal rules governing the transactions differ across the states imposing, correspondingly, different costs on specific transactions-- or it could involve indirect costs-- the new regime might affect the likelihood of litigation over transactions. The data on reincorporations support this contention. I found that firms reincorporate when they are preparing to initiate a discrete set of transactions, the most frequent being a public offering, a mergers and acquisitions program, and antitakeover defensive maneuvering.[29] A number of legal rules that vary across the states, including the conditions for shareholder voting and appraisal rights, affect the cost of engaging in such behavior. For instance, corporation codes may limit merger voting and appraisal rights of shareholders of acquiring firms, reducing the firm's acquisition costs. They may have statutes regulating takeovers or making charter amendment flexible, reducing the cost of resisting a bid. Finally, different organizational rules, including the requirements for

shareholder meetings, written consent and board communication, both ease the transition to, and reduce the cost of operating, a newly publicly-traded firm.

In addition, one of the common characteristics of these transactions that motivate a reincorporation is that they increase the likelihood that a firm will be embroiled in litigation. For instance, acquisitions and efforts to thwart them frequently produce protracted lawsuits over the fairness of the offer or the appropriateness of management's actions. Going public introduces into the firm a new class of stockholders whose interests may differ from those of manager-shareholders, setting the stage for potential fiduciary breaches. In all of these situations, a legal regime reducing expected litigation costs is desirable. A well-developed case law and legal expertise in corporate law are mechanisms by which states can lower those costs. For they enable counsel to provide managers quickly with opinion letters concerning the transactions they wish to pursue, which facilitates business planning to circumvent problems that could spark litigation.

The interest of reincorporating firms in finding legal regimes that reduce their costs of doing business is further supported by survey responses: Firms that reincorporate to undertake the transactions mentioned earlier perceive the laws of the origin and destination states to differ significantly and emphasize that the difference is an important factor in their decision to move, more frequently than other firms.[30] Moreover, firms that reincorporate to pursue the identified transactions choose more frequently to relocate in the most responsive state, Delaware.[31] If there is a self-selection story to be told about state competition for corporate charters, it is more likely to be one that matches responsive states with firms engaging in particular types of transactions rather than firms of specified ownership structures.

While the transaction cost explanation of reincorporation tells us why firms change their incorporation state, it is ambiguous concerning who benefits from the move. If firms reincorporate to reduce transaction costs, then migration is value-maximizing for shareholders by definition, as cost minimization is an inherent aspect of equity share price maximization. But when the stakes are a reduction in expected litigation costs, the direction of the effect is muddied. For the lawsuits are comprised principally of minority shareholder claims and the beneficiaries of the cost reduction may therefore include managers, who are the defendants in the suit, and whose interest in this context may conflict with that of shareholders. Moreover, even when the cost reduction consists of making a specific transaction cheaper to undertake, the move is value-maximizing only if the transaction itself benefits shareholders.[32]

2. **Why is Delaware the overwhelming choice as destination state?** The transaction cost explanation of the corporate charter market provides a different perspective on state competition: Delaware's persistent large market share is maintained by a first-mover advantage created by the reciprocal relation that develops between the chartering state and firms

because of their substantial investment in assets that are specific to the chartering transaction. The concept of a transaction specific asset, developed by Oliver Williamson, arises in an intertemporal context and refers to an asset that cannot be redeployed in an alternative use at a price anywhere comparable to its value in the original contract should that contract be disrupted.[33] Contracts involving such assets transform the parties' exchange relation from a competitive market transaction into a bilateral monopoly. A simple example of a transaction specific asset is the specialized racks that are used to transport finished automobiles to market. Such racks are customized for specific car models and cannot be used to transport models of different manufacturers. As a consequence, they are valuable only in certain transactions. Both sides, transporter and car maker, are vulnerable and have holdup power. At the outset, there are a number of transporters and automobile manufacturers with which to negotiate, but once parties enter into an agreement, the manufacturer needs that particular hauler to get its cars to market and the hauler needs that manufacturer to earn a return on the racks.

The key feature for analysis, then, is that the non-redeployable character of the asset makes the parties to a contract vulnerable and necessitates additional institutional arrangements, which Williamson terms "governance structures," that reduce the possibility of exploitation and safeguard investments in the transaction specific asset. One such mechanism is the bilateral use of hostages-- the contracting party who does not own the transaction specific asset may place himself in an analogously vulnerable position to the asset owner by giving up something of value, posting a bond so to speak, thereby credibly guaranteeing his performance so as to maintain the other party's incentive to invest in the transaction specific asset.[34] In cases of asset specificity, the exchange of hostages may be a prerequisite for exchange itself to occur.

How does this analysis apply to the corporate charter market?[35] Because the transactions between a firm and its incorporation state extend over a long period of time and changing incorporation state is not costless, if a firm relocates, it is vulnerable to exploitation by the state. In particular, the state may charge a premium for an incorporation fee and then alter its code or simply not implement the latest innovations, to the firm's detriment, knowing that the firm cannot easily relocate without incurring additional expenses. Hence, because of this nonsimultaneity in performance, if a state is to lure incorporations with a favorable corporation code and receive high fees, it has to guarantee its code's continued responsiveness to be successful.

Of all the states, Delaware is best positioned to credibly commit itself to responsiveness. In the first place, its very success in the incorporation business serves, ironically, to constrain its behavior: The high proportion of total revenue it derives from franchise taxes guarantees continued responsiveness because it has so much to lose. For unlike states less dependent on franchise revenues, Delaware has no readily available alternative source to which it can turn in order to maintain expenditures. It cannot afford to lose firms to other states by failing to keep its code up-to-date. In this way, Delaware offers itself as a hostage by its reliance on franchise taxes to finance its expenditures.

Second, an additional institutional mechanism to warrant responsiveness is Delaware's constitutional provision mandating all changes in the corporation code to require a two-thirds vote of both houses of the state legislature.[36] This makes it difficult to renege on provisions already in the code and, correspondingly, on the overall policy of being responsive to firms. While the provision would appear to make future changes equally difficult, if firms are risk averse when it comes to corporation codes, they would favor a maximin strategy in which the constitutional provision would be desirable for it helps to ensure that the legal regime can be no worse than it is at the time of incorporation. This provision thus complements Delaware's high proportionate franchise tax, for while the constitution is backward-looking, limiting radical revamping of the code, the incentives provided by the franchise tax revenue are forward-looking, as the state reacts to the high proportion of franchise tax revenues in the past by maintaining its responsiveness to incremental change in the future.

Third, further guaranteeing responsiveness, Delaware has invested in assets that have no use outside of the chartering business. These assets, which can best be characterized as legal capital, consist of a store of legal precedents forming a comprehensive body of case law, judicial expertise in corporate law, and administrative expertise in the rapid processing of corporate filings. They are also features that are not as easily duplicated by other states as the provisions of a corporation code because of the startup costs in developing expertise and the dynamic precedential-based nature of adjudication by courts.[37] These factors-- the high proportion of franchise tax revenues, the constitutional supermajority requirement, and the investments in legal capital-- create an intangible asset with hostage-like qualities, a reputation for responsiveness,[38] that firms weigh in their incorporation decision.

The large number of firms already incorporated in Delaware solidifies Delaware's commanding position in the market by giving it a first-mover advantage. There is safety in numbers-- the more firms there are, the higher the level of franchise tax paid and the more the state relies on its incorporation business for revenue, thereby maintaining the incentive to behave responsively. In addition, the large number of firms makes it more likely that any given issue will be litigated and decided in Delaware, providing a sound basis for corporate planning. Both of these features attract even more firms, for the more responsive a state and the more settled its law, the cheaper it is for a firm to operate under that legal system. And the more firms there are paying its franchise tax, the greater the return Delaware earns on its reputation for responsiveness, and the stronger its incentive to not engage in an end-game strategy of exploiting firms, which would damage, if not destroy, its investment in that reputation.

This brings us to the demand side of the market, which also aids Delaware in maintaining an edge. There is a third party besides managers and shareholders who is affected by the incorporation system, legal counsel, and the features of Delaware's legal system that are attractive to firms-- a well-developed case law with a pool of handy precedents and a means for rapidly obtaining a legal opinion on any issue-- are also advantageous to corporate lawyers. For they lower the cost of furnishing advice to clients. This is especially important for outside counsel, who service firms that are headquartered in different states, and who are instrumental in choosing the incorporation state.[39] They realize cost savings by having clients operate under one legal regime. In addition to encouraging the choice of Delaware as the incorporation site for clients, specialization also provides an incentive for advising firms to remain in Delaware, because moving will diminish the attorney's human capital. Counsel's desire to recoup their investment in mastery of the institutional detail of Delaware law ties firms reciprocally to Delaware, just as Delaware is tied to firms.

Human capital is important in another way. Delaware's stake in the chartering business exceeds the revenues it receives from the franchise tax. A number of its citizens specialize in providing services to nonresident Delaware corporations. It is, accordingly, in the interest of those individuals that Delaware be responsive to corporations so that the demand for their services does not decline.[40] Delaware's supermajority constitutional provision therefore serves an important function besides credibly precommitting it to be responsive to firms; it protects the value of these individuals' personal investments, because it makes it more difficult for a political realignment in the state to alter the longstanding course of corporate law responsiveness.

This transaction specific human capital, creating a "mutual reliance relation"[41] between firms and Delaware, joins the parties in long-term cooperation because of their reciprocal vulnerability, and cements Delaware's market position. For it makes it difficult for a rival to compete successfully. Another state cannot simply offer corporations the same code at a lower price and attract the marginal firm because a switch would increase operating costs, the cost of legal counsel, and more important, the state cannot provide a credible commitment of superior service. In particular, a rival state cannot place itself in the same vulnerable predicament as Delaware because it starts from a low franchise tax ratio.[42] For a state to begin to compete, a significant number of firms would have to agree to move to it in concert. But there is no incentive for corporations to move to another state so long as Delaware continues to cooperate, and powerful incentives for Delaware to continue to do so.

II. Takeover Statutes: Anomaly or Exemplem?

More than most provisions in corporation codes that are the technical terrain upon which the state competition debate is fought, state takeover statutes are a source of substantial controversy. The statutes were enacted in two waves: the first generation of takeover laws that spread rapidly across states in the 1970's directly regulated tender offers by establishing waiting periods and administrative hearing requirements for bids for target firms that often had dubious jurisdictional contacts with a state. After the Supreme Court ruled that Illinois' statute burdened interstate commerce in 1982 in Edgar v. Mite,[43] new statutes, with more plausible jurisdictional bases were devised.

The new statutes have three major permutations: (1) control share acquisition statutes, that require a majority vote to approve acquisitions of the firm's stock that constitute control, as well as specified increases in controlling positions;[44] (2) fair price statutes, that require either a supermajority vote, disinterested board approval, or payment of a fair price for the second step of a two-tier acquisition;[45] and (3) redemption rights statutes, that give all shareholders cash redemption rights against any acquirer of thirty percent of the firm's stock.[46] The fair price provision is the most popular of the three, having been enacted by ten of the first fifteen states to adopt second generation statutes.[47] All three types of takeover statutes can raise the price of an acquisition, although unlike the first generation, they codify tactics that firms could undertake by self-help through charter provisions and they permit firms to opt out from the coverage. Their potential to discourage unfriendly acquisitions is, of course, what gives them bite, and, correspondingly, what makes them controversial.

