

THE HIDDEN VIRTUE OF  
ANTITAKEOVER DEFENSES

Sharon Hannes

Discussion Paper No. 354

03/2002

Harvard Law School  
Cambridge, MA 02138

The Center for Law, Economics, and Business is supported by  
a grant from the John M. Olin Foundation.

This paper can be downloaded without charge from:

The Harvard John M. Olin Discussion Paper Series:  
[http://www.law.harvard.edu/programs/olin\\_center/](http://www.law.harvard.edu/programs/olin_center/)

## THE HIDDEN VIRTUE OF ANTITAKEOVER DEFENSES

Sharon Hannes\*

### ABSTRACT

Although corporate takeover literature discusses the pros and cons of takeover defenses quite thoroughly, it fails to explain the wide divergence in actual takeover practices. Recent empirical studies reveal that while some IPO stage firms do not adopt defenses, a significant number use a variety of antitakeover strategies (Daines & Klausner 2001, Coates 2000 and Field & Karpoff 2000). Moreover, none of the tests conducted in these studies revealed any relevant difference between adopting and non-adopting firms.

The purpose of this paper is to shed light on the findings of these empirical studies, while demonstrating that there may even be rational divergence of antitakeover practices among similar firms. The potential advantage in antitakeover charter provisions, which can guarantee higher premiums to shareholders in the event of a takeover, is eroded by the adoption of defenses by multiple targets. The reason for this is that bidders prefer to buy unshielded targets, if all other factors are equal, since they are less expensive. Like the increased risk of burglary to one's apartment when a neighbor installs bars on his windows, the greater the likelihood that unshielded targets will enjoy takeover events as the ratio of shielded targets in a market increases. The diversion of takeover activity toward unshielded firms, which seemingly is a hidden virtue of takeover defenses, provokes an evolutionary process that could explain the divergence of antitakeover practices among firms.

---

\* Assistant Professor, Tel Aviv University Law School. I am deeply grateful to Lucian Bebchuk for numerous comments and suggestions. For helpful comments and conversations I also wish to thank Bernard Black, John Coates, Hanoch Dagan, Robert Daines, Einer Elhauge, David Gilo, Marcel Kahan, Lewis Kaplow, Michael Klausner, Omri Yadlin, and participants at the Yale/Stanford Junior Faculty Forum, the 2001 Global Finance Conference, the 2001 annual CLEA meeting, a seminar at Northwestern University, and the Law & Economics Seminars at Harvard Law School and Tel Aviv University. For financial support I wish to thank the John M. Olin Center for Law, Economics and Business at Harvard University.

## Table of Contents

<b>I.</b>	<b>Introduction</b>	<b>1</b>
<b>II.</b>	<b>Corporate Literature and its Missing Element</b>	<b>6</b>
	A. The Development of an Incumbent's Powers to Impede Bids	6
	B. The Proliferation of ATPs in their 1980s and their Standstill in the 1990s	11
	C. The Missing Discussion in Corporate and Financial Literature	13
	D. The Puzzle of the Empirical Study of IPO-Stage Firms	17
<b>III.</b>	<b>The Various Counter Effects and Market Equilibria</b>	<b>18</b>
	A. A Graphic Representation of a Numerical Example	19
	B. The Premium Effect	23
	C. Scenarios in which Defenses are Absolutely Harmful, Absolutely Beneficial or Become Contagious	28
	D. The Disciplinary Effect	31
	E. The Scale Economics Effect	34
	F. The Pool Definition	35
	G. The Relevant Takeover Activity	38
	H. How Rational Do We Expect Issuers to be?	38
	I. Multiple Equilibria	39
	J. Why Similar Firms May Adopt Different Types of ATPs, each with Different Shielding Strength?	42
<b>IV.</b>	<b>The Explanatory Power of the Theory</b>	<b>44</b>
	A. Shedding Light on the Empirical Evidence	44
	B. Competing Explanations for the Variance in Takeover Defenses at the IPO Stage	50
	C. Testable Predictions	56
<b>V.</b>	<b>Two Analogous Legal Choices: Ownership Structure and State of Incorporation</b>	<b>57</b>
	A. State Law Competition	57
	B. The Determinants of Ownership Structures	58
<b>VI.</b>	<b>Summary and Normative Implications</b>	<b>62</b>

# THE HIDDEN VIRTUE OF ANTITAKEOVER DEFENSES

Sharon Hanes

© 2002 Sharon Hanes. All Rights Reserved.

## I. Introduction

Recent studies reveal that IPO-stage firms diverge in their attitudes toward antitakeover charter provisions (“ATPs”).<sup>1</sup> While the charters of some companies are replete with such legal shields, they are non-existent in others. This finding, coupled with the absence of any relevant distinguishing factors among these new issuers, has puzzled corporate law scholars. One commentator recently presented the challenge to traditional corporate law as follows: “Standing alone, Lipton’s position would suggest all companies should adopt defenses prior to an IPO, and Easterbrook & Fischel’s position would suggest that no firm should adopt a defense; yet, in reality, about half do and half do not.”<sup>2</sup>

The inability to explain this phenomenon is rooted in a ubiquitous shortcoming in the literature. Although the widespread adoption of antitakeover mechanisms has been exhaustively covered, the focus has been almost exclusively on their impact upon various corporate players; and there has been no analysis of the effect which adoption of such devices by a firm has upon other potential takeover targets in the market.

In practice, however, antitakeover devices have a very real effect upon potential takeover targets because purchasers make the comparative analysis in their decision-making.<sup>3</sup> In addition to looking at the functional characteristics of the different potential targets, bidders compare the degree of ease with which each target may be acquired. Therefore, in order to

---

<sup>1</sup> See JOHN C. COATES, EXPLAINING VARIATION IN TAKEOVER VULNERABILITY: FAILURE IN THE CORPORATE LAW MARKET (Harvard Law and Economics Discussion Paper No. 297, 2000), at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=237020](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=237020); Robert Daines & Michael Klausner, *Do IPO Charters Maximize Firm Value?* 17 J. L. ECON. & ORG. 83-120 (2001); LAURA C. FIELD & JONATHAN M. KARPOFF, TAKEOVER DEFENSES AT IPO FIRMS (SSRN Working Paper Series No. 236043, 2000), at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=236043](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=236043).

<sup>2</sup> See John C. Coates, *supra* note 1, at 6.

<sup>3</sup> This fact was readily shown by an empirical study that found that termination of a planned merger creates vast stock gains for industry rivals, suggesting that such firms are takeover alternatives for the same buyer. See Aigbe Akhigbe et al., *The Source of Gains to Targets and Their Industry Rivals: Evidence Based on Terminated Merger Proposals*, 29 FIN. MGMT. 101 (2000).

obtain a complete picture of a company's takeover prospects, one must consider not only the company's defenses, but also those of its peers.<sup>4</sup>

So long as corporate takeover discourse focuses solely on the behavior of seasoned firms, the interaction among takeover targets may go unnoticed. Because dispersed stakeholders of seasoned firms cannot easily re-negotiate, the adoption or rejection of ATPs by such firms may be the result of a bargaining failure. However, the recent empirical revelation that IPO-stage firms (firms with undistorted managerial incentives) also tend to adopt ATPs, requires a thorough reevaluation of fundamental assumptions heretofore held in corporate discussions.

This paper intends to piece together the puzzle that has yet to be addressed by the literature. This can be achieved by examining the effects which a firm's adoption or rejection of ATPs may have upon its peers. Although there may be various and relevant counter-effects, the focus of this paper is on effects that result from two specific and related phenomena.

First, the takeover risk to an individual firm is not endogenous to its antitakeover decisions. Each prospective bidder naturally confronts a limited pool of suitable targets from which to choose. Thus, every potential target, regardless of the degree to which it is or is not shielded, must consider the defenses available to other prospective targets. The decisions of one firm may divert takeover activity to another firm, which may in turn affect the average takeover premium that the latter may reasonably expect in the event of a takeover.<sup>5</sup>

Second, potential bidders, particularly since the 1990s, are frequently widely held corporations with agency problems of their own.<sup>6</sup> In the quest to expand, managers of such

---

<sup>4</sup> In a sense, this externality argument is close to Shavell's diversion of crime argument. See Steven Shavell, *Individual Precautions to Prevent Theft: Private Versus Socially Optimal Behavior*, 11 INT'L J. L. & ECON. 123, 126 (1991). For example, bars placed on one's windows would result in a higher risk to one's neighbors. However, the externality resulting from adoption of takeover defenses may pose a positive externality to "neighboring" firms since shareholders have adequate reasons to promote takeovers.

<sup>5</sup> The discussion in this paper assumes the existence of a *corporate stagnation* effect regarding ATPs, a phenomenon that I have analyzed elsewhere. As the empirical evidence clearly points out, seasoned firms that entered the 1990s with ATPs do not tend to repeal them, but the rest of the mature firms' population seldom adopts ATPs. This means that managers are potent enough to maintain ATPs in seasoned firms while stockholders are potent enough to resist adoption of new ones. See Sharon Hannes, *The Determinants and Consequences of Corporate Stagnation: Discussion and Reform Proposal 20* (2001) (unpublished manuscript, on file with author).

<sup>6</sup> Managerial agency problems of unjustified expansion and harmful empire building are frequently studied and analyzed empirically. See, Randall Morck et al., *Do Managerial Objectives Drive Bad Acquisitions*, 45 J. FIN. 31 (1990); Larry H.P. Lang et al., *A Test of the Free Cash Flow Hypothesis: The Case of Bidder Returns*, 29 J. FIN. ECON. 315-35 (1991), and PEKKA HIETALA ET AL., WHAT IS THE PRICE OF HUBRIS? USING TAKEOVER BATTLES TO INFER OVERPAYMENTS AND SYNERGIES (SSRN Working Paper Series No. 242098, 2000), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=242098](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=242098).

bidders who consider the use of an unsolicited bid prefer takeover targets that are run inefficiently.<sup>7</sup> In this way, the managers are able to satisfy their drive for expansion while obtaining a profit for their own stockholders.<sup>8</sup> If, however, there are no relevant poorly run targets from which gains can be extracted, the management of the bidding firm may still proceed with its quest to expand by launching an unsolicited bid for a company that is run well.<sup>9</sup> Consequently, even a firm with perfect management performance which is left unshielded and vulnerable to takeovers may be raided.

From a targeted firm's perspective, these realities generate two opposing effects among companies that consider adopting ATPs: 1) the *Premium Effect*; and 2) the *Disciplinary Effect*.<sup>10</sup> According to the *Premium Effect*, firms with ATPs divert bidding activity to unshielded targets. If one disregards the stagnant effect of ATPs to increase the premiums paid once a bid is launched, the Premium Effect reduces the probability of such a bid, and consequently whatever premium may be expected, as the number of unshielded targets increases.<sup>11</sup> Conversely, the frequency of bids for unshielded targets tends to increase, and thus the premiums they can expect, as the percentage of shielded targets increases.<sup>12</sup> Consequently, the more prevalent ATPs become, the more reluctant entrepreneurs are to embrace ATPs for their own firms and

---

<sup>7</sup> For matters of simplicity I defer the discussion of possible synergies. For now I assume that the pertinent targets are similar in every aspect other than their ATP coverage and managerial performance.

<sup>8</sup> In the definition of poorly run firms I include incidences of unjustified managerial resistance to beneficial business combinations that threaten the firm's independence and the managers' careers.

<sup>9</sup> Such incidences may be detected by a decline in the share price of the buyer as a result of the negative market reaction to the acquisition. See, e.g., Bernard S. Black, *Bidder Overpayment in Takeovers*, 41 STAN. L. REV. 597 (1989). A recent empirical study indicates that this specific type of agency problem is especially prevalent among firms with managers that have low equity-based compensation. Compared to managers with high equity based compensation, low-equity-based-compensation managers pay higher acquisition premiums and acquire targets with less growth opportunities. See Supid Datta et al., *Executive Compensation and Corporate Acquisition Decisions*, J. FIN., forthcoming, available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=265225](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=265225).

<sup>10</sup> Only the *Disciplinary Effect* requires that bidders will be willing to pursue inefficient business combinations as described above. Thus, the results of this study will essentially remain in place whether one disputes this inefficient mergers assumption or not. Also, as explained by section 3.C, some delicacies of the *premium effect* show that the *premium effect* does not always contradict the *Disciplinary Effect*.

<sup>11</sup> But note that this effect may be limited because some takeover activity is not susceptible for diversion by ATPs.

<sup>12</sup> The feasible consequences of the *Premium Effect* lie beyond the diversion of bidding activity that was described above. Section 3.B shows that diversion of takeover activity also affects the premiums that are paid once a takeover event materializes (in addition to its effect on takeover frequency).

vice versa.<sup>13</sup>

In contrast to the Premium Effect, the Disciplinary Effect most likely thrives in the opposite direction. Although the threat of an solicited bid tends to have a disciplinary effect on the executives of a given target, the picture is distorted by the uneven dispersion of ATPs.<sup>14</sup> Although an unshielded firm may appear to benefit more from an active market for corporate control because its management is more likely to be disciplined for any wrongdoing, one must take into account that it is easier to take over such a target in relation to highly shielded firms. Hence, because the bidder's management may not hesitate to combat a well-run firm, even first-rate managers of unshielded firms may be severely penalized by the market for corporate control.<sup>15</sup> As a result, the virtues of a takeover market for unshielded firms diminish as the number of potential shielded targets increases.

By itself, the Disciplinary Effect means that the more ATPs are adopted by firms, the greater the incentive for every entrepreneur to adopt them. Conversely, the more firms remain unshielded, the more valuable the unshielded position becomes.

Together, the net influence of the Premium Effect and the Disciplinary Effect may help to solve the conundrum regarding the diversity of practices among similar firms at the IPO stage with respect to the adoption of ATPs. Examining the behavior of other firms could lead the market to a unique equilibrium that strikes a balance between firms that adopt antitakeover mechanisms and those that do not.<sup>16</sup> In this evolutionary equilibrium, the marginal firm entering the market enjoys the same total benefits regardless of whether or not it adopts ATPs. Nevertheless, this indifference does not mean that takeover defenses are ineffective. Rather, the indifference is a result of the interaction between firms with ATPs and those without. One thus arrives at a compromise approach to the commonly held belief that takeover defenses must be either harmful or beneficial. This compromise is based on an assumption that takeover defenses

---

<sup>13</sup> This is not the only possible outcome of the *premium effect* as discussed at length in section 3.C. Moreover, the *Premium Effect* that directly influences the takeover likelihood also affects the premium that is paid once a bid is launched. This issue is also explored in section 3.B.

<sup>14</sup> There are commentators that think, though, that ATPs have a positive *ex ante* effect, which may lead them to an opposite result.

<sup>15</sup> In contrast to the *Premium Effect*, the *Disciplinary Effect* is an *ex ante* effect. Good managers may exert less effort if they are exposed to an arbitrary takeover market.

<sup>16</sup> Alternatively, the counter effects may create a rational herd-like behavior luring firms to adopt sub-optimal behavior. This possible outcome also lies beyond the explanatory power of the existing literature on takeovers. Section 3.C. discusses this possibility at length.

may raise premiums in the event of a takeover, and thus compensate for the fact that they reduce the likelihood of a takeover. However, this advantage of ATPs is fully eroded since ATPs divert takeover activity until their relative advantage becomes vestigial.

Moreover, the framework of this paper does not neglect the agency problem between managers and shareholders that led the discussion on takeovers and ATPs in seasoned firms.<sup>17</sup> The agency problem is in fact essential to the current argument. Managers empowered by ATPs, and fighting to preserve their positions, are expected to either successfully deter bids or negotiate hefty premiums on behalf of their shareholders.<sup>18</sup> Potential takeover targets exploit this stated agency problem at the IPO stage, and gauge the amount of discretion they grant their managers accordingly. The more defenses a takeover target adopts, the more discretion its managers will be accorded. In the context of the present discussion, firms compete for takeovers and takeover premiums with other firms. Granting defenses to managers is a commitment mechanism that shareholders use to support the strategy they opt for in the competition.

Finally, the infrastructure presented in this paper carries many implications beyond the principal goal of developing a new understanding of takeover defenses and takeover activity. If one embraces the notion that counter-effects are produced by a firm's legal choices, and in particular those relating to takeover activity, then many theses become subject to reevaluation. Two of these theses are contemplated in this paper. First, the choice of ownership structures may be analyzed through the tools developed here that facilitate an understanding of takeover defenses. Using this framework may help to explain why nations that have primarily dispersed ownership firms also have a significant minority of concentrated ownership firms, while nations with a majority of concentrated ownership firms hardly have dispersed ownership firms. Second, the framework of this paper suggests why similar firms do not necessarily reach identical decisions insofar as their preferred place of incorporation is concerned. The framework

---

<sup>17</sup> For a guide to the relationship between agency problems and takeover resistance, see Ronald Gilson, *Seeking Competitive Bids Versus Pure Passivity in Tender Offer Defense*, 35 STAN. L. REV. 51 (1982).

<sup>18</sup> Fat premiums for shareholders generally also yield high premiums for the managers in their frequent capacity as sizable shareholders. This is cited as one of the reasons that managers sometimes accept a business transaction that costs them their job. See, e.g., Rene M. Stulz, *Managerial Control of Voting Rights: Financing Policies and the Market for Corporate Control*, 20 J. FIN. ECON. 25-54 (1988); see also JAY C. HARTZELL ET AL., WHAT'S IN IT FOR ME? PERSONAL BENEFITS OBTAINED BY CEOs WHOSE FIRMS ARE ACQUIRED (SSRN Working Paper Series No. 236094, 2000), at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=236094](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=236094).



of this paper thus supplements the voluminous literature on state law competition.

The second section of this paper proceeds to scan the literature and history of takeovers, as well as the highlights of the empirical data on IPO stage firms. The analysis uncovers flaws in the theoretical literature that prevent an understanding of novel empirical findings. In short, the risk of takeover is not endogenous to the antitakeover characteristics of a firm. Section Three of this paper expands upon the discussion of the counter-effects generated by the adoption of ATPs, and upon the notion that takeover targets are members of a pool. By examining the consequences of these effects, the discussion concludes that the mixed strategy equilibrium, which is exemplified, is but one of many possible outcomes. Multiple equilibrium scenarios in non-linear settings are also contemplated, and the discussion is broadened to explain why similar firms may adopt different types of ATPs, each with its own distinctive shielding strength. Section Four verifies the explanatory power of the theory presented herein. It counters the existing empirical evidence with predictions made by the theoretical argument advanced in this paper. Section Four then proceeds to discuss the various, albeit few, competing explanations for the variance in takeover defenses at the IPO stage, and their relation to the current argument. Finally, Section Four suggests verifiable outcomes that may be predicted by the model. Section Five then expands the conclusion of the paper into two analogous fields: 1) the division of ownership structures between concentrated and dispersed ownership; and 2) state law competition. Finally, Section Six summarizes and discusses the divergence between social and private values of the equilibrium.

## II. Corporate Literature and its Missing Element

### A. The Development of an Incumbent's Power to Impede Bids

Unsolicited Control Transactions, otherwise known as hostile takeovers, first became prevalent in the 1980s.<sup>19</sup> The unique and defining feature of a hostile takeover is that the board

---

<sup>19</sup> This was by no means the first wave of unsolicited control transaction and the “market for corporate control” was famously described much earlier in the seminal work of Henry Manne. Henry Manne, *Mergers And the Market for Corporate Control*, 73 J. POL. ECON. 110 (1965).

of directors of the firm to be acquired opposes the proposed transaction. Thus, in order to overcome this opposition, the bidder must appeal to the shareholders of the corporate target.<sup>20</sup>

By law, directors are either elected or dismissed from office by the voting mechanisms of the firm, which occur at certain times or upon certain events. However, if a bidder can successfully acquire a majority of shares from the target firm, it would only be a question of time before she would use the voting mechanism to replace the opposing directors. In practice, however, the incumbent board in a hostile takeover situation tenders its resignation without waiting for the inevitable vote.<sup>21</sup> The voting mechanism was, therefore, left virtually untouched by the offers tendered in hostile takeover situations in the early 1980s.<sup>22</sup>

Subsequently, however, innovative legal devices, which were upheld by landmark judicial precedents, permanently altered the landscape on which hostile takeover battles were waged.<sup>23</sup> In order to impede hostile market transactions, corporate attorneys crafted plans for shareholder rights, which were notoriously referred to as “poison pills.”<sup>24</sup> Under the terms of such plans, the purchase of a significant portion of stock without the board of directors’ approval triggers special rights for incumbent shareholders.<sup>25</sup> As a result, the value of a hostile

---

<sup>20</sup> The merger wave of the 1980s was so fierce that an unbelievable 30% of the Fortune 500 companies were subject to takeover bids during the decade. Gerald Davis & Suzanne Stout, *Organization Theory and the Market for Corporate Control: A Dynamic Analysis of the Characteristics of Large Takeover Targets, 1980-90*, 37 ADMIN. SCI. Q. 605, 608 (1992).

<sup>21</sup> John C. Coates, *Measuring the Domain of Mediating Hierarchy: How Contestable are U.S. Public Corporations?*, 24 J. CORP. LAW 837, 850 (1999).