Takeover statutes are of particular interest because they generate a puzzle for the state competition literature. For some commentators who contend that state competition produces laws that benefit shareholders, have also maintained that mechanisms that facilitate management's efforts to thwart hostile bids, such as takeover statutes, are not in the shareholders' interest and should be banned.[48] The difficulty for this analysis is that many firms choose their incorporation state to facilitate defensive maneuvering against takeovers. To be consistent, it would seem that they must argue either that state competition is managerialist or that defensive tactics are beneficial to shareholders.[49]

A. The Politics of a Takeover Statute.

I set out to explore this apparent inconsistency in the literature concerning the effects on shareholder welfare of state competition and takeover defensive tactics by examining the politics behind the adoption of a state takeover statute.[50] For one avenue for resolving the difficulty would be if we could differentiate between code provisions by their political support. My initial hypothesis, which was sparked by newspaper accounts, was that provisions could be differentiated as value-maximizing or managerialist by who lobbied for their passage.

In particular, I expected takeover laws to be supported by a coalition of labor, local community leaders and managers. In such a context, managers would be better positioned to have a law adverse to shareholders enacted because they could appeal for support to a broad-based constituency, which would have no particular interest in the everyday technicalities of corporation codes. I expected to find that takeover laws would be aberrational in their politics, and hence sharply distinguishable from other provisions in corporation codes.

The hunch was wrong. In Connecticut, the passage of a fair price statute was of moment only to one firm. A major corporation in the state, the Aetna Life and Casualty Insurance Company, promoted the bill with the aid of a trade group similar to a state chamber of commerce, the Connecticut Business and Industry Association.[51] The only other organization interested in the legislation was the executive committee of the corporate law section of the state bar association.

There was, however, one distinct difference in the passage of this takeover statute when compared to other corporate law provisions in Connecticut: the corporate bar was not consulted and learned of the provision only after it was about to be approved by the state Senate. Historically, revisions of the corporation code have originated with the bar committee. Moreover, the limited opportunity for involvement by the corporate bar in the legislation was clearly connected to the peculiar procedural posture of the bill-- having missed or waited until after the session's filing deadline, the fair price statute's sponsors had it attached as an amendment to an inconsequential bill providing for changes in corporate names. This procedure made it possible for the bill's sponsors to bypass the requirement of a public hearing on the fair price statute. Apart from the procedural irregularity, the experience of other states regarding which groups were active in the enactment of second generation takeover statutes is indistinguishable. The statutes proceed through state legislatures at an extraordinarily rapid pace, with virtually unanimous bipartisan support, at the behest of the local business community and quite frequently, one concerned firm.

B. When Should We Question Takeover Statutes?

While the micro explanation of the political process identified the parties involved in the legislation, it did not provide clear cut evidence for resolving the issue motivating the study: Who do takeover statutes benefit? I therefore returned to first principles, by trying to answer the question when would shareholders voluntarily adopt a charter provision such as a fair price statute. For if we had a plausible explanation of which firms voluntarily adopt shark repellent amendments, we would be better able to assess how legislation incorporating such provisions impacts on firms.

The logical place to start is with the shareholder's decision problem in the takeover context, whether or not to tender.[52] A decision analysis that incorporates the findings of empirical research on takeovers provides a compelling explanation for why fair price provisions are more popular in charters and statutes than control share acquisition or redemption rights rules. The latter two statutes consist of separate features that are combined in a fair price provision, supermajority approval and equal premium payments respectively, and accordingly they offer firms fewer options for the structuring of acquisitive transactions. Because bidders have more room to maneuver under a fair price statute, it introduces fewer barriers to an acquisition. In addition, target shareholders' decisions to tender or not vary under the three takeover rules, such that only under a fair price regime is there a decision strategy that sometimes tenders and sometimes does not. These two factors suggest that shareholders voting on shark repellent amendments could be rationally trading off some decrease in the probability of receiving an initial bid against an increase in the certainty of receiving an equal share of the bid premium: They appear to choose most frequently the tactic that has the smallest impact on initial bids and at the same time retains for them some possibility of receiving a higher premium.

To answer the initial question concerning which firms adopt shark repellent amendments, some important institutional details have to be added to provide realism to the analysis of the decision problem: the typical multi-stage techniques bidders employ to obtain control, and the systematic differences across investors in information costs regarding such bids. The confluence of these factors causes a disproportionate sharing of takeover premiums in multi-stage offers across shareholders, with more informed investors typically receiving the greater share. In the takeover situation, therefore, in contrast with the norm for corporate law, shareholders' interests may differ. Consequently, shareholders' views on the welfare-enhancing properties of shark repellent provisions will not be uniform across the class. In particular, because provisions such as a fair price requirement enable small investors to realize information cost savings by equalizing bid prices, small shareholders should tend to favor the adoption of such provisions while larger, institutional investors, who have superior information and benefit from the disproportionate premium structure, should not. A firm's voluntary adoption of an antitakeover provision would, correspondingly, be dependent upon its ownership concentration.[53]

The corollary of an ownership composition explanation of shark repellent amendments is that the impact of a statute would differ across firms, and could, accordingly, become quite problematic. For it could be a means for managers to circumvent shareholders where a favorable vote on a charter amendment would not be attainable. Given that management can place a proposal on the agenda with less difficulty than a shareholder, this troubling possibility would be mitigated by statutes with opt-in rather than opt-out regimes.[54] But opting-in also has disadvantages: It negates much of the transaction cost savings of a statute for those corporations whose shareholders would approve a charter provision because a vote is still required.

I sought to test whether ownership concentration would be an accurate predictor of firms with shark repellent amendments by comparing concentration measures for firms with and without fair price provisions. None of the differences were statistically significant. I also partitioned the firms in the sample by their incorporation state, grouped by whether or not they had a second generation statute, and compared the concentration levels for those with and without fair price provisions within the subgroups separately. The concentration ratios differed significantly across the states, with the concentration ratios being lower in states with second generation statutes.[55] This appears to support a transaction cost reducing view of the statutes-- states that have enacted the legislation have more firms with diffuse ownership, which are the firms, under my conjecture, whose shareholders would approve such provisions. There is, however, anecdotal evidence in support of the opposite proposition: The firm that promoted the Connecticut legislation, Aetna Life and Casualty, has a relatively high concentration ratio, which, in keeping with the ownership composition thesis, suggests that its management would have had difficulty obtaining shareholder approval.[56]

The impact of takeover statutes remains, then, a troubling open question. This is particularly so in the case of a fair price statute because it is inexpensive to obtain shareholder ratification, evidenced by how many firms do so. The Connecticut experience suggests that state chartering may not always be an unmitigated good. Yet it also entails a positive assessment of Delaware's role in the corporate charter market. Delaware was slow to enact a first generation takeover statute, the one it did adopt was not as hostile to bids as other states' versions-- there was no hearing requirement and firms could opt out of its coverage-- and it has, as yet, no second generation statute. As the explanation of the corporate charter market suggests, Delaware would be better able to resist political pressure for takeover laws because of the large number of incorporated firms, which includes both acquirers and targets.[57] Delaware legislators have to be responsive to a corporate constituency whose interests are varied and conflicting. In addition, other interested parties, such as financial intermediaries, who oppose restricting takeovers, would find it more worthwhile to lobby in Delaware than in any other state because its statute would have a greater impact on acquisitions as it would apply to so many firms. Consequently, it is unlikely that any one firm could have the political clout in Delaware that Aetna displayed in Connecticut.[58] As a result, we can expect a different political equilibrium in Delaware than in other states when it comes to takeover defenses: Target firms will rely on self-help and shareholder approval rather than on a blanket statutory solution.

III. Event Studies as Arbiters of the Debate

The debate over the efficacy of state corporation codes essentially boils down to an empirically testable question. If we could identify who benefits from the market for corporate charters, managers or shareholders, then fashioning a political consensus regarding the optimal level of government regulation would be straightforward.[59] The best available means of generating information bearing on this question is to examine the impact on stock prices of reincorporating. For a change in equity value conveys investors' assessment of the event's[60] expected effect on shareholder wealth. A price increase upon a firm's reincorporation would mean that investors expect the change in incorporation state to increase the firm's future cash flows, and from this it could be concluded that shareholders benefit from a move. Similarly, a decline in stock price would indicate the anticipation that shareholder welfare will be diminished by the move and confirm the managerialist position.

Several such event studies have examined state competition. Researchers have addressed the issue directly by investigating the impact of reincorporating, and indirectly by looking at the effect of state court decisions and state takeover laws. The results are summarized in table one. None of the studies support the managerialist position for none

(Insert table one here.)

found a negative effect on stock price. Rather, to the extent that they can be used to buttress any position, it is the value-maximizing one associated with Ralph Winter.

A. Event Studies on State Competition.

Peter Dodd and Richard Leftwich, in the first empirical study concerning state competition, found statistically significant positive abnormal returns to the stock of reincorporating firms over the two-year period preceding the reincorporation.[61] The returns around the event date were not, however, significant. While this finding undermines Cary's position, it is difficult to assert that it bolsters Winter's view because the period of abnormal returns is so far before the announcement of the move that it is possible that the abnormal returns are due to some other factor affecting the firms.

I sought to refine the Dodd and Leftwich study by partitioning the portfolio of reincorporating firms according to the reasons for which the reincorporation was undertaken, and by using daily rather than monthly stock price data.[62] I found that firms reincorporating to embark on mergers and acquisitions programs, as well as the aggregate portfolio of reincorporating firms, experienced statistically significant positive abnormal returns on and around the event date. The signs of the cumulative average residuals for the other groups were also positive, although they were not significant.[63] This finding creates further difficulty for the Cary thesis and provides more clear cut support for the value-maximizing interpretation of state competition. Although the positive revaluation of the firm's stock may be generated by the activity associated with the reincorporation rather than the reincorporation itself, the rise in price that occurred in the months preceding the event date is most probably caused by leakage concerning the plan to reincorporate and engage in the associated activities in the future and not other events. For all firms that were the subject of any report in the Wall Street Journal in the two months preceding and one month following their event dates were excluded from the sample.

Elliott Weiss and Lawrence White recently examined another theme in the literature to get at the crux of the state competition debate: Who is helped out by Delaware court decisions?[64] They investigated the effect of seven Delaware opinions that they characterized as reversals or departures from existing corporate law rules. They hypothesized that if the decisions benefitted shareholders, firms would experience abnormal positive returns, and if not, there would be negative returns. They found no statistically significant abnormal returns were earned by Delaware firms, and the signs of the residuals were not consistent with any particular thesis.[65]

As a further test of the state competition debate, they sought to explain the relative size of the cumulative average residuals for one of the decisions by the firms' likelihood of being taken over.[66] They had two alternative scenarios: If the decision was detrimental to shareholders because it discouraged takeovers, companies that are more likely to be targets should have larger negative residuals, and if the decision was favorable to investors because it decreased the likelihood of an exploitative cash out, companies that are more likely to be taken over would have larger positive residuals. This is the more interesting of their tests because most of the judicial opinions are of concern only to a subset of firms -- potential targets -- and hence, in a randomly constructed portfolio of Delaware firms, only some of the firms would fit this category and any effect of the event on them could be overwhelmed by the insignificant effect of the event on the aggregated portfolio. The regression failed, however, to explain much of the variation in the residuals: Only one of the characteristics of targets that they identified, firm growth, was significant.