<sup>22</sup> The tender offer mechanism was invented in the 1950s and since then became the major tool for acquiring shares in control transactions. See DOUGLAS AUSTIN & JAY FISHMAN, *CORPORATIONS IN CONFLICT* 7-23 (1970). In a tender offer the bidder specifies the price at which it is interested in buying the company’s shares, the amount it is willing to pay and the time period available for the public shareholders to tender their shares. Hence, it is different from a simple aggregation of single purchases on the open market with a variety of prices and terms.

<sup>23</sup> See the seminal case of *Moran V. Household Int’l, Inc.*, 500 A.2d 1346 (Del. 1985).

<sup>24</sup> These developments troubled even scholars who believe that state law competition generally leads to efficient results. See Daniel R. Fischel, *The “Race to the Bottom” Revisited: Reflections on Recent Developments in Delaware’s Corporation Law*, 76 NW. U. L. REV. 913 (1982); Roberta Romano, *Competition for Corporate Charters and the Lesson of Takeover Statutes*, 61 FORDHAM L. REV. 843, 856-59 (1993).

<sup>25</sup> Poison pills typically allow the incumbent shareholders to buy the acquirer’s stock (so-called “flip-over” poison pills) or the target’s stock (so-called “flip-in” poison pills) at substantially discounted price. A flip-over poison pill is generally a far less potent defense than a poison pill with a flip-in provision. See Ronald J. Gilson & Bernard S. Black, *THE LAW AND FINANCE OF CORPORATE ACQUISITIONS* 747 (2d ed. 1998).

purchase could be so severely diluted as to defeat any possible benefit of the takeover.<sup>26</sup> Moreover, because these plans to protect shareholder rights are, per the discretion of the board, distributed as in-kind dividends, shareholders' approval is not required in order to implement the harsh measures, which of course facilitate adoption thereof. The seminal Delaware court decision in *Moran* and subsequent litigation legitimized the use of these poison pills, despite their potential for conflict between shareholders and directors.<sup>27</sup> This marked the end of pure market transactions as possible means for achieving hostile takeovers.<sup>28</sup>

Nevertheless, the development and judicial approval of the poison pills could not stop the lively market for unsolicited control transactions, since it did not temper the vote or proxy mechanisms of targeted firms.<sup>29</sup> Thus, even if there is a poison pill, a bidder can solicit the votes of shareholders in order to replace an incumbent board.<sup>30</sup> The new directors can then remove the poison pill since "poison pills can be removed by a board of directors as easily as they can be

---

<sup>26</sup> For the terms of a standard poison pill, see Wachtell Lipton Rosen & Katz, *The Share Purchase Rights Plan*, reprinted in Gilson & Black, *id.* 4-12 (2d ed. 1998).

<sup>27</sup> Initially, commentators debated whether boards' decisions to reject transactions, made under the shields of the poison pills, were about to be scrutinized by the courts. Gilson and Kraakman advocated substantive scrutiny by the courts of any board decision regarding unsolicited offers to purchase the firm. Specifically they suggested an intermediate review standard that is not too harsh but nevertheless does not leave unconditional discretion to the board of directors. See Ronald Gilson & Reinier Kraakman, *Delaware Intermediate Standard for Defense Tactics: Is There Substance to Proportionality View?*, 44 *BUS. LAW.* 247, 256-60 (1989). Kahan explains that the Delaware court never intended and will not conduct such substantive scrutiny. The only requirements that the board of directors is obliged to fulfill in a case of an offer to purchase the firm are procedural. See Marcel Kahan, *Paramount or Paradox: The Delaware Supreme Courts Takeover Jurisprudence*, 19 *J. CORP. L.* 583 (1994). However, it soon became clear that in most cases boards were being granted a very broad mandate by the courts to reject acquisition offers. See *Paramount Communications v. Time* (Del. 1989); Jeffrey N. Gordon, "Just Say Never? Poison Pills, and Shareholder-Adopted Bylaws: A Paper for Warren Buffet", 19 *CARDOZO L. REV.* 511, 522-30 (1997). Only one doctrine that covers a minority of the cases allows for straightforward judicial intervention. See *Revlon Inc. v. MacAndrews and Forbes Holdings, Inc.*, 506 A.2d 173, 181 (Del. 1986).

<sup>28</sup> According to Gilson's recent criticism, the Delaware court prompted bidders to use the vote mechanism of the target firms by approving the use of poison pills, which foreclose the ability of the bidder to purchase stock directly from the corporate shareholders. RONALD GILSON, *UNOCAL FIFTEEN YEARS LATER (AND WHAT WE CAN DO ABOUT IT)* (Stanford Law and Economics Olin Working Paper Working Paper Series No. 201, 2000), at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=235417](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=235417).

<sup>29</sup> Dispersed shareholders usually do not show up for a vote but rather mail in their proxies with their decisions. Hence, the vote process should be more accurately termed the proxy process.

<sup>30</sup> One exception is the so-called "dead-hand" poison pill, which managers tried to use to undermine the effectiveness of the proxy contest. A dead-hand poison pill limits the power to redeem the poison pill to those directors who were members of the board at the time of the pill's adoption. These were prohibited by the Delaware Chancery Court in *Carmody v. Toll Bros.*, 723 A.2d 1180 (Del.Ch. 1998), at least if the articles of incorporation do not include authorization for their adoption. *Id.* at 1191

installed,”<sup>31</sup> thereby allowing the bidder to proceed to purchase stock. The voting process may, therefore, circumvent the effects of a poison pill if it is not accompanied by any other defensive mechanism. Interestingly, the voting mechanism, which was initially designed to allow changes in corporate control, regained its leading role during the era of the poison pills.<sup>32</sup>

Although poison pills certainly made hostile takeovers much more expensive, the out-of-pocket costs of soliciting shareholder votes are not the primary deterrent to hostile takeovers.<sup>33</sup> The power of the poison pills, lies in the extremely costly delays they create.<sup>34</sup> Because market values fluctuate rapidly, deals that can be concluded without delay are of much greater value than those that cannot. Moreover, because takeover activity engages the bidder’s management, significant opportunity costs are created. Finally, the longer it takes to conclude a deal, the

---

<sup>31</sup> Coates, *supra* note 21, at 852.

<sup>32</sup> In reality, when the bidder solicits the shareholders’ votes to circumvent a poison pill, she must also create a credible commitment to purchase the stock after she captures the board. This commitment is required to assure the shareholders that the bidder does not pursue her own agenda at the expense of the shareholders after she prevails in the vote. Moreover, the committed purchase price serves as a signal to the shareholders that can help them evaluate the quality of the bid. The market mechanism to allow for such commitment is a contingent tender offer that is held in conjunction with the proxy fight for the board. In short, this is a simultaneous offer to replace the management of the company and buy its shares. See Harold Mulherin & Annette Poulsen, *Proxy Contests and Corporate Change: Implications for Shareholders Wealth*, 47 J. FIN. ECON. 279, 286 (1998). First, the shareholders are presented with an offer and decide whether or not to tender their stock. However, the tender offer does not consummate at this stage, so as not to trigger the poison pill. Thereafter, and if enough shares are tendered, the shareholders vote for the board and if the bidder prevails, the contingent tender offer is automatically triggered. At once the poison pill is lifted and the target’s stock changes hands for the previously specified price. A joint tender offer and proxy contest are thus structured to overcome the board’s disinclination for the transaction. This joint vote and tender offer also assist shareholders to overcome strategic tendering which could hurt the entire shareholders’ group. Thus it precludes coercive bids that are designed to pressure and absorb shareholders value. See Lucian A. Bebchuk, *Toward Undistorted Choice and Equal Treatment in Corporate Takeovers*, 98 HARV. L. REV. 1695 (1985); Lucian A. Bebchuk, *The Pressure to Tender: An Analysis and a Proposed Remedy*, 12 DEL. J. CORP. L. 911 (1987). Finally, uninformed shareholders may find it hard to decide whether to vote for or against their own managerial team. The offered price in comparison to the pre-bid price of the firm’s stock may help the shareholders reach a decision. A more accurate explanation may be found in LUCIAN BEBCHUK & OLIVER HART, TAKEOVER BIDS, PROXY FIGHTS AND CORPORATE VOTING (NBER Working Paper Series No. W8633, 2001), at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=293246](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=293246).

<sup>33</sup> For a proxy for solicitation expenses, see CATHERINE M. DAILY ET AL., INSTITUTIONAL INVESTOR ACTIVISM: FOLLOW THE LEADERS? (SSRN Working Paper Series No. 10299, 1997), at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=10299](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=10299).

<sup>34</sup> Coates measures the potency of a takeover defense by the number of days in which the defense can delay a purchase of the company’s stock. This delay is computed for every firm and thus creates an innovative index, the “contestability index,” for every measured company. The contestability index allows for a fine tuned and comparative analysis of different types of legal defenses, including combinations of defenses. See John C. Coates, *An Index of the Contestability of Corporate Control: Studying Variation in Legal Takeover Vulnerability* (1999) (unpublished manuscript, on file with author).

greater the risk to the bidder of competition. As a result, if the process of replacing the board of the targeted firm takes longer than the time necessary for a pure tender offer, the effect of the poison pill becomes far more salient.

Surprisingly, however, this need not be the case. If, for example, a majority of shareholders can quickly dismiss an incumbent board without cause, and nominate a new board via written consent, without holding a meeting, then the process should not consume much more time than would have been spent had an offer been tendered in an ordinary takeover.<sup>35</sup> Moreover, and rather surprisingly, this is precisely the default standard established under which proxy fights may be concluded within 45 days.<sup>36</sup> Hence, a poison pill by itself does not allow managers of a defending target much time to rescue their sinking positions.<sup>37</sup>

There are, nevertheless, delaying tactics that can be taken in order to strengthen the power of the poison pill. Unlike the poison pills, the adoption of which lies solely within a board's discretion, delaying tactics beyond a legal default must ordinarily be implemented with shareholder approval.<sup>38</sup> However, in the second half of the 1980s, as illustrated by the work of Karpoff and Danielson, managers began to easily obtain shareholder consent for various delaying mechanisms.<sup>39</sup>

For instance, although Delaware law generally requires that every board member be elected annually, a charter provision may establish staggered elections such that only a third of

---

<sup>35</sup> Instead of the 20-day minimal period for tender offers imposed by the Williams Act, it takes about 45-60 days for the Securities and Exchange Commission to pre-clear the proxy statement including the time required for the solicitation itself. This minimal delay is the result of the Federal Proxy Solicitation rules. For the Williams Act requirements, see 5 U.S.C. §§ 78m(d)-(e), 78n(d)-(f) (1999). For the delays imposed by the S.E.C. involvement, see Coates, *supra* note 21, at 853.

<sup>36</sup> Since Delaware General Corporation Law allows action by written consent and removal of directors without cause as a default matter, it imposes no more delay than the minimal 45 days that the federal proxy regulation mandates. See DEL. CODE ANN. tit. 8, § 141, 228 (1999).