Weiss and White conclude from the failure to find abnormal returns at the time of the decisions and from the lack of explanatory power of their regression of the residuals on target characteristics, that investors do not believe that changes in corporate law affect stock value and that, correspondingly, they are not concerned about differences in statutory regimes. As a result, they maintain that there is no state competition to speak of. Their study makes an important contribution to our understanding of state competition, but the implications they derive for the state competition thesis from their data are questionable. In the first place, a plausible alternative interpretation of the data is that investors anticipate Delaware court decisions better than researchers.[67] A complementary, and perhaps more realistic, explanation is that it is likely that shareholders expect the state legislature to rectify any undesirable decision. For example, Delaware recently revised its code to allow firms to exempt outside directors from liability.[68] This move is presumably a reaction to the Delaware Supreme Court's controversial decision, Smith v. Van Gorkom,[69] that held outside directors liable for too hastily accepting an acquisitive offer. In addition, given the complexity of corporate acquisitions, many of the decisions in the study could have offsetting positive and negative effects on shareholder welfare.

Although some participants in the state competition debate have emphasized the role of the Delaware judiciary in furthering the state's market position while disputing who has benefitted from doctrine,[70] there is another role for courts, with sharply different implications, from the transaction cost economics point of view. One factor that transaction cost economics emphasizes is that reducing uncertainty reduces the cost of doing business. Hence, certainty concerning the structuring of a transaction is valuable in corporate law. Indeed, one of the benefits stressed by firms reincorporating in Delaware was its pool of precedents, and the corresponding ability to receive opinion letters on contemplated transactions quickly. In this context, the substantive content of a legal rule is far less important than having a rule. A rule defines the rights of the parties, enabling them to bargain around it if they so desire, and provides guidance as to how a transaction should be structured if liability is to be avoided. This feature permeates corporate law: corporation codes are enabling statutes that set presumptions to govern specific issues and allow firms to tailor their internal organization around the rule. Indeed, the costs of particular rules could be offset by the benefits of having a rule around which future transactions can be planned. Thus, from the transaction cost perspective, which would not predict that firms necessarily realize abnormal returns on the announcement of corporate law decisions, it is not surprising that the market did not react to the decisions in any systematic way.

In addition Weiss and White's findings must be interpreted with caution. Their conclusion is built upon a description of the evolution of the corporate law rules that are produced by court decisions over time. Courts are depicted as engaging in a balancing process that continually adjusts and reconciles the interests of shareholders and managers, in which no one decision can be evaluated separately. Such a story is most in keeping with an explanation that they reject, that the event study methodology is inappropriate for determining the effect of court decisions. If judicial decisionmaking is the perpetual adjustment process they describe, it does not consist of discrete events.[71] Event studies do not -- and cannot-- evaluate the effects of evolutionary processes. The methodology presupposes information of a lump-sum nature that is introduced in the market instantaneously with a single event, with its accuracy a function of the correct specification of an event date.

B. Studies on the Effect of Takeover Statutes.

Research on first generation takeover statutes has produced uniform findings, although only one of the two empirical studies in this area sought to relate the research to the state competition debate. Gregg Jarrell and Michael Bradley, and Margaret Guerin-Calvert, Robert McGuckin and Frederick Warren-Boulton (Economic Analysis Group), using both cumulative average residual techniques to estimate bid premiums and actual bid prices, found that the premiums received by firms in states with takeover statutes were significantly higher than those received by firms in unregulated states.[72] There is variation in the studies' findings on whether state regulation reduces the number of acquisitions. The Economic Analysis Group found no clear evidence that the proportion of successful takeovers declined with regulation. Jarrell and Bradley found that the relative frequency of successful cash tender offers for firms in states with statutes declined after the legislation was enacted from that before enactment, but they do not say whether they tested for the decrease's statistical significance. Of course, none of these results resolve the state competition debate. They, at best, point to a possible trade off of premium size against initiation of bids, which makes it difficult to decipher whether shareholders are losers or gainers under these laws.

The Economic Analysis Group did, however, relate their research directly to the incorporation debate. Jarrell and Bradley appear to have restricted their identification of regulated firms to those whose incorporation state had a takeover statute, thereby possibly misclassifying some targets whose bids were in fact subject to regulation. The Economic Analysis Group included and distinguished targets by their susceptibility to both place of business and charter regulation. They found that when they partitioned their sample of regulated targets by type of jurisdiction, the dummy variable for jurisdictional type was significant. The Group had hypothesized that this would be so because they believed that regulation based on a firm's physical location more clearly constitutes a negative externality created by state competition than regulation by incorporation state, since moving assets is more costly than moving a charter. They concluded that place of business regulation might be the most important component of the significant effects of state regulation on bid premiums in the aggregated estimations in which no jurisdictional variable was employed.

Second generation statutes are only of the incorporation state jurisdictional variety, and thus examination of their effect might shed more light on the Economic Analysis Group's work. Because some of these statutes have been passed quickly after their introduction, with little debate, they are better suited than most pieces of legislation for an event study, for pinpointing the event date is crucial to the power of the statistical tests. I studied the effect on stock prices of each type of second generation statute, rather than their impact on bid premiums. The statutes in my studies were those adopted by Connecticut (fair price provision), Pennsylvania (redemption rights provision), and Missouri (control share acquisition statute), for all of these states enacted the legislation within a few months after introduction as bills, and are thus good candidates for an event study.[73]

No effects were discernible in any of the event studies: The average residuals were not significant on the event date, the cumulative average residuals revealed no distinctive pattern, and the abnormal returns were of insignificant magnitudes.[74] Of course, since not all firms are potential takeover targets, not all firms should be expected to experience abnormal returns upon the enactment of these statutes. This seriously weakens the power of the tests because the aggregate portfolio could be burying the impact of the legislation on the unidentifiable subset of future target firms (although presumably the market also cannot predict in advance which firms are future targets). A selective <u>ex post</u> examination to see if this was a factor, by looking at the residuals of firms that subsequently turned out to be targets, did not help. One Connecticut firm, Scovill Inc., was in a takeover fight shortly after the enactment of the Connecticut statute. While it was not involved in the drafting or passage of the legislation, management hoped it would be protected by the law.[75] However, Scovill's abnormal performance was not greater than that of other Connecticut firms. In addition, the returns of the proponent of the legislation, Aetna Life and Casualty, were insignificantly negative.

In sum, the financial research on takeover statutes does not provide any new information on the state competition debate. It cements the intuition that these statutes, like most defensive tactics, will increase the premiums target shareholders receive, possibly at the cost of a reduction in the aggregate number of bids. Such a tradeoff does not indicate whether shareholders, managers, both, or neither, are better off. To be sure, the event studies on reincorporation, which go directly to that question, offer greater support to the Winter than to the Cary position, for there is no evidence of negative returns to migrating firms (or to firms operating under Delaware law). But studies of the impact of specific statutes are even more inconclusive and are subject to substantial methodological difficulties given the limitations on obtaining precise event dates for legislation. The most we can say with confidence, drawing on the research, is that reincorporation produces abnormal positive returns for some firms (those engaging in certain transactions), and for the rest it is a zero net present value transaction.[76]

IV. Stability and Optimality in State Competition: A Markov Model of the Process

One way to explore the dynamics of state competition is to use a probabilistic model known as a Markov process.[77] A system following a Markov process embodies the intuition motivating the state competition debate because its evolution through time can be conceptualized as propelled by the winner of a series of independent competing forces. The forces can be arrayed in a matrix that generates the process and enables us to describe its likely progression. From such a matrix, we can obtain the process's stationary or limiting probability distribution, which indicates the tendency of the system in the long run to be in a specific state.

Such a model abstracts away a legislature's ability to control the competitive process, and is analogous to an invisible hand. It is in the spirit of the Hayekian view of the benefits of decentralization, the spontaneous aggregation of information. It thus provides a rough baseline approximation for assessing the optimality and stability of the corporate charter market. It is a stylized story with the advantage of a model, that of making assumptions explicit and of assessing effects of small changes in variables in the system. The model's benefits are also its limitation: The dynamic properties of Markov processes are definitional, such that if a process is Markov, it follows specific rules. This means that an important initial focus of analysis is whether such a process is an appropriate characterization of state competition. Accordingly, I first detail the assumptions for modeling state competition as a Markov process, and thereafter consider several simple simulations for illustrating what the long run tendency of the system could be.

A. Defining the Process as Markov.

The system that we are modeling is the corporation laws of the states. To avoid confusion, I will refer to the states of the union as jurisdictions. A "state" will refer to a particular constellation of laws in the jurisdictions. I will continue to use state, rather than jurisdiction, when using the phrase state competition. A Markov process is a way of describing how a system moves across its various states.

The information concerning a system's dynamics can be described by a matrix. In a Markov process, a system stays in a state for a random period of time and then moves to another state, according to stable transition probabilities. State competition is depicted as a process that moves stochastically from one set of laws in the jurisdictions to another set. For example, let us assume that there are only three jurisdictions, A, B, and C, and currently A has corporate law 1, B has corporate law 2, and C has neither law. C might decide to enact law 2. In this new state, A has law 1, B has law 2, and C has law 2. If we call the original state, state i, and this new state, state j, the matrix entry (i,j) indicates the force by which the system moves from state i to state j. From this entry we can derive a transition probability, Q_{ij}, that describes the likelihood of starting at i and moving to j, and time L(i), the actual staying time or sojourn of the system in i before it moves. Remaining in a state may also be a movement of the process.

Two assumptions are necessary to describe the model as Markov, which will enable us to use the mathematical properties of Markov processes to study the evolution of the system. A third assumption will be useful to explore the optimality of the system.

A.1: The number of states is finite.

A.2: Legislatures consider only the present set of laws and not their history in deciding to adopt or repeal a particular law. In other words, only the present state of the system is relevant for the future state.

A.3: There is always a possibility that a law may be adopted or repealed.

The first assumption of finite states is adopted primarily for mathematical convenience.[78] It is neither inherently implausible nor technically important to warrant discussion.

The second assumption is crucial, for it is the defining characteristic of a Markov process, that the future is conditionally independent of the past, provided the present is known. This is not as controversial as might appear. In our context, it implies the plausible scenario that when a legislature is considering a change in its corporation code, the probability of the change occurring depends only on knowledge of the current laws -- its own laws and the laws of other jurisdictions at that time -- and not on the history of how those laws came to be enacted. Conventional wisdom supports this assumption in the constitutional maxim that one Congress cannot bind a future Congress. Unlike courts, whose decisions are said to be constrained by precedent, it is reasonable to posit that legislators approach each lawmaking session from their knowledge of present conditions and needs. For instance, legislators reintroduce bills that have failed in previous sessions, and laws that were adopted in one session are often modified in the very next session.[79]

This second assumption contains a further, perhaps more disputable, restriction on the legislative process: the probabilities of change are independent of time. This means that the likelihood of starting in state i and moving to state j (C's enactment of law 2 when A has 1, B has 2 and C originally has neither law) remains the same throughout time, whether it is September or July, 1986 or 1926. More precisely, the transition probabilities depend only upon the state in which the system is and not the time at which it is in the state.[80] This would be a troublesome restriction if, for instance, legislators behave differently at election time, or if the probabilities of passage differ dramatically with the composition of the legislature.[81]

I believe, however, that the time homogeneity restriction does not create serious difficulty in the corporate law context. First, one of the consistent features in the enactment of corporation laws, illustrated by the politics of Connecticut's second generation takeover statute, is the bipartisan, nearly unanimous, support for such provisions.[82] Second, corporation laws are generally not a salient issue in election campaigns. Third, we can rely on the notion of a "critical election" to maintain that when new representatives take office the transition function does not change. Political scientists have theorized that on certain rare electoral occasions, such as the election ushering in Franklin

Roosevelt's New Deal, a critical political realignment of interests occurs and profoundly changes the course of history.[83] Only after such an election would the probabilities of legislative responses to a given set of laws change. Thus, at least for the extended periods of time of routine politics, a Markov process is a reasonable approximation for modeling state competition.

The third assumption affects results concerning the optimality of the system. The only means of ensuring that the system moves to and stays in the optimal state is to assign zero probability to the repeal of a value-maximizing law and a probability of one to the adoption of a value-maximizing law. This third assumption rules out such a guarantee.[84] It can be analogized to an assumption of bounded rationality on the part of legislatures, that they do not always recognize the value-maximizing laws and legislate by trial and error. Moreover, it captures an important institutional detail of corporate law: All jurisdictions have statutes reserving to themselves the power to alter any corporate law provision and to impose that change on firms that were chartered under the previous law.[85] The model of the process thereby adopted is, at best, a weak form of the shareholder wealth maximization branch of the state competition debate, for it can weight the transition probabilities to favor moves to more optimal states and disfavor moves in the opposite direction, yet it will not rule out reverse moves.

These three assumptions are sufficient to characterize competition as a Markov process and to attain the Markov property that there is a unique set of transition probabilities into which the process settles, which is independent of where it began. The trigger of change --the source of the motion of the process-- is itself a random process that may depend on the other jurisdictions. There are at least three possible methods that spur a legislature to reconsider its legal regime and all may stem from the existence of other jurisdictions: i) corporate interests lobby the legislature to innovate or imitate by bringing its laws in line with those of other jurisdictions -- the Aetna scenario; ii) corporate capital leaves the jurisdiction as some firms reincorporate or shareholders alter their portfolios and firm values decline -- the Cary-Winter hypothesis; and iii) legislators themselves innovate or keep abreast of developments in other jurisdictions and suggest trying proven or popular measures that they think will help solidify their political positions. I assume that the occurrence of any of these factors follows a random path, which eventually brings a law to the legislature's attention and calls into play the Markov transition probabilities.[86]

B. Simulating Competition.

We can now construct the matrix that generates the process, telling us how and when the process is likely to move, and that can be used to compute the steady state. This special generator matrix neatly describes an evolutionary process for its entries are forces competing to move the system. It reflects local and not global changes, treating as though frozen, all the laws in all the jurisdictions but one. I describe next the system's essentials; the notes present the functional form for the entries in the matrix. To operationalize a Markov model as a "test" to resolve the state competition debate would require a vast number of observations of the frequency with which legislatures consider and reconsider particular statutes and with which those laws are actually changed. I cannot even begin to undertake such a task. The model's value is, therefore, primarily heuristic. It pinpoints the behavioral assumptions on which hypotheses of the optimality and stability of state competition must be based, and the impact changing crucial variables and assumptions will have on the process, within the general framework of our understanding of the corporate charter market.

In the generator matrix of the Markov process, the competing forces are a function of the number of other jurisdictions having particular laws and the array of laws in the jurisdiction considering the change. For example, as the number of jurisdictions with a given law increases, this environment has a greater influence on a jurisdiction's decision to retain, repeal or adopt that law. The jurisdiction's own laws temper an automatic reaction dependent upon the situation in the other jurisdictions. I assume that less weight is given to the law's absence in other jurisdictions if the jurisdiction under consideration already has the law.

To incorporate the notion that it is costly to change the status quo, I assign positive weights to all states. This is because adopting or repealing a law takes time and money, and involves risks: Legislators have to engage in bargaining and may lose constituents' votes in a future election. I do make the likelihood of repeal a function of the state by making it inversely related to the number of other jurisdictions with the law. In addition, to explore the value-maximizing hypothesis, I vary the assumption of whether repeal is as likely as adoption.

Five sets of assumptions from which values of a generator matrix are derived, and their corresponding steady states, will be examined. For computational simplicity, I begin by studying the motion of a system consisting of three jurisdictions and one possible law. This system has eight possible states. These are identified in table two. Recall that, to use a

(Insert table two here.)

Markov process, legal change is incremental; accordingly, the system cannot move from one state to any other state. A move of the system consists of one jurisdiction's consideration of retaining the status quo or changing it by either adopting or repealing a statute. For example, from state two, in which only the first jurisdiction has the law, the system can move to one of three other states (states one, five and seven); either the first jurisdiction can repeal the law, or one of the other two jurisdictions can adopt the law. It can also remain in state two.

The first process assumes that the three jurisdictions are identical -- that is, the transitions for one jurisdiction adopting or repealing the law are the same as the transitions for any other jurisdiction. Within this general framework, two alternative generator matrices are constructed. In the first, the forces compelling a statute's adoption or its repeal are symmetrical. A symmetry restriction equates the costs of adopting a law and of repealing it. Thus, the status quo changes -- a law is either repealed or adopted -- with the same frequency. The only factor affecting the legislature's decision is the number of other jurisdictions with the statute,[87] a feature that captures the notion of imitation, that state competition entails jurisdictions reacting to what others do. This is equivalent to assuming that legislators cannot distinguish a value-maximizing law from a non-value-maximizing one. For a legislature that is blind to a law's value-maximizing properties would not know the effects of the law it is considering, and under such circumstances, it is reasonable to assume that any change in the status quo is equally likely. I will refer to this process as the random process.

The second process retains the assumption that jurisdictions are identical but adjusts response rates downward for repealing a law, in an inverse relationship with the number of other jurisdictions with the law.[88] This is intended to represent the behavior of a weakly optimizing legislature. Assuming the law under consideration is a value-maximizing one, then, if a legislature is optimizing, the law's adoption will be more likely than its repeal. Moreover, even if a state's legislators cannot identify a value-maximizing law, they can imitate other states, assuming that a law's persistence across jurisdictions is a signal of its welfare-enhancing properties. Both of these characterizations are in keeping with the response function of this process. However, consistent with A.3, neither possibility, repeal or adoption, is undertaken with zero or certain probability. I will refer to this process as the weak v-m process. It is a weak story of charter market optimality because there is no guarantee of a statute's passage nor of its retention, yet its movement is weighted toward optimality by the asymmetry in repeal and adoption response rates.[89] The findings of the empirical research-- no negative abnormal returns and sometimes positive abnormal returns upon reincorporation-- seem to fit most closely with such a story.

Table three lists the stationary distributions for the different processes. In the random process, the system stays,

(Insert table three here.)

as expected, in each state an equal proportion of the time. In the weak v-m process, the steady state looks quite different, and accords with intuition. The system spends increasingly more time in the states in which more jurisdictions have the law, and in particular, for two-thirds of the time in the long run all three jurisdictions have the law. These simulated evolutionary processes demonstrate a plausible dynamic in which state competition produces value-maximizing regimes for the most part, but will result in time spent in suboptimal states.

Moreover, the steady state of the weak v-m process is more in accord with the observed S-shaped diffusion pattern in corporate law reforms, in which over time more, though not all, states come to have a law, than is the steady state of the random process.

To increase the realism of the process, a third generator matrix was created that extends the second by incorporating different response rates for the jurisdictions. In keeping with the Delaware phenomenon, the probabilities for one of the jurisdiction's own actions are changed, making adoption even more, and repeal even less, likely.[90] The probabilities for the reactions of the other two jurisdictions when the first jurisdiction has adopted the law, are also altered to make the statute's adoption more, and its repeal less, likely. This process captures the idea of innovation, in a limited way, in addition to imitation, for the first jurisdiction has a higher probability of adopting the law when no other jurisdiction has the law, as well as a lower likelihood of repeal, than the other two jurisdictions. I will call this the Delaware process.

As table three indicates, this change intensifies the results of the weak v-m process. The same relation in the steady state holds between the different states, that the frequencies are substantially greater for the states in which two or three jurisdictions have the law than for the states in which only one jurisdiction has the law. But the differential between these sets of states is greater in the Delaware process, as is the actual frequency spent in the state in which all three jurisdictions have the law. The time spent in states in which only two jurisdictions have the law is less in the Delaware process than in the weak v-m process. Thus, the Delaware process results in greater uniformity in corporation codes than the weak v-m process.

Two simulations of evolutionary processes were undertaken for a more complex system consisting of three jurisdictions and two laws. This system has sixty-four states, summarized in table four. To investigate optimality, only one of the two

(Insert table four here.)

laws is assumed to be value-maximizing. This is in keeping with the fact that many jurisdictions have adopted takeover statutes, whose benefits to shareholders are disputed. The steady states of a random and a weak value-maximizing system are then compared. In this more complicated setting, in the random process, the legislature cannot perfectly distinguish between laws. It does know that one law is value-maximizing and therefore uniformly treats adoption more favorably than repeal. In the weak v-m process, the adoption and repeal rates are further adjusted to favor having the value-maximizing law.[91]

The steady state of these two processes, characterized in table five, is similar to that of the simpler ones. The system

(Insert table five here.)

spends the greatest proportion of time in the state in which all three jurisdictions have both laws, although that proportion is less than it is in the simpler system. It is virtually never in the state in which no jurisdiction has any law. However, as we would expect, the weak v-m process spends less time in the states with the non-value-maximizing law and more time in the states with only the value-maximizing law, than the random process. The system's tendency is to spend a longer period of time in the long run in the more optimal states, but a substantial proportion of time is spent in suboptimal states.

Three conclusions can be drawn from the simulations of the evolution of a corporate charter market.

1. The steady state results of the Markov processes that were adapted to incorporate value-maximizing behavior are more in accord with the observed patterns in corporation codes than are those of the totally random response processes.

2. If there is any uncertainty about legislators' ability to identify value-maximizing proposals, such that value-maximizing laws are not adopted for sure and have some positive probability of repeal, then the system will, in the long run, spend some time in suboptimal states.

3. Although very strict assumptions concerning legislative behavior are needed to guarantee that a system will evolve to the optimal state, with relatively weak behavioral assumptions that have a plausible real world basis, we can construct a dynamic process in which a system spends the greater proportion

of its time in the more optimal states (states in which most or all jurisdictions adopt value-maximizing laws).

V. Policy Implications of the New Learning on State Competition (or Where Do We Go from Here?)

The new learning on state competition provides us with a good understanding of the economics, and some inkling of the political dynamics, of the corporate charter market. What conclusions can we draw for public policy?

1. A middle ground between Cary and Winter's positions on the efficacy of state competition seems to me to be most appropriate. Such a view recognizes that shareholders benefit from state competition, while granting that, on occasion, competition may well produce laws that shareholders in some firms would not choose to adopt voluntarily. To review the data informing this conclusion:

(i) Event studies indicate that state competition does not harm shareholders. None of the studies were able to find any negative effect on investor wealth from state regulation, whether they investigated changes made by the states in statutes or doctrine, or changes made by firms in their choice of incorporation state.

(ii) There is a plausible logical scenario, which is supported by anecdotal evidence, that suggests managers may promote second generation takeover statutes because they cannot obtain shareholder approval for the tactics the laws codify.

(iii) There is good reason to believe that the political equilibrium in Delaware differs from that of other states when it comes to potentially managerialist provisions, such as second generation takeover statutes, because its diverse corporate constituency and the corporate bar's input into the legislative process check any one firm's ability to have a pet bill passed.