<sup>37</sup> Therefore, it is not surprising that by itself a poison pill does not hinder much of the likelihood of being taken over. See the empirical results by Robert Comment & William Schwert, *Poison or Placebo? Evidence on the Deterrence and Wealth Effects of Modern Antitakeover Measures*, 39 J. HN. ECON. 3 (1995).

<sup>38</sup> Alternatively, ATPs may be installed in the initial charter of the firm or while ownership is concentrated before the initial public offering, when tension between managers and shareholders usually does not exist.

<sup>39</sup> This empirical work shows that the percentage of antitakeover shields in seasoned firms grew tenfold during the second half of the 1980s. See, J. M. Karpoff & M. G. Danielson, *On the Uses of Corporate Governance Provisions*, 4 J. CORP. FIN. 347, 354 (1998), table 2.

the board is replaced or re-elected each year.<sup>40</sup> Gaining control of a third, however, obviously does not give one a majority, and thus an attempt to gain control of a “staggered” (or “classified”) board requires victory in at least two proxy battles, and in some cases three if a company has a cumulative voting procedure.<sup>41</sup>

Apparently, the possibility of delaying takeovers for up to two years became very appealing to a significant number of firms.<sup>42</sup> Since the 1980s, there has been a dramatic upsurge in the number of publicly held companies that have staggered elections: today, approximately sixty percent do not re-elect their entire board every year.<sup>43</sup> This is undoubtedly a lethal and frequently used type of ATP, and is in fact the most extreme measure among many other charter provisions that are widely used to foster delays.<sup>44</sup>

In addition to these delaying tactics, founders can prevent hostile takeovers altogether if they maintain a controlling stake following the IPO or by using a dual class stock structure.<sup>45</sup> The consequences of using such harsh devices are contemplated later in this paper.<sup>46</sup>

## B. The Proliferation of ATPs in the 1980s and their Standstill in the 1990s

---

<sup>40</sup> See DEL. CODE ANN., tit. 8, § 141(d) (1991). There is a possibility to form a two-tier staggered board instead of a three-tier one. However, in practice such a structure does not provide managers with the benefits of a three-tier staggered board and therefore is rarely, if ever, witnessed.

<sup>41</sup> For background, criticism and statistics regarding staggered boards, see INVESTORS RESPONSIBILITY RESEARCH CENTER, BACKGROUND REPORT ON CLASSIFIED BOARDS (1994). Empirical research by Ambrose & Megginson found that classified boards are associated with a decrease in the likelihood of a firm to be acquired, but that other takeover defenses have no statistically significant effect on acquisition likelihood. See Brent W. Ambrose & William L. Megginson, *The Role of Asset Structure, Ownership Structure, and Takeover Defenses in Determining Acquisition Likelihood*, 27 J. FIN. & QUANTITATIVE ANALYSIS 575-89 (1992).

<sup>42</sup> If the firm opts for cumulative voting and the managers have considerable influence on a small percentage of the firm’s votes, staggered boards may delay takeover for up to three years.

<sup>43</sup> Staggered boards incidences are graphically presented in appendix 2. The source of the data is the report by Alesandra Monaco, CORPORATE GOVERNANCE SERVICE 1999 BACKGROUND REPORT C: CLASSIFIED BOARDS, 1999 INVESTOR RESPONSIBILITY RESEARCH CENTER.

<sup>44</sup> For a broad discussion of antitakeover charter provisions, see Hannes, *supra* note 5; Coates *supra* note 34.

<sup>45</sup> Three different mechanisms: stock pyramids, dual class stock, and cross-holdings, allow separation between ownership and control. Thus, the controller can achieve a complete lock on control with any level of ownership. See Lucian A. Bebchuk et al., *Stock Pyramids, Cross-Ownership, and Dual Class Equity: The Creation and Agency Costs of Separating Control from Cash Flow Rights*, in CONCENTRATED OWNERSHIP (Randall Morck ed., 2000).

<sup>46</sup> *Infra* Section V.

Because poison pills are somewhat impotent in the absence of ATPs that hinder the availability of the proxy mechanism, it is not surprising that the proliferation of the former was closely followed by the proliferation of the other takeover defenses. However, as previously mentioned, whereas use of a poison pill lies solely within executive discretion, use of ATPs to impede the proxy process requires shareholder approval. Yet shareholders of many public corporations in the 1980s did not prevent managers from adopting ATPs.<sup>47</sup>

By the 1990s, however, the ease of adopting ATPs had all but dissipated. The increased power and activity of institutional shareholders practically precluded managers from implementing ATPs in seasoned firms.<sup>48</sup> Surprisingly, while institutional investors frequently block management proposals to adopt ATPs, they do not force firms that already have them to remove them, nor do they pressure IPO-stage firms to defer implementation of ATPs.<sup>49</sup> Consequently, ATPs may be either adopted at the IPO stage or effectively abandoned.<sup>50</sup> As phrased by one commentator: “After an IPO is complete and ownership dispersed, the takeover defenses of a public company in the U.S. in the 1990s have generally been fixed”.<sup>51</sup> The resultant corporate stagnation plays an important role in the arguments put forth by this paper, as will be discussed shortly. An explanation will be forthcoming regarding the enigmatic decisions of institutional investors to forbid seasoned firms from adopting ATPs, while ignoring the ATP practices of IPO-stage firms.

---

<sup>47</sup> The proliferation of ATPs in the population of seasoned firms in the second half of the 1980s is documented by Danielson & Karpoff. See Morris Danielson & Jonathan Karpoff, *On the Uses of Corporate Governance Provisions*, 4 J. CORP. FIN. 347-71 (1998). The widespread use of ATPs is also readily apparent from viewing many other sources. For example the use of staggered boards rose from about 20% in the early 1980s to beyond 60% today. For the up-to-date data, see Monaco, *supra* note 43. For the evidence regarding the 1980s, see Wayne Mikkelson & M. Megan Partch, *Managers Voting Rights and Corporate Control*, 25 J. FIN. ECON. 263, 267 (1989).

<sup>48</sup> “ATPs are ... opposed by institutional investors. Institutional investors have sponsored shareholders’ proposals seeking the elimination of ATPs and adopted shareholder voting protocols under which they will automatically vote against the adoption of a charter amendment containing an ATP.”, Daines & Klausner, *supra* note 1, at 84.

<sup>49</sup> As a result corporations that go public tend to use more and more defenses. See Appendix 2. This paper also suggests an explanation for this oddity. See *infra* note 114 and accompanying text.

<sup>50</sup> I have analyzed this status quo elsewhere. In a nutshell, concurrent legal structure together with other structural reasons prevent shareholders from removing ATPs from corporate charters, while managers cannot persuade shareholders to add ATPs that are not already in place. See Hannes, *Supra* note 5.

<sup>51</sup> Coates, *Supra* note 1 at 5.

### C. The Missing Discussion in Corporate and Financial Literature

The takeover boom in the 1980s, and the widespread use of antitakeover defenses in response thereto, sparked an unprecedented debate in the financial and legal literature.<sup>52</sup> Much of the copious literature that followed dealt with the effects of takeovers and ATPs on a variety of corporate actors. Discussion focussed on the influence of new conditions on managers, shareholder wealth (from the perspective of both corporate targets and bidders), employees, hosting communities, consumers, suppliers, government, and society.<sup>53</sup> Curiously, however, the salient influence of one firm's adoption of ATPs on other potential targets was overlooked.

Undoubtedly, most of the debate focused on questions of shareholder wealth. Commentators who regard takeovers as beneficial declared ATPs to be harmful to target shareholders, whereas commentators who regard takeovers as potentially harmful recognized the value of defenses.<sup>54</sup> As previously mentioned, and as will be argued below, there is no absolute answer to this question. If one accepts the proposition that the defenses of a given firm will impact upon other firms, then one must also recognize that the effect of ATPs on shareholder wealth is contingent upon the decisions of all potential takeover targets.

In other words, the notion that defenses are inherently "good" or "bad" is flawed, and one should consider the relative proliferation of defenses in the market. As discussed below, the counter-effects between corporate targets may lead to a rational herd-like behavior or to different choices among similar firms. One choice may be just as efficient for shareholders as another, even though ATP-adopting and non-adopting firms do not, contrary to the understanding of contemporary literature, differ with regard to any relevant characteristic.

---

<sup>52</sup> The debate is summarized at length by Romano. See Roberta Romano, *A Guide to Takeovers: Theory, Evidence, and Regulation*, 107(9) YALE J. ON REG. (1992).

<sup>53</sup> See, e.g., Frank H. Easterbrook & Daniel R. Fischel, *The Proper Role of a Target's Management in Responding to a Tender Offer*, 94 HARV. L. REV. 1161 (1981); Frank H. Easterbrook & Daniel R. Fischel, *Takeover Bids, Defensive Tactics, and Shareholders Welfare*, 36 BUS. LAW. 1733 (1981); Lucian Bebchuk, *The Case for Facilitating Competing Tender Offers: a Reply and Extension*, 35 STAN. L. REV. 23 (1982); Bebchuk (1982) *supra* note 32; Gilson, *supra* note 17; Andrei Shleifer & Lawrence H. Summers, *Breach of Trust in Hostile Takeovers*, in CORPORATE TAKEOVERS: CAUSES AND CONSEQUENCES 33 (Alan Auerbach ed., 1988) (concentrating on the effects of takeovers on employees under the assumption that the corporate raider is likely to breach implicit contracts between the corporate target and its employees); Margaret Blair & Lynn Stout, *A Team Production Theory of Corporate Law*, 85 VA. L. REV. 247 (1999).

<sup>54</sup> For the classic approach of defenses' opponents see Easterbrook & Fischel, *supra* note 53, Alan Schwartz, *Search Theory and the Tender Offer Auction*, 2 J. L. ECON. & ORG. 229-253 (1986). For proponents' classic view, see Martin Lipton, *Takeovers Bids in the Target's Boardroom*, 35 BUS. LAW. 101 (1979).



Because the counter-effects of ATPs analyzed in this paper complement the effects of individual firms already identified in the literature, it is important to review the classical arguments that have been expounded to date. This review can also help to evaluate the social efficiency of the equilibrium that will be exposed by the counter-effect argument.

The principal arguments found in the literature regarding the effect of takeovers on shareholder wealth may be roughly divided into two categories: 1) the disciplinary hypothesis; and 2) the bargaining power hypothesis. Neither hypothesis, however, leads to absolute conclusions regarding takeovers or ATPs.