(iv) Simple stochastic models of the dynamics of a corporate charter market indicate that some time will be spent in suboptimal states unless we adopt quite strong constraints on legislative behavior, such as perfect foresight so that value-maximizing laws must be adopted and never repealed; the processes that capture some key features of state competition through weak behavioral assumptions spend a significant time in the more optimal states.

Staking out a middle ground between Cary and Winter is not especially appealing because it both conveys the appearance of hedging one's bets and requires detailed empirical analysis of individual code provisions before any conclusion can be reached. But it is, in my opinion, the most reasonable position to advocate, given current knowledge. A corollary of the position is that we should invest less energy in discussing whether national chartering is needed,[92] and more in examining state regulation at a micro level, to determine how we can improve the federal system.

2. One method to protect shareholders without having to identify precisely which rules maximize shareholder wealth and which do not, is to require that corporation code amendments entailing a major change in relations between shareholders and managers, where we can intuit conflicting interests, such as second generation takeover statutes, contain opt-in rather than opt-out provisions.[93] For an opt-in regime can minimize the possibility that management will lobby successfully for legislation that shareholders might not support since shareholders must explicitly approve the law's application to their firm. An opt-in policy is an extension of the basic feature of corporation codes, that they are enabling. Such an approach is to be preferred, for it is a strategy by which shareholders, rather than managers, lobbyists or legislators, have the ultimate say by voting.[94] In addition, by increasing the cost of corporate decisionmaking by requiring a shareholder vote, it tends to add to the stability of the status quo of no shark repellent amendment.[95] This is a desirable feature if shark repellent amendments are harmful to shareholders.

(i) The conventional objection to relying on such a device is that voting is a sham because shareholders lack the information to vote intelligently (or the inclination to expend time and resources to obtain the information). I do not find the claim of massive shareholder ignorance and misinformation compelling. But even if the objection is granted, it can be resolved directly, by ensuring the provision of the pertinent information to investors.[96] Government intervention is not always necessary to ameliorate a market failure. In this context, institutional investors, who are typically well informed voters, have recently begun to create national organizations for pooling information and research on corporate policies.[97] These voluntary networks could, in due course, produce substantially more informed voting.

(ii) One potential problem for even informed shareholder voting is that, because management controls the proxy apparatus, if there are many points in the set of majority-preferred outcomes, then management can place on the agenda the particular proposal that it prefers from that winning set.[98] But if shareholder preferences are homogeneous, which is a plausible assumption in corporate law for all shareholders have the same goal of equity share price maximization, then the majority-preferred set will consist of a single point and management's control of the agenda cannot determine the outcome.

3. If institutional investors' interests differ sharply from those of individual investors, who are uninformed or who do not vote, then reliance on voting rights to protect all shareholders will be unsuccessful. This possibility might conjure up the specter of management agenda manipulation but if the differences are such that shareholder preferences can be represented as single-peaked, arrayed along a single line, which is reasonable given the value-maximizing goal, then, again, there will be no voting cycle and the shareholders determine the outcome regardless of management's position. The concern is therefore not that the outcome is management-chosen

but that the choice of the majority differs from that of the minority. In other contexts where shareholders' interests may differ because of institutional characteristics, such as the different positions of high and low tax bracket investors on distribution policies, there is evidence of a clientele effect, in which investors segregate themselves by firm according to similar interests, and thereby avoid the potential conflict.[99] But this solution may not be available to diffuse the conflict with which we are concerned: For example, takeover policies affect so many firms that clientèles may be unable to form because it may be difficult to exclude investments in targets and achieve optimal portfolio diversification. The policy punch of these considerations is not clear cut. We may have to rethink the use of majority rule to alter rights in corporate law, for it presupposes shareholder unanimity on ends. But there are at least two factors mitigating such a concern. First, majority rules that permit disproportionate premiums may not be objectionable; the non pro rata sharing may be a return on the shareholder's investment in information. Such rewards to information-seeking may be necessary for market efficiency.[100] Second, there have been and may continue to be fundamental changes in the form of ownership of public corporations, such that uninformed investors with small holdings may come to hold shares only indirectly via mutual funds, which would moot the potential conflict.[101]

4. When we consider the issue of informed voting by shareholders in light of the politics of Connecticut's second generation takeover statute, a further recommendation is in order: Bills revising corporation codes should be scrutinized and debated in a public hearing. This policy will raise the cost of legislating, but it will also provide a check on the passage of hastily drafted statutes that can have unintended, adverse consequences. A legislature should be more than a clearing house for pork barrel. With a public hearing, a legislature could improve the quality of decisionmaking by drawing on the insights of experts testifying concerning the probable consequences of particular policies in reaching a judgment on a bill.[102] It would, at least, promote a more active role for the corporate bar in the legislative process. The bar's participation offers the benefit that its members represent clients with diverse interests, and a package that meets their approval would be more likely attuned to the problems of unintended consequences, if not more balanced in its effects, than a draft submitted by one corporation.[103] In addition, hearings create a record of a proposal's strengths and weaknesses that shareholders can use in assessing whether to agree to conform their charters to the revised codes.

5. A middle ground on state competition has specific implications for the direction of research. In particular, we need to undertake more comparative studies of the political process across states and statutes, and compile information on shareholder attitudes and voting patterns on different

corporate policies. To the extent that the events of importance involve evolutionary processes, we may also need to seek out new and refine existing techniques on how to determine the impact of specific policies on investor wealth. Without such information, discussion will devolve into ill-informed _a priori_ assertions about the probable effects of particular rules, and we will correspondingly be unable to raise the quality of public decisionmaking.

Tables

Table one. Research Findings on State Competition.

Study	Type	Results
1. Dodd and Leftwich (1980)	Event study of reincorporation	Positive cumulative average residuals, 2 years before event
2. Jarrell and Bradley (1980)	First generation takeover statutes (event=acquisition)	Premium higher, more shares acquired, in states with statutes
3. Romano (1985)	Event study of reincorporation, grouped by motive for move	Positive cumulative average residuals, 1-10 days around event, for merger group and aggregated portfolio
4. Guerin-Calvert, McGuckin and Warren-Boulton (1986)	First generation takeover statutes (event=acquisition; other techniques also employed)	Premium higher, more multiple bids, in states with statutes
5. Weiss and White (1986)	Event study of Delaware court decisions	No effect
6. Romano (1986)	Event study of second generation takeover statutes	No effect

Table two. States of a Simple System (3 Jurisdictions, 1 Law).

State 1 =	0 0 0
State 2 =	1 0 0
State 3 =	0 1 0
State 4 =	0 0 1
State 5 =	1 1 0
State 6 =	0 1 1
State 7 =	1 0 1
State 8 =	1 1 1

Key: O=no law, 1 = law; column 1 is jurisdiction 1, column 2 is jurisdiction 2, column 3 is jurisdiction 3.

Table three. Stationary Distributions of a Simple System.

	Random Process	Weak v-m Process	Delaware Process
V1	.125	.010526	.001511
V2	.125	.021053	.006749
V3	.125	.021053	.004363
V4	.125	.021053	.004363
V5	.125	.084211	.053543
V6	.125	.084211	.025934
V7	.125	.084211	.053543
V8	.125	.673684	.849991

Key: Vi = limiting probability of state i.

Table four. States of a More Complex System (3 Jurisdictions, 2 Laws).

1	0 0 0 0 0 0	18	0 0 0 1 1 1	35	1 0 0 1 0 1	52	1 1 1 1 0 0
2	1 0 0 0 0 0	19	1 0 0 0 1 0	36	0 1 0 1 1 0	53	1 1 1 0 1 0
3	0 1 0 0 0 0	20	1 0 0 0 0 1	37	0 1 0 0 1 1	54	1 1 1 0 0 1
4	0 0 1 0 0 0	21	0 1 0 0 0 1	38	0 0 1 1 0 1	55	1 0 0 1 1 1
5	0 0 0 1 0 0	22	0 1 0 1 0 0	39	0 0 1 0 1 1	56	0 1 0 1 1 1
6	0 0 0 0 1 0	23	0 0 1 1 0 0	40	1 1 0 1 0 1	57	0 0 1 1 1 1
7	0 0 0 0 0 1	24	0 0 1 0 1 0	41	1 0 1 1 1 0	58	1 1 1 0 1 1
8	1 0 0 1 0 0	25	1 1 0 1 1 0	42	1 1 0 0 1 1	59	1 1 1 1 0 1
9	0 1 0 0 1 0	26	1 0 1 1 0 1	43	0 1 1 1 1 0	60	1 1 1 1 1 0
10	0 0 1 0 0 1	27	0 1 1 0 1 1	44	1 0 1 0 1 1	61	0 1 1 1 1 1
11	1 1 0 0 0 0	28	1 1 0 1 0 0	45	0 1 1 0 1 1	62	1 0 1 1 1 1
12	1 0 1 0 0 0	29	1 0 1 1 0 0	46	1 1 0 0 0 1	63	1 1 0 1 1 1
13	0 1 1 0 0 0	30	1 1 0 0 1 0	47	1 0 1 0 1 0	64	1 1 1 1 1 1
14	1 1 1 0 0 0	31	0 1 1 0 1 0	48	0 1 1 1 0 0		
15	0 0 0 1 1 0	32	1 0 1 0 0 1	49	0 0 1 1 1 0		
16	0 0 0 1 0 1	33	0 1 1 0 0 1	50	0 1 0 1 0 1		
17	0 0 0 0 1 1	34	1 0 0 1 1 0	51	1 0 0 0 1 1		

Key: for each state
1st row = law 1
2nd row = law 2

1 is value-max law.

Table five. Stationary Distributions of a More Complex System.

	Random	Weak v-m		Random	Weak v-m
V1	.000000	.000000	V33	.002538	.003138
V2	.000003	.000004	V34	.002583	.001244
V3	.000003	.000004	V35	.002583	.001244
V4	.000003	.000004	V36	.002583	.001244
V5	.000003	.000002	V37	.002583	.001244
V6	.000003	.000002	V38	.002583	.001244
V7	.000003	.000002	V39	.002583	.001244
V8	.000254	.000187	V40	.006479	.005309
V9	.000254	.000187	V41	.006479	.005309
V10	.000254	.000187	V42	.006479	.005309
V11	.000164	.000291	V43	.006479	.005309
V12	.000164	.000291	V44	.006479	.005309
V13	.000164	.000291	V45	.006479	.005309
V14	.006175	.022221	V46	.000495	.000633
V15	.000164	.000051	V47	.000495	.000633
V16	.000164	.000051	V48	.000495	.000633
V17	.000164	.000051	V49	.000495	.000242
V18	.006175	.001035	V50	.000495	.000242
V19	.000042	.000031	V51	.000495	.000242
V20	.000042	.000031	V52	.020715	.048364
V21	.000042	.000031	V53	.020714	.048366
V22	.000042	.000031	V54	.020715	.048363
V23	.000042	.000031	V55	.020715	.005921
V24	.000042	.000031	V56	.020714	.005921
V25	.013685	.011208	V57	.020715	.005921
V26	.013685	.011207	V58	.072133	.108071
V27	.013685	.011208	V59	.072133	.108067
V28	.002538	.003138	V60	.072133	.108070
V29	.002538	.003138	V61	.072133	.035834
V30	.002538	.003138	V62	.072133	.035834
V31	.002538	.003138	V63	.072133	.035836
V32	.002538	.003138	V64	.315187	.285953

Notes

[1] See Romano, Law as a Product: Some Pieces of the Incorporation Puzzle, 1 J. Law, Econ. & Org. 225, 233-35 (1985). The enactment of general incorporation statutes in the nineteenth and early twentieth century follows a similar pattern to what we observe today. See Shughart & Tollison, Corporate Chartering: An Exploration in the Economics of Legal Change, 23 Econ. Inquiry 585 (1985). A recent graphic example of statutory invention and imitation is Maryland's second generation takeover statute that requires a supermajority vote in certain business combinations, which was enacted in 1983 and in less than two years has been adopted by nine other states.

[2] E.g., Winter, State Law, Shareholder Protection, and the Theory of the Corporation, 6 J. Legal Stud. 251 (1977).

[3] Romano, supra note 1.

[4] R. Romano, The Political Economy of Takeover Statutes, Yale Law School Center for Studies in Law, Economics and Public Policy Working Paper No. 47 (June 1986) (forthcoming Va. L. Rev.).

[5] Romano, supra note 1, at 239-240.

[6] Id. at 240-42.

[7] Romano, Metapolitics and Corporate Law Reform, 36 Stan. L. Rev. 923, 928-29, 955-56, 1013-14 (1984).

[8] Cary, Federalism and Corporate Law: Reflections upon Delaware, 83 Yale L.J. 663, 666 (1974).

[9] Winter, supra note 2.

[10] Cary, supra note 8. Cary's article is a forceful restatement of a perennial objection to Delaware and state competition. See,e.g., (cite 1953 article).

[11] See Cary, supra note 8, at 690-92.

[12] If the claim is that communication costs are lower when there is only one legislature to worry about, the obvious response is that even with state competition, only one state really matters, Delaware, where a large number of firms reside. Putting it this way makes clear that competition is the linchpin of the argument. Cary must argue that another state would come to the rescue if shareholder lobbyists succeeded in Delaware, making such expenditures futile, whereas no such alternatives would exist in a national scheme. The transaction cost explanation of state competition discussed in part I.C infra suggests that there is friction in the chartering market, involving transaction specific assets that tie together

particular states and firms, that prevents overnight shifts in a state's market share, while simultaneously protecting firms' interests in a responsive corporation code.

13 See generally, Y. Aharoni, **The No-Risk Society** (1981); M. Fiorina, **Congress: Keystone of the Washington Establishment** (1977).

14 Romano, supra note 1, at 244 (82 percent of reincorporations of publicly traded firms in the period 1960-1980 were in Delaware). In my sample of firms, those with multiple reincorporations consisted primarily of a group of Michigan manufacturing companies that went to Delaware in the 1960's and 1970's upon Delaware's revision of its corporation code, and then moved back to Michigan in the 1980's after a change in that state's taxation; Michigan had also revised its code to duplicate Delaware's in the interim. Id. at 258.

15 If we assume optimizing behavior, as Winter and Cary assume of managers, then a disequilibrium model is unsatisfactory because it implies that deals could still be made between firms and states and, consequently, the actors have not optimized. (cite to economic literature re concept of equilibrium)

16 R.Posner & K.Scott, **Economics of Corporation Law and Securities Regulation** 111 (1980). A fuller exploration of such a view of corporate charters derived from an economic theory of federalism--Charles Tiebout's theory of local public goods in which citizens move to the locality whose tax and spending program matches their preferences--was provided by Frank Easterbrook. Easterbrook, Antitrust and the Economics of Federalism, 26 **J. Law & Econ.** 23 (1983).

17 E.g., Del. Code Ann. tit.8, sect. 342 (1984).

18 Romano, supra note 1, at 262-65. The only statistically significant differences were that the Delaware firms have been in existence for fewer years than non-Delaware firms and they average more acquisitions over their shorter lives. Id. This difference can be explained by the transaction explanation of reincorporation discussed in part I.C, infra.

19 See Spence, Product Selection, Fixed Costs, and Monopolistic Competition, 43 **Rev. Econ. Stud.** 217 (1976).

20 Baysinger & Butler, The Role of Corporate Law in the Theory of the Firm, 28 **J. Law & Econ.** 179 (1985).

21 I have developed a measure of states' corporate law responsiveness that is a function of both the substance and timing of enactment of corporation code provisions in order to better examine the state competition hypothesis. See Romano, supra note 1. The responsiveness measure identifies strict and lax legal regimes more precisely than migration because it is derived directly from the content of corporation codes.

[22] An additional difficulty is that we do not know whether their variable for director and officer holdings excludes family members who are managers. Presumably the tests controlled for such individuals. If not, then the finding of no difference in management holdings would be misleading. Moreover, the conclusion that strict laws are important for firms with higher family holdings would be illusory because if the family members are also managers, then the basis for maintaining that the legal regime matters is eliminated because there is no separation of ownership and control in such firms.

[23] Romano, supra note 1, at 250-51. See part I.C., infra.

[24] Romano, supra note 1, at 255-56.

[25] It might make sense for Baysinger and Butler to alter their thesis so as to emphasize absolute levels of ownership rather than the relative measure of a difference in means test. This would eliminate the problem discussed in the text by excluding firms that go public. But it would also weaken the link between their thesis and state competition. In their story, it is the preferences of migrating firms that drives the selection of corporation codes. Because going-public firms comprise the largest group of reincorporating firms, Romano, supra note 1, at 250, 253, to be complete any theory of state competition must explain those decisions.

[26] For example, the corporate ownership of "leavers" averages 11.28 percent, compared to 15.69 percent for "stayers," Baysinger & Butler, supra note 20, at 187, yet in both situations, the percentage is well within what is generally thought to be more than enough for working control in a public corporation.

27 See Romano, supra note 1, at 246-49.

[28] In my analysis, because most states are behaving defensively in the charter market and differences in legal regime are of interest to firms undertaking certain types of transactions, firm self selection could still be a factor in statutory variety in the following circumstance: If no firms in a state will ever undertake specific transactions for which another state has innovated, then the former state does not have to amend its code to retain the firms in its jurisdiction.

[29] These three categories comprised 72 percent of the reincorporations whose transaction type could be identified. Romano, supra note 1, at 250. My data consisted of survey responses and public information on the reincorporations of several hundred industrial corporations that were publicly traded in 1982 and had changed their incorporation state during the 20-year period 1962-1981.

[30] The other firms moved primarily to realize tax savings.

Firms that move to a more responsive state also more frequently report a difference in origin and destination state legal regimes and that the difference is an important decisional factor. The chi-square statistic for both crosstabulations was statistically significant, although the statistic for the table of transaction type by questionnaire response is not reliable because more than 20 percent of the cells had very low expected frequencies. Id. at 258-60.

31 Id. at 255-56.

32 Some would argue that particular transactions, such as takeover defensive tactics, do not benefit shareholders. For some discussion of this issue see part II, infra.

33 For the fullest exposition of the theory see **O. Williamson, The Economic Institutions of Capitalism** (1985).

34 See id. at 163-206. The typical solution to the automobile racks example discussed in the text is not an exchange of hostages but ownership of the racks by the car manufacturer. (cite) Good examples of pure hostages are far too complex to be useful for the pedagogic point of an illustration of a transaction specific asset. For specific examples see O. **Williamson**, supra note 33, at 180-89, 197-203.

35 The discussion in the text sets out the thesis put forth in Romano, supra note 1, at 235-36, 240-42, 257-60, 273-78. I state the thesis in detail for those who have not read or do not wish to read the longer article, and for those who did not understand it. Jonathan Macey and Geoffrey Miller, in a recent paper, after citing my article for the data, state that they are offering a new explanation of state competition in which Delaware "offers a reliable promise--one that cannot be matched by its competitors--that its corporation law will remain highly attractive to managers for many years into the future." J. Macey & G. Miller, Interest Groups and Delaware Corporate Law 26 (draft 1986). The central insight that they are advancing as their theory of the corporate charter market is precisely that of my earlier article.

36 Del. Const. Art. IX, sect. 1. Only one other state, Iowa, has such a constitutional provision.

37 While a state could explicitly legislate the principle of statutory construction that when it enacted a Delaware law it intended to include all of the existing judicial interpretations, see, e.g., Wilmington City Ry. v. People's Ry., 47 A. 245, 251 (Del.Ch.Ct. 1900), this would not protect firms concerning future adjudicative issues. The state would have to bind its courts to follow Delaware courts in the future, and hope that no case of first impression would be decided by its courts such that a conflict would arise with a subsequent decision in Delaware. It seems to me that such a system would involve overwhelming problems concerning

constitutional delegation and parties' rights of appeal, in addition to problems concerning the coherency of local decisional law and the granting of retroactive relief should the hypothesized conflict arise.

38 The connection between reputations and hostages is straightforward: When parties have a long time horizon, as in the corporate charter market where both firms and states have potentially infinitely long lives, the party with the reputation--Delaware-- has an incentive to maintain it because the costs of building up the reputation will not be recouped if it behaves irresponsively in the short-run, as firms will relocate and new firms will stop migrating to it, and it will lose its tax revenues. In other words, a cooperative equilibrium can emerge from a "tit-for-tat" strategy. See generally R. Axelrod, The Evolution of Cooperation (1983).

39 Romano, supra note 1, at 274-76. Macey and Miller question these results, stating that "the questionnaire . . . used did not list investment banks as potential parties to suggest reincorporation." J. Macey & G. Miller, supra note 35, at 25. The questionnaire included investment bankers as an explicit choice; the respondents did not choose that answer.

40 A number of years ago, Joe Bishop eloquently made the point concerning the importance of lawyers in Delaware's legislative output, when, in explaining Delaware's lack of a security-for-expenses requirement for shareholder derivative suits, he wrote: "It might . . . occur to a cynical mind that this curious anomaly of the Delaware law may not be wholly unconnected with the fact that the prosecution or defense of a derivative suit in a Delaware court requires the retention of Delaware counsel." Bishop, New Cures for an Old Ailment: Insurance Against Directors and Officers' Liability, 22 Bus. Lawyer 92, 94-95 (1966). Macey and Miller, supra note 35, stress this factor, the importance of lawyers in Delaware. They appear to suggest that the input of lawyers in Delaware's legislative process has negative implications for a theory of state competition. Such a conclusion would be wrong-- the role of lawyers is peripheral to the debate, particularly from the transaction cost view of state competition that they appear to be advancing. If Delaware passed corporate laws that systematically favored lawyers to the detriment of firms, it would lose its chartering business to another state whose lawyers were not as avaricious. For Delaware maintains its position by mutual cooperation with and not by exploitation of firms. Thus, while, as no one has questioned, lawyers are actively and intimately involved in Delaware's profitable chartering business, their participation provides no clear cut insight concerning whether managers benefit at the shareholders' expense.

41 The term is from Williamson, Credible Commitments: Using Hostages to Support Exchange, 73 Amer. Econ. Rev. 519, 528 (1983).

[42] Nevada, one of two states to experience a net immigration of corporations in the period 1960-80, Romano, supra note 1, at 246, is a state that has sought to compete with Delaware. It has been styled the "Delaware of the West." But it has failed in its quest for a commanding share of the corporate charter market.

[43] 457 U.S. 624 (1982).

[44] E.g., Ohio Rev. Code Ann. sect. 1701.831 (Page Supp. 1984). Control share acquisition statutes have recently been held unconstitutional in several states. E.g., Fleet Aerospace Corp. v. Holderman, Nos. 86-3533 and 86-3536, (6th Cir. June 25, 1986) (Ohio); Terry v. Yamashita, Civ. No. 85-143 (D.Ha. June 13, 1986) (Hawaii); Dynamics Corp. of America v. CTS Corp., Nos. 86-1601 and 86-1608 (7th Cir. May 28, 1986) (Indiana).