### 1. THE DISCIPLINARY HYPOTHESIS

In brief, managers are reigned in by the threat of hostile takeovers. The market value of a given firm will decline if its managers do not run it properly, or if they shirk their duties, engage in harmful self-dealing, and pursue empire building or pet projects. When this happens, an opportunity arises for a hostile bidder to buy the company cheaply and reap the benefits of its improvement. From this narrow perspective, use of any obstacle to a takeover is both harmful and expensive.<sup>55</sup> The more defenses that are available, the greater the risk of misconduct on the part of the firms' officers.<sup>56</sup>

However, the disciplinary argument is diluted if a market suffers from myopia.<sup>57</sup> Managers who have not committed any wrongdoing may be replaced in a takeover maneuver if the market does not recognize the wisdom of their acts.<sup>58</sup> Thus, due to the threat of a takeover,

---

<sup>55</sup> In their seminal work Jensen and Meckling describe the three components of agency costs: monitoring (costs of the principal scrutiny), bonding (costs of the agent commitments) and residual loss (the loss resulting from agents' misbehavior). See Michael C. Jensen & William H. Meckling, *The Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structures*, 4 J. FIN. ECON. 305-60 (1976).

<sup>56</sup> Many more restraining market forces and internal mechanisms help reduce managerial agency costs. However, they leave a huge gap for a takeover to fill. See, e.g., Michael C. Jensen, *The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems*, 48 J. FIN. 831, 847 (1993).

<sup>57</sup> Stein is the first to link the takeover market behavior with the inefficient market hypotheses. See Jeremy Stein, *Takeover Threats and Managerial Myopia*, 96 J. POL. ECON. 61 (1988) and Jeremy Stein, *Efficient Capital Markets, Inefficient Firms: A Model of Myopic Corporate Behavior*, 104 Q. J. ECON. 393 (1989).

<sup>58</sup> Similar to Stein's main point, Shleifer and Vishny argue that the value of firms that invest in long-term hard-to-evaluate projects are likely to be discounted relative to their peers that invest in short-term projects. See Andrei Shleifer & Robert W. Vishny, *Equilibrium Short Horizons of Investors and Firms*, 80 AM. ECON. REV. 148-53 (1990).

managers may under-invest or over-invest to satisfy investors seeking short-term returns.<sup>59</sup> When this is the case, ATPs may cure the above managerial distorted incentives, rather than simply undermining the beneficial disciplinary power of the market for corporate control.<sup>60</sup> Although this is a feasible scenario, commentators usually tend to believe that the overall disciplinary influence of the market for corporate control is beneficial, and thus that ATPs are harmful to shareholders.<sup>61</sup>

## 2. THE BARGAINING POWER HYPOTHESIS

At least three ways have so far been identified in which shareholders may, from a bargaining perspective, benefit from having antitakeover defenses. First, antitakeover mechanisms may allow managers to block coercively designed bids.<sup>62</sup> Second, managers can use ATPs to negotiate a higher bid or to procrastinate in hopes of a better offer from another bidder.<sup>63</sup> This feature of takeover defenses has been well entertained by the financial press as is evident from the description of a recent takeover battle: “[I]vestors hoping for a rival bid or a much higher offer from Shell may be disappointed. That is because Barrett [a small natural gas company] has very weak takeover defenses, aside from a standard shareholder-rights plan, or

---

<sup>59</sup> The point that market inefficiencies can cause both under and over-investment belongs to Lucian Bebchuk & L. Stole, *Do short Term Objectives Lead to Underinvestment or Overinvestment in Long Term Projects*, 48 J. FIN. 719 (1993).

<sup>60</sup> While it is difficult to find direct evidence for myopic mispricing, it was recently shown that high levels of transient ownership are associated with an overweighing of near-term expected earnings. This finding supports the concerns that many corporate managers have about the adverse effects of an ownership base dominated by short-term focused institutional investors. See Brian J. Bushee, *Do Institutional Investors Prefer Near-Term Earnings over Long-Run Value?*, 18 CONTEMP. ACCT. RES. (2001).

<sup>61</sup> Daines & Klausner, *supra* note 1, at 88.

<sup>62</sup> The coercion results from a front-loaded bid, i.e., a bid that offers the tendering shareholders more than the value of untendered stock. If shareholders believe that enough shareholders will tender and therefore the bid succeeds, they will rationally elect to tender their stock as well even if it would have been better for all shareholders to coordinate rather than to tender their stock. See Lucian A. Bebchuk, *The Pressure to Tender: An Analysis and a Proposed Remedy*, 12 DEL. J. CORP. L. 911, 917-31 (1987); See Lucian A. Bebchuk, *Toward Undistorted Choice and Equal Treatment in Corporate Takeovers*, 98 HARV. L. REV. 1695 (1985).

<sup>63</sup> The kernel of the argument is that managers have better means and incentives to negotiate an improved deal than the scattered shareholders' body. Granting takeover defenses to managers empowers them to conduct such negotiations. See, e.g., Gilson *supra* note 17; Bebchuk, *supra* note 53; Elazar Berkovitch & Naveen Khanna, *How Target Shareholders Benefit from Value-Reducing Defenses Strategies in Takeovers*, 45 J. FIN. 137 (1990); Harry DeAngelo & Edward M. Rice, *Antitakeover Charter Amendments and Shareholders Wealth*, 11 J. FIN. ECON. 329-60 (1983); David S. Scharfstein, *The Disciplinary Role of Takeovers*, REV. ECON. STUD. 185-200 (1988); Stulz *supra* note 18; Rene M. Stulz, *Managerial Discretion and Optimal Financing Policies*, 26 J. FIN. ECON. 3 (1990).

‘poison pill’.’<sup>64</sup> Finally, because markets are sometimes inefficient, and prices do not necessarily reflect real values, bidders may be able to persuade shareholders that under-priced offers are attractive.<sup>65</sup> Managers may be able to protect shareholders from such opportunistic bids through the use of ATPs.

If one combines the three aforementioned ways in which ATPs can benefit shareholders, the conclusion to draw is that shareholders may hope for a better price (i.e., higher takeover premium) when they choose to implement ATPs.<sup>66</sup> The drawback to ATPs is that managers may use them to their advantage by entrenching themselves into their current jobs, while forsaking the interests of shareholders. Consequently, managers frequently defer bids that would be appealing to shareholders. Ultimately, shareholders must consider whether the advantages brought about by ATPs outweigh their disadvantages, or whether the higher premium is worth the risk of reduced takeover frequency.

Finally, the literature suggests that takeover defenses have a third type of impact insofar as they preserve private control benefits of the pre-IPO owners (benefits that cannot be shared with the public shareholders). Specifically, it has been argued that the existence of high private benefits of control may lead controllers to minimize their exposure to the market for corporate control.<sup>67</sup> The reason for this is, in essence, that a hostile control transaction does not generally compensate the incumbent controller for the loss of private benefits. For the sake of brevity, therefore, this paper assumes that the considerations of Pre-IPO owners regarding private

---

<sup>64</sup> Nikhil Deogun and Chip Cummins, *Shell Launches ‘Bear Hug’ Bid To Buy Barrett*, WALL ST. J., March 8, 2001, at A3.

<sup>65</sup> In the literature this pro defenses’ argument is phrased in ex ante efficiency terms. If the market is myopic, managers that are not shielded by defenses may shirk or make poor investment decisions. However, it also has an ex post component. Shareholders may accept an opportunistic bid with a premium beyond the market price, while this market price underestimates the true value of the firm. Hence, shareholders are better off ex post without accepting the bid but they may not recognize this to be the situation at hand. See Jeremy Stein, *Takeover Threats and Managerial Myopia*, 96 J. POL. ECON. 61 (1988); Jeremy Stein, *Efficient Capital Markets, Inefficient Firms: A Model of Myopic Corporate Behavior*, 104 Q. J. ECON. 393 (1989).

<sup>66</sup> On the empirical side Comment and Schwert found that the presence of a poison pill increases takeover premium. See Robert Comment & William Schwert, *Poison or Placebo? Evidence on the Deterrence and Wealth Effects of Modern Antitakeover Measures*, 39 J. FIN. ECON. 3-43 (1995). However, since most firms without poison pills can easily and rapidly adopt a pill, the significance their finding is questionable.

<sup>67</sup> See LUCIAN A. BEBCHUK, A RENT-PROTECTION THEORY OF CORPORATE OWNERSHIP (Harvard Law and Economics Discussion Paper No. 260, 1999), at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=168990](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=168990). Other versions of the argument also exist and are surveyed by Coates. See Coates, *supra* note 1.

benefits are negligible.

#### D. The Puzzle of the Empirical Study of Takeover Defenses of IPO-Stage Firms

So much has been written about the pros and cons of takeover defenses adopted by seasoned firms; it was only a matter of time before someone would analyze ATPs of firms that go public. Widely acknowledged features of the IPO stage led researchers to conclude that analysis of ATP decisions of IPO-stage firms would help determine whether defenses are beneficial or inimical to shareholders. This approach was doomed to fail from the outset. One cannot determine whether defenses are beneficial or not to shareholders without examining what types of ATP decisions are made by other firms. The results of the novel empirical work are, however, extremely helpful in undermining traditional assumptions about takeovers, and thus merit reevaluation.

The notion that a firm going public can maximize its value by adopting optimal governance structures can be traced to the seminal work of Jensen and Meckling.<sup>68</sup> Hence, ATP decisions of IPO-stage firms are supposed to be optimal in view of the fact that the securities market carefully prices public offerings, and the fact that entrepreneurs in such situations are guided by market professionals to adopt the structures that the market fancies. ATP decisions of seasoned firms, in contrast, do not enjoy the same exonerating mechanisms.

The increasing number of empirical papers on the ATP practices of IPO-stage firms presents a unified and tantalizing picture. There is a great divergence among the antitakeover practices of firms, which can neither be attributed to the dissimilarities of the respective firms nor to variances in the degree of their pre-IPO owners' sophistication. Section 4 provides careful analysis of these findings and comparison to the predictions made within the framework of this paper. It is clear from the outset, however, that these empirical findings, as outlined below, call for a reevaluation of the contemporary theory of the takeover phenomenon.

Defenses are, apparently, neither entirely good nor entirely bad. Moreover, the simple explanation for variations in ATPs, which points to dissimilarities among firms, does not hold. Interestingly, some commentators believe that the new evidence calls for a reevaluation of the

---

<sup>68</sup> See Jensen & Meckling, *supra* note 55; see also FRANK H. EASTERBROOK & DANIEL R. FISCHER, THE ECONOMIC STRUCTURE OF CORPORATE LAW 4-7 (1991).

classical understanding of the IPO process.<sup>69</sup> Although they were prepared to make this sacrifice, they were not ready to give up firmly held understandings regarding the takeover phenomenon.