[45] E.g., Md. Corps & Assn's Code Ann. sect. 3-602 (Supp.1984). New York recently passed a more restrictive fair price statute that bans the second-step combination for five years after the first step, unless the board approves the combination prior to the initial acquisition or a fair price is paid. 1985 N.Y. Laws ch.915. The New York version may well become the model for states adopting fair price provisions in the future.

[46] E.g., Pa. Stat. tit. 15, sect. 1910 (Purdon Supp. 1984-85).

[47] R. Romano, supra note 4, at 83 (table one). Only two of the first fifteen states adopted a redemption rights provision and four chose control share acquisition statutes, including one state that also enacted a fair price provision. For a discussion of why the fair price statute is the most popular, see id. at 8-11, 61-63.

[48] E.g., Easterbrook, supra note 16 (state competition benefits shareholders); Fischel, The "Race to the Bottom" Revisited: Reflections on Recent Developments in Delaware's Corporation Law, 76 Nw. Univ. L. Rev. 913 (1982) (same); Easterbrook & Fischel, The Proper Role of a Target's Management in Responding to a Tender Offer, 94 Harv. L. Rev. 1161 (1981) (defensive tactics harm shareholders).

[49] Ralph Winter distinguished state takeover laws from state competition over corporation codes because of their extraterritorial effect-- the first generation statutes applied to more than domestically incorporated firms, and, he maintained, this enabled the states to restrain competition. Winter, supra note 2, at 268, 287-89. The second generation statutes, however, have a narrower jurisdiction and thereby lack the external effects with which he was concerned, for they apply only to domestically incorporated firms. They therefore cannot be so readily differentiated from other corporation laws.

[50] The discussion that follows is from R. Romano, supra note 4, at 14-20, 31-32.

[51] There was no opposition within the business community to Aetna's proposal: The number of firms affected by the statute was small, in particular, a substantial number of the publicly-traded firms had similar provisions in their charters; there are few acquiring companies in Connecticut, and the statute would matter to those acquirers only if they wanted to acquire other Connecticut firms.

[52] The discussion that follows summarizes the conclusions in R. Romano, supra note 4, at 40-79.

[53] Barry Baysinger and Henry Butler make the case that the support for shark repellent provisions comes from shareholders who have special relations with firm management such that their shares would be worth less under new management and are worth more to them than the premium paid by an outsider. Baysinger & Butler, Antitakeover Amendments, Managerial Entrenchment, and the Contractual Theory of the Corporation, 71 Va. L. Rev. 1257 (1985). They further contend that this stock relation, which they view as a transaction specific asset, is independent of the size of the holding. They do not connect their thesis concerning firms' choice of incorporation state, see text accompanying note 20, supra, and firms' adoption of shark repellent amendments, although the two choices are related because firms often choose their incorporation state to facilitate adopting such measures, as well as to be protected by a second generation statute codifying such measures. Even if we assume that the concept of transaction specific stock is sensible (and I have serious doubts on this that cannot be pursued in this paper without going off on an unrelated tangent), an analysis of the effects of the most popular shark repellent amendments indicates the problem with the thesis: These provisions do not favor unambiguously shareholders with special relations to managers, unless they are the managers themselves. See R. Romano, supra note 4, at 67-74. Moreover, if certain shareholders have special relations with management that were beneficial to all shareholders of the firm, then we need an explanation for why those relations would not be continued by new management.

[54] Only a few states have opt-in rather than opt-out provisions. E.g., Georgia, 1985 Ga. Laws 527, sect. 14-2-235(a). Minnesota switched from an opt-out to an opt-in regime. Act of June 24, 1985, ch.5, sect.19, 1985 Minn. Laws 1638.

[55] As a conceptual matter, the introduction of concentration measures in the adoption of charter amendments has no direct implication for the enactment of statutes because firms with diffuse ownership, that could presumably adopt such provisions on their own, might want a law to reduce drafting costs, yet

managers of firms with concentrated ownership might also want a law because they could not employ voluntary solutions. If the enactment of these takeover statutes evinces a permissive state, then this data supports Baysinger and Butler's pairing of more diffusely owned firms and lax jurisdictions, see text accompanying notes 20-26, supra. But when I used a random sample with an equal number of firms in each subset to provide a more powerful test of the difference of means, as Baysinger and Butler used for their analysis, the difference in shareholder concentration across the states was not significant.

56 Aetna was also doing poorly at the time, and shortly after the statute's passage there was a change in top management.

57 There is an externality created by the second generation statutes, though of a different sort from Winter's analysis of first generation statutes, see note 49 supra: States like Connecticut may be benefiting local target firms at the expense of nonresident acquiring firms. See R. Romano, supra note 4, at 33-35.

58 There has been very little research, although there is need for some, on the modern political history of Delaware. Some have contended that the DuPont family and their corporation run the state, see J. Phelan & R. Pozen, **The Company State** (1973), but that claim is disputed, and viewed with skepticism by local historians, see,e.g., C. Hoffecker, **Corporate Capital: Wilmington in the Twentieth Century** 260-61 (1983).

59 Of course the issue may be resolvable only in theory: Limitations of data and statistical techniques may render an answer impossible. Moreover, an analyst's priors will affect the weight he attributes to empirical findings, which may result in an exceedingly slow updating of beliefs that hinders the development of a political consensus.

60 An event can be technically defined as a change in the information set about firms from which price expectations are formed. An event's effect can be isolated from the effects of other factors that influence the market by standard econometric techniques. The regressions typically employ a version of the capital asset pricing model of security valuation. That model asserts that there is a positive linear relation between an asset's risk and return, and in particular, that the risk premium varies in direct proportion to the stock's sensitivity to market movements, which is called the stock's beta. Betas estimated from stock prices in a period prior to the event are used to predict stock prices at the time of the event. The regression residuals, which are the difference between the predicted prices and observed prices, measure abnormal returns that can be attributed to the event. Event studies are therefore tests of semi-strong form market efficiency-- the hypothesis that all publicly available information is reflected in stock prices and changes in the information set are

instantaneously reflected in price adjustments. To ensure that only the effect of the event of interest is being measured, a portfolio of firms that have experienced the event is created and the average residual of the group is studied. In addition, when there is uncertainty over the precise date of the event--that is, the day on which the information that is conveyed by the event became publicly available in the market-- the average residuals are cumulated over an interval in event time and the relevant datum is the cumulative abnormal return. When event dates are well specified, the methodology is very accurate. See Brown & Warner, Using Daily Stock Returns: The Case of Event Studies, 14 J. Fin. Econ. 3 (1985) (hereinafter cited as Brown & Warner II); Brown & Warner, Measuring Security Price Performance, 8 J. Fin. Econ. 205 (1980).

61 Dodd & Leftwich, The Market for Corporate Charters: 'Unhealthy Competition' versus Federal Regulation, 53 J. Bus. 259, 274-75 (1980).

62 Romano, supra note 1, at 265-73. Tests relying on daily data are more accurate than those using monthly data, as daily data allow for more precise identification of events, assuming the event date is accurately specified. Brown & Warner II, supra note 60.

63 I had expected to find a negative effect on the stock of firms that had reincorporated for antitakeover purposes, but none could be detected. This provided further evidence of the inconsistency in some commentators' positions on state competition and takeover defensive tactics, see text accompanying note 48, supra, and spurred me to investigate the politics behind state takeover laws as a possible explanation.

64 E. Weiss & L. White, Investors' Reactions to Changes in Corporate Law: Evidence and Observations (draft June 5, 1986).

65 Because Delaware firms make up a large segment of the market, they also examined the effects of the decisions on a portfolio of non-Delaware firms, and again, the results were largely statistically insignificant, and the signs of the residuals were not always the opposite of the signs of the residuals of the Delaware firms, as they had hypothesized. Id. I am not sure, however, that this technique adequately deals with the problem. For to the extent that Delaware firms make up most of the market, and state competition tends to produce uniformity in corporation codes, then corporate law rules embodied in court decisions will be contributing to systematic risk and not to unsystematic risk, and therefore will not be picked up as an abnormal return. Weiss and White do recognize this possibility as an interpretation of their finding of no statistical significance (though not as a criticism of their experimental design) but then reject it as unrealistic. Id. at 44.

66 The decision, Singer v. Magnavox, 380 A.2d 969 (Del. 1977),

affected the rights of dissenters in cash out mergers. Because we do not have very good theories for predicting which firms will become targets, an interesting further test would be to look at the residuals of firms that subsequently were acquired.

67 If we adopt a strong rational expectations view of the market, then we would also not predict any reaction to court decisions because, as investors expect all decisions to have only welfare-enhancing (or diminishing) effects, all of the value of those decisions would be impounded in the stock price at the time of incorporation or reincorporation in Delaware.

68 S.B. 533, enacted June 18, 1986, to be codified at Del. Code Ann. tit.8, sect. 102(b)(7).

69 488 A.2d 858 (Del. 1985). For a critique of the decision see Fischel, <u>The Business Judgment Rule and the Trans-Union Case,</u> 40 Bus. Law. 1437 (1935).

70 <u>Cf.</u> Cary, <u>supra</u> note 8 <u>with</u> Fischel, <u>supra</u> note 48 <u>and</u> Winter, <u>supra</u> note 2.

71 This is also true if legislatures systematically overturn judicial opinions.

72 Jarrell & Bradley, <u>The Economic Effects of Federal and State Regulations of Cash Tender Offers,</u> 23 J. Law & Econ. 371 (1980); M. Guerin-Calvert, R. McGuckin & F. Warren-Boulton, State and Federal Regulation in the Market for Corporate Control, Economic Analysis Group Discussion Paper 86-4, Antitrust Div., Justice Dept. (Jan. 21, 1986) (hereinafter cited as Economic Analysis Group). Jarrell and Bradley also found that acquirers of firms in states with statutes purchased a higher percentage of shares, and the Economic Analysis Group found that targets in states with statutes were more frequently the subject of multiple bids. In this regard, it would be useful to remove the multiple bid firms from the sample, to see how much of the difference in premiums across states is due to actual auctions rather than the effect of statutes alone. However, it may be difficult to disentangle the effects of statutes and auctions, for bidders, knowing that the statutes make auctions more probable, may raise their initial bids to make competition less likely.

73 I chose Connecticut for the study of a fair price statute, even though its small population of publicly-traded firms reduces the power of the tests, because, in addition to my ability to date precisely its enactment, my knowledge of the legislative history could provide a useful interpretative gloss on any results. Pennsylvania has the benefit of having a large pool of firms as well as a short time from introduction to enactment, and Missouri had the shortest time from introduction to passage of the states with control share acquisition statutes for which accurate dates were available, although like Connecticut, it has too small a number of firms to provide a

powerful test.

74 The cumulative average residuals of Missouri firms that did not have fair price charter provisions at the time the statute was enacted show a relatively nice upward trend after the bill passed the state Senate (t-statistic 1.2), in contrast to the residuals of the firms that already had such provisions. In addition, in all of the studies, there were blips of significant abnormal returns approximately one week after the event dates, but trying to draw conclusions from such data would be equivalent to reading tea leaves.

75 The statute did not affect the bid because it was an any or all offer.

76 Romano, supra note 1, at 272-73. Macey and Miller misuse this conclusion in their paper, when they assert that it was grounded in a survey of reincorporating firms and not the event study. Macey & Miller, supra note 35, at 16. They are also mistaken in asserting that the survey produced biased information because of self-serving answers by managers. The explanations for reincorporations provided by respondents were independently verified by public sources of information, wherever available. In addition, the respondents were not only managers, but also legal counsel, inhouse and outside, and the responses did not differ systematically with the identity of the respondent.

77 Robert Cooter and Lewis Kornhauser used a Markov process in their contribution to the debate on the efficiency of the common law. Cooter & Kornhauser, Can Litigation Improve the Common Law without the Help of Judges?, 9 **J. Legal Stud.** 139 (1980). Their article inspired this discussion. Additional inspiration comes from **R. Nelson & S. Winter, An Evolutionary Theory of Economic Change** (1982). In order to capture the notion of jurisdictional competition, I use a continuous time Markov process, which is a Markov chain subordinated to a Poisson process, rather than the discrete time Markov chain that Cooter and Kornhauser use.

78 If the state space of a Markov process is finite, then there are limiting probabilities that are unique, so that we can speak of a stationary or steady state of the system in which, in the long run, it spends a fixed proportion of its time in each of the possible states. If the state space is infinite, then these limiting probabilities may not exist, although a solution can be obtained in terms of ratios of time spent in particular states. But even if the number of states is infinite, if the process is non-null, which my other assumptions provide, then there is a unique stationary distribution. **E. Cinlar, Introduction to Stochastic Processes** 264 (1975). **A.1** is therefore technically not required to guarantee the uniqueness of a steady state. However, finiteness ensures certain regularities in the Markov process that exclude the occurrence of instantaneous states, which are

states that the process jumps out of as soon as they are entered. _Id._ at 243-44. Such states make little sense in the legislative context, as the deliberation process takes time, and therefore, **A.1** is a useful assumption. I do not make any assumption concerning aperiodicity because in a continuous time Markov process periodicities disappear in the steady state.

79 For instance, legislation restricting takeovers and banning greenmail has been repeatedly introduced in Congress (cite bills), and Connecticut's second generation takeover statute, which was enacted in the Spring of 1984, 1984 Conn. Acts 595, P.A. 84-431 (Reg. Sess.), was modified in the very next session to repeal the exemption for firms that had a ten percent shareholder, 1985 Conn. Acts, P.A. 85-283 (Reg. Sess.).

80 This is the requirement that the Markov process be time homogeneous. The transition function incorporates the time spent in a state before the process changes; the process is time independent in that the probabilities are unaffected by the sojourn time in the state and the time at which the state is entered.

81 If elections were not held at fixed intervals but occurred randomly and therefore followed an exponential distribution, then the problem that the election process could disturb the time homogeneity requirement of a Markov chain would be avoided. Elections in parliamentary systems satisfy such a condition, as the prime minister calls the election.

82 _See_ R. Romano, _supra_ note 4, at 21, 33.

83 **W. Burnham, Critical Elections and the Mainsprings of American Politics** (1970). The critical election literature has serious theoretical problems since it is an _ex post_ characterization of events, lacking predictive content.

84 To state the point more precisely, **A.3** ensures that there is no absorbing state, which is a state that, once it is entered, the process never leaves.

85 _E.g.,_ Del. Code Ann. tit. 8, sect. 394 (1984). _See_ **W. Cary & M. Eisenberg, Cases and Materials on Corporations** 147-48 (5th ed. 1980). These reservation statutes are typically incorporated into the firm's incorporation documents. _E.g.,_ Del. Code Ann., tit. 8, sect. 394 ("[the corporation law] and all amendments thereof, shall be a part of the charter or certificate of incorporation of every corporation").

86 For mathematical convenience, I assume that the random process that sets in motion the transition between states is independent of the destination state and memory-less, that is, the sojourn time follows a Poisson process. This means that the interarrival times, where an arrival is the time at which a legislature begins to consider a statutory change, are independent and identically exponentially distributed. The

timing of the legislature's consideration of a reform is such that knowing that the time has been t units long since the last consideration of a law ended does not alter the probability of the interval lasting another s units of time. Although certain laws, such as budgets, are considered at fixed times of the year, it seems reasonable to treat the review of corporation laws as following such a random process. If the timing of legislative consideration is not exponentially distributed, the process could be modeled stochastically as a more general Markov renewal process. The added complexity in the calculations that would be necessary to relax the restriction on interarrival times would not, in my opinion, produce a commensurate gain in explanatory power.

87 The desirable relation, g(N), between the jurisdiction's response and the state of other jurisdictions is an increasing function that is always positive, but always less than one. In this way, the jurisdictions have some stochastic independence from imitation: A jurisdiction may adopt a law even though no other jurisdiction has the law, and it may not adopt a law even though all other jurisdictions have the law. The specific form I used to derive transition values (the entries in the generator matrix, A) to solve for the steady state is:

$$a_{ij} = g((N_{ij}+1)/4)^3)$$

where N_{ij} is the number of other jurisdictions with the law in the origin and destination states (the denominator 4, equals n+1, where n = the maximum number of jurisdictions), for all $i \neq j$. There are only three values of a because N has only three possible values, (0,1,2), and these are, correspondingly (.0156, .125, .4218). The diagonal entries of A, a_{ij} for all $i = j$, equal the negative of the sum of the other entries in the row (the rows of A sum to zero, for it is the derivative of the matrix of transition probabilities when the process has yet to begin, that is, when time = 0). The steady state is found by solving the system of equations $vA = 0$, where v is the vector of the probabilities of the stationary distribution.

88 Specifically, entries in the generator matrix are derived from the response function

$$y = r_i g(N), \text{ where}$$

$r_i = 1$ if the move is from no law to adoption and

$r_i = (1/2)^{N+1}$ if the move is from the law to repeal.

89 Assuming the costs of repeal and adoption are asymmetrical may be more realistic than assuming symmetry. Although I consider the different structures to be related to the substantive content of the law as value-maximizing, this need not be the case. For instance, unspecified procedural factors might make repeal more difficult than adoption, such as, the growth of vested interests. For examples of organized public

interest groups arising after passage of legislation see Walker, The Origins and Maintenance of Interest Groups in America, 77 Amer. Pol. Sci. Rev. 390 (1983). Clearly, what is needed is what we do not have, a theory of the production function of a state legislature.

90 Entries are now constructed by the formula

$$y = d_{ij} r_{ij} g(N), \text{ where}$$

d_{ij} is somewhat of an indicator variable for Delaware (where I assign the first jurisdiction to be "Delaware") with the following values. If the jurisdiction is Delaware, $d_{ij} = 1/2$ if the move is to repeal and $d_{ij} = 2$ if the move is to adopt. If the jurisdiction is not Delaware and Delaware does not have the law, $d_{ij} = 1$ (the equation is the same as that for the weak v-m process, see note 88, supra). If the jurisdiction is not Delaware but Delaware has the law, then $d_{ij} = 3/4$ if the move is to repeal and $d_{ij} = 3/2$ if the move is to adopt.

91 The entries for A now reflect transitions that are a function of how many jurisdictions have both of the laws, as well as the laws of the jurisdiction considering change:

$$a_{ij} = g_1(N_1) + g_2(N_2) + s_{ij}$$

The response values for the value-maximizing law, which I assign as law 1, $g_1(N_1)$, follow those for the simple system, see notes 87-88, supra. The response values for law 2, $g_2(N_2)$ are simply 1/2 of those for law 1, (.0078,.0625,.2109) for N = (0,1,2) respectively. The s_{ij}, when the move is to adopt, equal 1 for law 1 and .5 for law 2; when the move is to repeal, $s_{ij} = g_i(N_i)$. For the random process, the g and s values for law 2 are identical to those for law 1, supra.

92 Even apart from the lack of empirical support, the analytical case for national chartering, in my opinion, has not been made. Most of the benefits of federalism have been emphasized in the debate, such as the incremental experimentation and innovation in corporate law rules created by having numerous decisionmakers rather than one. One benefit often overlooked in the corporate law literature, that I find important, is the supportive relation between a federal structure and individual liberty. Vital state governments can check a powerful national government, (for an interesting effort to revitalize this view of federalism, see A. Amar, Federalism (draft Aug. 1986)), just as private organizations also protect individuals from the encroachment of the state by counterbalancing the state's power, J. Coleman, The Asymmetric Society (1982). If corporations were subject to total national regulation, they would be less effective performers of that checking function.

93 Cf. M. Eisenberg, The Structure of the Corporation: A Legal

Analysis (1976) (shareholders should vote on fundamental changes). A similarly spirited proposal is to require shareholder approval of defensive tactics, such as poison pills. Cf. SEC Advisory Committee on Tender Offers, Report of Recommendations, reprinted in Fed.Sec.L.Rep. (CCH), Special Report No. 1028, at 37-40 (July 15, 1983) (recommending annual shareholder advisory votes on golden parachutes, standstill agreements, and supermajority and disenfranchisement charter provisions).

94 Delaware's latest revision to its code is a good example of such a policy: It does not eliminate director liability but rather, it permits a firm to limit its directors' liability by charter amendment. S.B. 533, enacted June 18, 1986, to be codified at Del. Code Ann. tit.8, sect. 102(b)(7). The political process of this bill provides an interesting comparison with that of other state statutes; in contrast to the adoption of Connecticut's takeover statute, in which the corporate bar organization was excluded from the drafting process, Delaware's director liability statute was approved by the corporate law section of the state bar association prior to its enactment.

95 (cite; probably Bruff article).

96 There is no convincing basis for asserting that shareholders will be so overwhelmed by the information that an indirect solution of prohibition should be adopted. Cf. Grether, Schwartz, & Wilde, The Irrelevance of Information Overload: An Analysis of Search and Disclosure, So. Cal. L. Rev. (1986) (questioning the contention of an information overload problem in commercial law). If the fear is the free rider problem that afflicts all voting processes, supermajority conditions could be attached to the amendment process, although I am not sure that such a solution would be optimal.

97 cite to formation in 1985 of Council of Institutional Investors for public pension plans and other instituional investors. See also, Appearances Likely to Prove Deceiving When It Comes to T. Boone Pickens, Wall St. J., Aug. 22, 1986, at 6 (corporate raider to establish group to lobby for shareholder rights). In addition, the Investor Responsibility Research Center annually compiles a report on institutional investors' voting on corporate governance questions.

98 See K. Shepsle, Institutional Equilibrium and Equilibrium Institutions (May 1984), published in The Science of Politics (H. Weisberg ed. 1985).

99 See Lewellen, Stanley, Lease & Schlarbaum, Some Direct Evidence on the Dividend Clientele Phenomenon, 33 J. Fin. 1385 (1978).

100 See generally, Gilson & Kraakman, The Mechanisms of Market Efficiency, 70 Va. L. Rev. 549 (1984). The rewards may also be

shared by some of the uninformed-- some of the information of sophisticated investors will be conveyed in the stock price as they trade, and some uninformed shareholders will tender in two-step offers and receive the same disproportionate share as the informed.

101 See Clark, The Four Stages of Capitalism, 94 Harv L. Rev. 561 (1981).

102 See W. Muir, **Legislature** (1982) (state legislature a school in which legislators are educated by lobbyists and other informed individuals).

103 The introduction of attorneys obviously creates the potential for additional agency problems concerning their advocacy of the client's interests in the legislative process. In addition to the constraints placed on attorneys from the forces of state competition, see note 40 supra, a competitive market for legal services should constrain attorneys from favoring their own interests at a cost to shareholders.