### III. The Various Counter Effects and Market Equilibria

Comparing potential targets is a natural consideration in the business reality of acquisitions.<sup>70</sup> The fact that industry rivals may become alternate takeover targets is proven by a recent empirical study showing sharp rises in stock value of rival firms when an anticipated merger falls through.<sup>71</sup> In determining whether to make an offer, bidders must weigh the relative functional or business virtues of the potential target against the ease or difficulty of the acquisition. When takeover defenses make the acquisition process lengthy and expensive, which they invariably do, then one must consider the takeover shields of other targets. Clearly, if target *A* is equally attractive to the bidder as target *B*, then the one that is less shielded is more likely to be acquired by the takeover. If, however, acquisition of a shielded target can produce much better gains than acquisition of an unshielded one, then the former will be engaged even if it would have been easier to acquire the latter.

In other words, takeover defenses divert some takeover activity in the marketplace from shielded to unshielded enterprises. This concept entails a type of external influence among

---

<sup>69</sup> Daines and Klausner mention this widely held view, which is not cited often. However, they do not support it and show that it does not fit well with the empirical data. See Daines and Klausner, *supra* note 1, at 113.

<sup>70</sup> In a candid interview with the business press, William Steere, the CEO of Pfizer reveals the process that led Pfizer to launch the famous hostile takeover bid to acquire Warner Lambert. The decision to acquire Warner Lambert resulted from a careful analysis of the fitness and costs of other takeover alternatives. The costs of takeover shields are not mentioned explicitly by Pfizer's CEO, but Warner Lambert was cited by the business press as having had minimal takeover protection, and hence was relatively easy to acquire. See Robert Langreth, *Behind Pfizer's Takeover Battle: An Urgent Need*, WALL ST. J., Feb. 8 2000, B-1. For reports on the conduct of the takeover battle see, Robert Langreth, *Pfizer, Warner-Lambert Move Closer to Merger Terms*, WALL ST. J., Feb. 2 2000, Robert Langreth, *Warner-Lambert Takes Higher Pfizer Bid*, WALL ST. J., Feb. 3 2000; Robert Langreth, *Pfizer, Warner-Lambert Agree on Terms*, WALL ST. J., Feb. 7 2000.

<sup>71</sup> The study examines merger gains to targets and their industry rivals and finds evidence consistent with our argument about diversion of takeover activity. They find that rivals benefit from the merger announcement, but the termination results in significant negative returns for targets and significant positive returns for rivals. Termination gains to rivals support the hypothesis that rival firms could become acquisition targets. The gains are positively related to subsequent acquisition activity involving the target and the extent of merger activity in the industry, and inversely related to the relative size of the target rivals, the presence of a competing bidder, and the regulatory environment. See Akhigbe et al., *supra* note 3.

potential targets that has heretofore been ignored by takeover literature.<sup>72</sup> As will be shown shortly, this type of external influence may explain the divergence among firms with regard to ATP practices, as well as how practices may become more efficient.<sup>73</sup> Alternatively, it may show how healthy firms without agency problems can be infected by inefficient ATPs.

The external influence discussed in this paper represents, within a pool of takeover candidates, a cluster of counter-effects between those firms that use ATPs and those that reject defenses. Although there may be multiple relevant counter-effects, emphasis here is on two of the most potent, namely the *Premium Effect* and the *Disciplinary Effect*.<sup>74</sup>

The *Premium Effect* represents the influence of ATP adoption by a firm on takeover premiums received by other firms; whereas the *Disciplinary Effect* represents the influence of ATP adoption by a firm on the importance to managers of other firms of the market for corporate control as a disciplinary mechanism. Both types of effects are discussed below after examination of a numerical example based on a simple model of the *Premium Effect*.

#### A. A Graphic Representation of a Numerical Example

Consider a scenario in which the population of potential takeover targets in the pharmaceutical market is divided into targets with ATPs and unshielded targets. Let us consider a scenario in which the potential takeover targets in a pharmaceutical market are divided into two groups according to whether they have ATPs or are unshielded.<sup>75</sup> Figure 1 shows the interaction between the two groups, together with the premiums expected to be generated in the event of a takeover (which is calculated by multiplying the likelihood of a takeover by the

---

<sup>72</sup> The contemporary literature identified various other externalities. See, e.g., Sanford Grossman & Oliver Hart, *One Share, One Vote, and the Market for Corporate Control*, 20 J.Fin. Econ. 175 (1988); Easterbrook & Fischel, *supra* note 68; LUCIAN A. BEBCHUK & LUIGI ZINGALAS, CORPORATE OWNERSHIP STRUCTURES: PRIVATE VERSUS SOCIAL OPTIMALITY (NBER Working Paper Series, 1997) (externalities on corporate bidders); Andrei Shleifer & Lawrence H. Summers, *Breach of Trust in Hostile Takeovers*, in CORPORATE TAKEOVERS: CAUSES AND CONSEQUENCES 33 (Alan Auerbach ed., 1988) (externalities on the employees of takeover targets); Lucian Bebchuk, *The Case for Facilitating Competing Tender Offers: a Reply and Extension*, 35 STAN. L. REV. 23 (1982) (externalities on consumers, tax authorities, etc.).

<sup>73</sup> The mere existence of the externality, though, does not necessitate any result that is different than the one offered by the classic literature in the field.

<sup>74</sup> Another counter effect, the *scale economics effect*, is discussed below. See *infra* Section 3.E.

premium to be paid). The  $X$ -axis represents the percentage of unshielded firms within the total firm population, meaning that if  $X = 0$  percent, then all of the firms are shielded, and if  $X = 100$  percent, then none of the firms are shielded. The  $Y$ -axis represents the premium a target can expect to generate in the event of a takeover for any possible ratio between shielded and unshielded firms that might exist. The two curves, therefore, represent the expected premiums for both shielded and unshielded targets according to their ratio in a given market.<sup>76</sup>

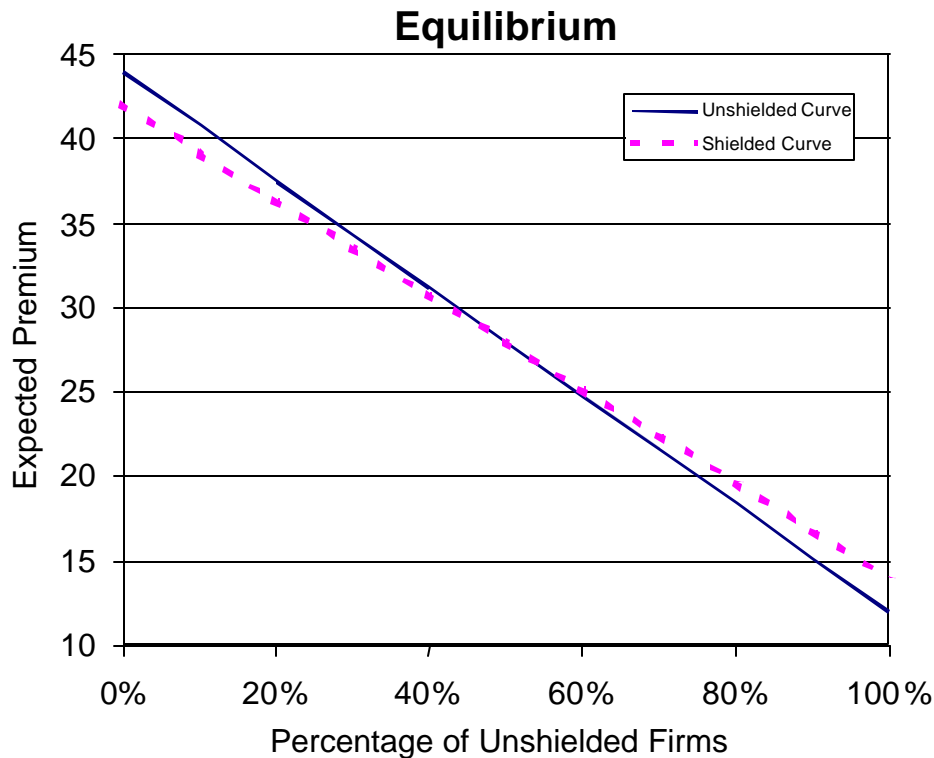


Figure 1

<sup>75</sup> The main simplifying assumptions of this numerical example are: linearity, stagnant premiums (although average premiums are dynamic) and allowing for the *premium effect* to overcome its disciplinary counterpart. Each of these restricting assumptions is relaxed in the discussion below.

<sup>76</sup> The graphic matrix is a representation of the following numerical example, based on a naïve model. Let  $P$  denote the fraction of unshielded firms in this population, with the complimentary fraction,  $1 - P$ , denoting the fraction of shielded firms. Let  $Q$  denote the ex ante takeover probability, with  $Q_s$  denoting the takeover probability for shielded targets and  $Q_u$  the takeover probability for unshielded ones.

The numerical properties for the specific market characteristics are as follows. The average takeover premium per share for corporations without takeover defenses is 80. Shielded firms, on the other hand, retain more leverage and may therefore obtain higher average takeover premium per share, say 140. Further, assume that  $Q_s$ , i.e., the takeover probability for shielded targets, is a declining function of the fraction of unshielded targets in the population ( $P$ ), for example  $Q_s = 0.3 - 0.2P$ . Hence, with the increase in the percentage of unshielded firms, the takeover probability, and in turn the expected takeover premiums for shielded firms, decrease. Note that the takeover probability, as sketched above, has a percentage that is susceptible to diversion (20%) and a percentage that is not susceptible to diversion (10%). These qualities are essential for this numerical example and the underlying model. Finally, let us assume that  $Q_u$ , i.e., the takeover probability of unshielded firms, rises with the percentage of shielded firms in the population ( $1 - P$ ), say  $Q_u = 0.15 + 0.4(1 - P)$ .

The dotted curve represents the expected premium for shielded firms (hereinafter: “the Shielded Curve”). A target that decides to become shielded should find its expected premium on this curve at the point that represents the percentage of unshielded firms in the given market. This curve descends, from left to right, as the number of unshielded targets rises. The reason for this is that unshielded targets are potential alternates to shielded targets in a takeover. The greater the number of unshielded targets, the greater the likelihood that one of these may be an inexpensive but adequate substitute candidate for takeover. Hence, the frequency of takeovers for shielded targets decreases as the number of unshielded firms increases. A decrease in takeover frequency means a decrease in the expected premium.

Accordingly, the bold-face curve (hereinafter: “the Unshielded Curve”), which represents the expected premium for unshielded firms, ascends, from right to left, as the percentage of unshielded firms in the given market decreases.<sup>77</sup> As the percentage of shielded firms increases, the pool of inexpensive, unshielded targets shrinks, causing the likelihood of takeover in relation to each remaining unshielded target to rise. Conversely, the greater the number of firms there are that reject shields, the greater the opportunities there are for inexpensive takeovers, which decreases the likelihood for any one unshielded firm to be targeted for takeover.

Now, let us first assume that when the IPO stage firm enters the market all incumbent targets maintain shields (which on the graph would be represented by  $X = 0$  percent). In this case, it is best for the firm that is going public not to adopt shields (see how the Unshielded Curve surpasses the Shielded Curve on the left side of Figure 1). Now, let us assume that another IPO stage firm draws the same conclusion as the first, namely not to adopt a shield. By this time, however, the ratio of shielded to unshielded firms has actually changed from what it was when the first firm made its decision because there is now at least one firm that is unshielded, and thus the firm that follows suit does not find itself on the extreme end of the graph representing zero unshielded firms. Nevertheless, as long as the Unshielded Curve surpasses the Shielded Curve at the point where the second firm finds itself, it will most likely

---

<sup>77</sup> The fact that the Shielded Curve lies on top of the Unshielded one when all firms are unshielded (and conversely when all firms are shielded) reveals the most salient assumption of this numerical example. It means that when all firms adopt ATPs it is better for the marginal firm not to adopt any and vice versa. Other possibilities are explored below and in appendix 3.



also refrain from using a shield. As the number of unshielded targets grows, one gradually moves toward the right end of Figure 1. Firms will follow suit in not adopting shields until the point at which the Shielded Curve intersects with the Unshielded Curve. At the point of intersection, the issue of ATP adoption or rejection is mute to takeover candidates. Thereafter, ATPs should neither be adopted nor rejected in any sort of systematic fashion. Moreover, if the market shifts back to the left side of the diagram for any external reason whatsoever, it will gradually slide back to the point of intersection that was reached as previously described.

Similarly, if a firm enters the market at a point in time in which there are no shielded firms, which is represented by the furthest position on the right of Figure 1, the market will climb to the point of intersection. The first firm will reckon that it is better to be shielded when all others are unshielded (which is demonstrated on the graph where the Shielded Curve is higher than the Unshielded one). Other firms will follow suit up until the point in time at which the two curves intersect. This point of intersection (which in Figure 1 is at 50 percent as is true for the real world) is, therefore, the only equilibrium of the system.<sup>78</sup> It is, moreover, a stable equilibrium insofar as market forces would correct any deviation therefrom.<sup>79</sup>

The outcome of this example is that half of all similar firms within a given market may remain unshielded, while the other half adopts ATPs.<sup>80</sup> Surprisingly, a population that is

---

<sup>78</sup> See Coates, *supra* note 1, at 6; Field & Karpoff, *supra* note 1, at 26; Daines & Klausner, *supra* note 1, at 4.

<sup>79</sup> Alternatively one could solve the numerical example without the graphic matrix. Figure 1, though, assists in explaining the dynamics of the model and the fact that the equilibrium is stable. By definition, in equilibrium the expected premium for shielded and unshielded firms must be even. Otherwise, marginal firms entering the market may benefit systematically from adopting ATPs (or alternatively refraining from such adoption) so that the percentage of shielded firms in the population would not remain stable. Put differently, in equilibrium a marginal firm entering the market must be indifferent between its ATPs adoption or rejection.

Thus, to solve for the equilibrium we should equate the expected premium for unshielded targets ( $60*Q_{us}$ ) with the expected premium for shielded firms ( $140*Q_s$ ). Or, after explicitly adding the takeover probabilities:

$$80*(0.15+0.4(1-P)) = 140*(0.3-0.2P)$$

And after immediate simplification:  $P=0.5$

To generalize, but still under the simplifying assumption of linearity: Let  $R_s$  be the per-share-premium for shielded firms and  $R_{us}$  the per-share-premium for unshielded firms. Further, let  $Q_s$  be  $a-b*P$ , and  $Q_{us}$  be  $c-d*P$ , when  $c>a$  and  $a-b>c-d$ , and then  $P$  equilibrium is  $(R_s*a-R_{us}*c)/(R_s*b-R_{us}*d)$ , which is a stable equilibrium.

<sup>80</sup> Firms' similarity is assumed for the firms' ex ante state in which ATP's decisions are made, and not to the firms' ex post position when they are possibly engaged in a takeover attempt.

homogenous at the IPO stage, does not reach uniform decisions with respect to the adoption of ATPs.<sup>81</sup>

## B. The Premium Effect

A takeover premium is the above market value price that is offered for shares of a target in a takeover event. As previously noted, it is often assumed that bidders must offer a higher premium to acquire targets with ATPs because it is harder to wrest control from managers of shielded firms than from managers of unshielded ones.<sup>82</sup> This means, however, that some potential buyers will be deterred by the higher acquisition costs, thereby decreasing the overall likelihood of takeover with respect to the firm in question. When considering whether to adopt ATPs, shareholders must thus weigh the advantages of higher premiums against the reduced frequency of takeover activity. By multiplying the anticipated takeover premium by the anticipated likelihood of takeover, shareholders can compute an average, or expected, takeover premium.

If a shield produces a higher expected premium for a firm, then it is better, at least from the perspective of premiums, for shareholders to adopt ATPs, and vice versa.<sup>83</sup> This is the conclusion drawn from the classic literature.<sup>84</sup>

Our research begins where the classic literature ends. The classic approach is static insofar as it assumes that the only effect on expected premiums that is produced by adopting a shield is determined by its strength. If one accepts, however, the notion offered above that ATPs divert takeover activity from shielded firms to non-shielded ones, then a *premium effect* is no longer endogenous to a single firm, but rather to a group of firms. This notion is also dynamic in

---

<sup>81</sup> The takeover likelihood figures that are used in the numerical example are not extreme. During the 1980s, for example, almost one third of the largest U.S. corporations received a takeover bid. See Davis & Stout, *supra* note 20, at 608. Acquisition offers are also pervasive among young firms. In the years 1995-1998, 20% of a large sample of Delaware firms that recently concluded their IPOs, received bids. See ROBERT DAINES, DOES DELAWARE LAW IMPROVE FIRM VALUE? (*Columbia Law School, Center for Studies in Law and Economics, Paper No. 159, 2000*), at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=195109](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=195109).

<sup>82</sup> For a simple version of the formal argument see *infra* appendix 1. In short, ATPs provide the managers with more leverage in negotiations and thus make such targets harder and more expensive to purchase. Higher premiums for shareholders of firms with ATPs may also be the result of the delay ATPs impose. Delay may create a bidding war for the firm, which will increase the premiums paid.

<sup>83</sup> Assuming risk-neutral or well-diversified investors.

<sup>84</sup> See, e.g., Coates, *supra* note 1.

the sense that it contemplates firms entering the public domain and considering adoption of ATPs against a backdrop of carefully made decisions by other firms already existing in the market.

More specifically, within a given pool of takeover candidates, every firm that adopts a shield diverts takeover activity, thereby increasing the likelihood of takeover for the unshielded targets.<sup>85</sup> Similarly, each firm that refrains from adopting defenses attracts greater takeover activity at the expense of its shielded peers. Furthermore, the addition of a firm to the takeover pool, whether or not it decides to adopt defenses, attracts takeover activity from both shielded firms and unshielded ones.<sup>86</sup> The extent to which each group is affected by the new addition depends upon what the new firm decides with respect to its defenses.

The discussion so far allows us to draw the first conclusion regarding the *premium effect*. The greater the number of firms there are that adopt takeover defenses, the greater the likelihood a similar, but unshielded, firm will enjoy a takeover (and its expected premium will rise accordingly), and vice versa. This does not, however, encompass all implications of the *premium effect*. Surely, if all similar firms entertain defenses, this may give a similar IPO stage firm reason to refrain from doing so, thereby changing the structure of the earlier market. But, if there are few similar firms without defenses, can there be a rational movement toward adopting defenses based solely on the *premium effect*? In other words, can the *premium effect* justify adoption of defenses when most of the similar firms do not have defenses?

The answer is yes. The *premium effect* may, under certain circumstances, be sufficient reason for firms to adopt defenses. The reason for this is, in essence, that not all takeover activity is susceptible to diversion by takeover defenses. Unique characteristics that are developed by targets following the IPO stage may render takeover of such firms by specific buyers more attractive. These types of targets are bound to be approached regardless of their defenses. Shielded firms are the victors in such situations. Their potent shields guarantee that

---

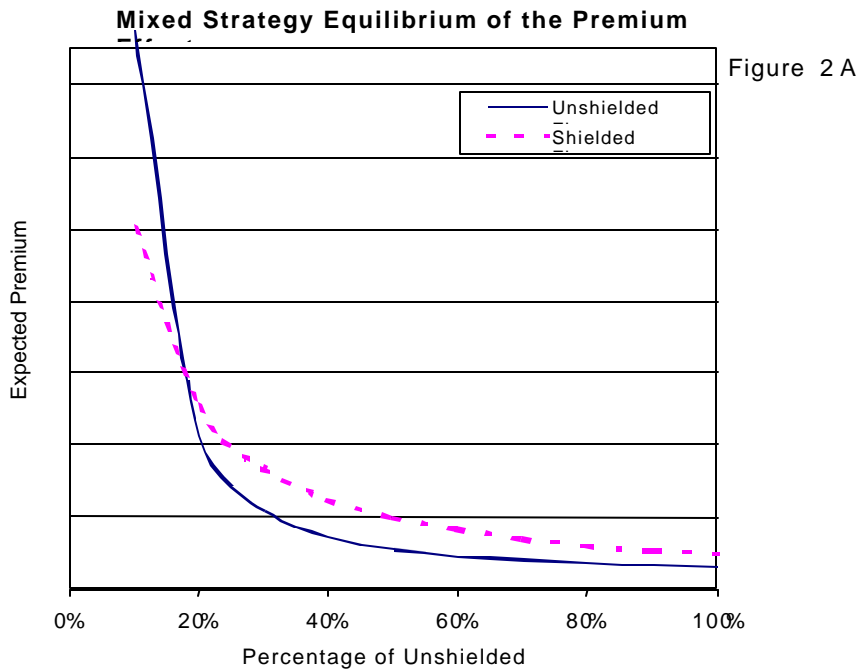
<sup>85</sup> The notion of a pool is an elusive concept. Characteristics of a certain pool are hard to define and they may partially be the result of subjective measures of potential buyers. Further, a target can be part of a few pools, and the pool definition may be different for the *premium effect* and the disciplinary effect. See *infra* notes 105 - 110 and accompanying text.

<sup>86</sup> Indirectly, though, a new addition to a takeover pool may spark a reaction that will draw attention of more bidders to the pool. It is hard to assess how prevalent is this effect and the discussion does not engage with such a set-up.

they will reap hefty premiums from a takeover. This is not a remote possibility, as shielded firms are often acquired while their unshielded counterparts are disengaged.

At the stage when a firm goes public or when it otherwise adopts takeover defenses, it cannot accurately predict which characteristics it will develop or how these characteristics will be regarded by potential bidders.<sup>87</sup> An approximate assessment of the probabilities must be made. When the majority of takeover candidates remain unshielded, a shielded target loses some takeover opportunities; but other opportunities are not susceptible to diversion. Although abstaining from adopting shields will enhance some degree of takeover likelihood, it will also bring about lower premiums in the event of an actual takeover.

If most of the market remains unshielded, there is not much to gain, on the one hand, by following suit, because takeover activity that can be diverted will be shared among many candidates. On the other hand, a firm that opts for a shield, when most firms are unshielded, will deliver high premiums as a result of takeover activity that cannot be diverted. When such possible gains outweigh the diminishing benefits of remaining unshielded, the *premium effect* lends itself in favor of adopting shields. This type of scenario is delineated by Figure 2A below. The fundamental assumption here is the relative advantage of takeover defenses to increase expected premiums, which diminishes as more firms adopt defenses.



<sup>87</sup> Empirically ATPs decisions are made prior to the IPO and remain static thereafter. See, Coates, *supra* note 1, at 5.

As illustrated by Figure 2A above, when most of the firms in the relevant market are shielded (represented by the left side of the graph), being unshielded furnishes much better returns. The reason being that takeover vulnerability in an environment loaded with many shielded firms attracts great attention. However, as we move to the right of the graph, leaving more and more firms unshielded, the returns for both shielded and unshielded firms diminish. On average, shielded firms lose premiums as the other group grows because the latter increasingly intercepts takeovers; while unshielded firms lose expected premiums because there are more inexpensive candidates with which to share the takeover.

Although there is a decline in the premium expectancy of each group, the shielded group's loss is milder. This is due to the fraction of takeover activity that is not vulnerable to diversion. Because shielded firms always obtain higher premiums when a takeover materializes, the gains they achieve from takeover opportunities that cannot be diverted are always higher than the parallel gains of the unshielded group. Looking at Figure 2A from left to right, we see that as more firms remain unshielded and expected premiums for both groups decline, takeover activity that cannot be diverted becomes more salient. At some point, the higher ratio of takeovers to higher premiums changes and being shielded becomes more attractive.

Upon entering the market depicted in Figure 2A, a marginal firm must decide on which curve it should place itself, by either adopting ATPs or not, depending on the current percentage of shielded firms. Let us first assume that the market in question is composed of a high number of shielded firms. As long as the Unshielded Curve surpasses the Shielded Curve, it is better for a marginal firm to refrain from adopting shields. Each time a marginal firm does so, the number of unshielded candidates obviously increases, and hence they comprise a growing segment of the pool of potential takeover targets. The graph thus depicts a shifting market, toward the right, with an ever-increasing percentage of unshielded firms. At the point of intersection, a marginal firm will find itself indifferent to the adoption of ATPs. In the long run, therefore, the market remains static with forces compelling it back to the point of equilibrium.

The mirror image of this sequence of events comes into play whenever the percentage of unshielded firms reaches beyond the point of equilibrium. On the right side of Figure 2A, where the Shielded Curve takes precedence, the market is saturated with unshielded targets, so it is

best for marginal firms to systematically adopt defenses. The market will eventually come to a halt at the point of equilibrium, and will return to it following any deviation.

For the sake of simplicity, the discussion above focused on the influence of antitakeover defenses of firms vis-à-vis the takeover *likelihood* of other firms. One must not lose sight, however, of the fact that such antitakeover defenses also impact upon the *price*, which other firms may expect in the event of a takeover. This effect stems from the clash of two forms of competition among firms in the context of takeover activity. The first form of competition is the novel one developed in this paper. Targets compete among themselves for takeover activity, and as the percentage of firms with defenses grows, so does the likelihood that an unshielded firm will be targeted for takeover.<sup>88</sup> There is, moreover, a classic notion of competition. As purchasers compete for takeover targets, it is empirically clear that shareholders garner better premiums.<sup>89</sup> This is a natural consequence of the informal, but competitive, auctioning process that is generated when firms are targeted.

Blending the two concepts of competition leads to a better understanding of the *premium effect*. The discussion so far has dealt primarily with the diversion of takeover activity, but will now focus on the influence of such diversion upon the premium once a takeover actually materializes. Suppose, for example, that initially there are several potential buyers and two equally desirable target firms. If one of these firms is shielded and thus more expensive than the other, it is obvious that buyers would make their first overtures toward the latter. Unfortunately for the buyers, however, this in itself triggers a price war with the less expensive target able to raise its price as a result of being the subject of enhanced competition. Ironically, therefore, the firm that did not adopt ATPs is able to attract greater takeover activity and also raise its premiums due to the ensuing competition. Although the price for the latter will, undoubtedly, not surpass the price offered for its shielded counterpart, the *prima facie* gap in their respective premiums is accordingly reduced.<sup>90</sup>

---

<sup>88</sup> Surely, the literature contemplates that each firm is maneuvering to attract or deter takeovers, but I did not find even one depiction of competition among the different targets. See, e.g., John C. Coffee, Jr., *Regulating the Market for Corporate Control*, 84 Colum. L. Rev. 1145 (1984).

<sup>89</sup> Empirical studies clearly indicate that competition, i.e., multiple bidders that show interest in one target, bid up the price in which such targets are eventually sold. See Morck et al., *supra* note 6.

<sup>90</sup> It was previously suggested that competition among buyers renders the difference between shielded and unshielded targets vestigial but not because targets' decisions interact, as this paper suggests. The idea in is that intensive competition may promise the highest possible price for a target notwithstanding its shields existence or nonexistence. See Daines & Klausner, *supra* note 1, at 89; Coates *supra* note 1.

The point emphasized above may, of course, be generalized. The greater the percentage of firms that adopt defenses, the greater the competition for their comparable, but unshielded, counterparts. This in turn usually leads to higher premiums being paid in takeovers for unshielded targets. The *premium effect* is thus magnified. In sum, as the market is increasingly comprised of shielded targets, both the likelihood of takeover and the takeover premium for unshielded targets increase, resulting in a higher expected premiums.<sup>91</sup>

### C. Scenarios in which Defenses are Absolutely Harmful, Absolutely Beneficial, or become Contagious

The aforementioned equilibrium is but one of the possible outcomes of the premium effect. As previously noted, the mere concept of diverting takeover activity does not lead to a particular conclusion regarding the advantages or disadvantages of defenses. Figure 2B, for example, depicts market characteristics that lead to a contagious outcome. The *premium effect* shown in Figure 2A, which led firms to adopt distinct ATP strategies, may also lead firms to succumb to the decisions of preexisting firms. A firm entering the market in this new scenario would probably follow whichever approach is most prevalent at the time, and in the long run, a uniform solution will be adopted throughout most of the market. The dynamics of such a market can be understood by examining Figure 2B.<sup>92</sup>

---

<sup>91</sup> The expected premium is simply the anticipated premium multiplied by the takeover likelihood.

<sup>92</sup> The discussion of this outcome is mostly theoretical since expected premiums for shielded firms are expected to decline more slowly than expected premiums for unshielded firms when the market becomes more unshielded. This is because the percentage of takeovers that is unsusceptible to diversion is more salient for unshielded target since they receive more premiums for each takeover event that materializes.

### Contagious Outcomes

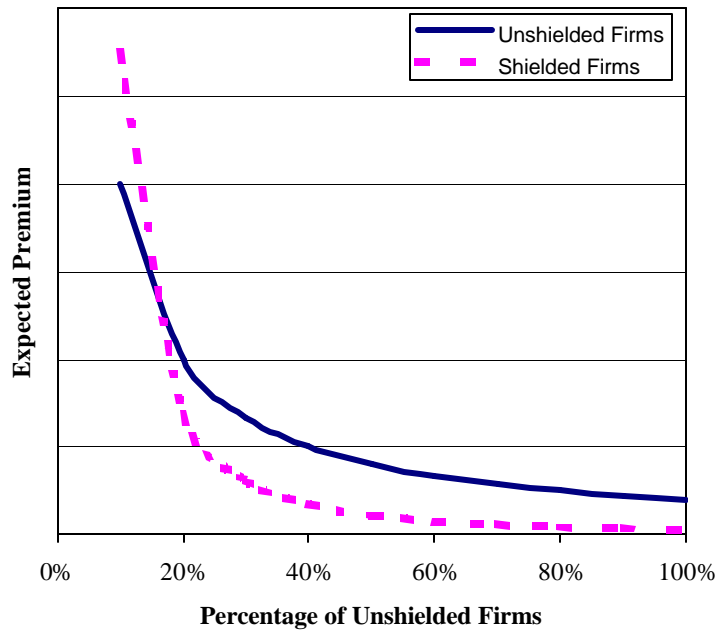


Figure 2B

Although Figure 2B appears, at first glance, to resemble Figure 2A, their respective outcomes are completely different from one another. Suppose first that a marginal firm approaches a market that is comprised solely of unshielded firms. Because the Unshielded Curve surpasses the Shielded Curve, at the right corner of the graph, the marginal firm will decide to remain unshielded as well. Unlike the scenario in Figure 2A, the marginal firm here does not opt to oppose the existing market strategy, but rather demonstrates solidarity with it. There is, consequently, no movement in the market. All firms remain unshielded and the right-corner solution remains stable.

Similarly, if the market originates at a reference point in which all or most firms entertain defenses, then a marginal firm must relent and adopt defenses as well. The reason for this lies on the left side of the graph, where the Shielded Curve, which represents the expected premium for shielded firms, surpasses the Unshielded Curve. The market thus stabilizes itself by using a solution in which all firms are shielded.

Finally, the point of intersection is also very important. If the market reaches this point, then a marginal firm will be indifferent to the issue of ATPs as neither adopting nor rejecting them will reap it any benefits. However, unlike the equilibrium found in Figure 2A, the market here is anything but stable. Even a minor disturbance will drive the market depicted in Figure



2B far from the point of intersection. To envision this, let us first suppose that the percentage of unshielded targets falls just short of the intersection point. A marginal firm would, under these circumstances, find it best to adopt shields. In turn, the addition of a shielded firm pushes the market toward the left and away from the point of intersection. There would, therefore, be greater incentives for the new firm to adopt shields, thereby creating a greater shift to the left. Hence, the marketplace is doomed by the rational herd-like behavior to become almost exclusively shielded.

Conversely, a shift to the right leads to rational herd-like movement toward fewer shields. Once the percentage of unshielded firms surpasses the point of intersection, there is undoubtedly not a single firm that would opt in favor of shields. The market will ultimately find itself almost entirely unshielded.

To sum up, the path dependence characteristic of the direct *premium effect*, brought us to recognize scenarios that are not dealt with by the existing literature. First, the market depicted in Figure 2A, in which IPO firms with similar characteristics rationally differ regarding antitakeover defenses (which is empirically a fair description of the real world).

Second, the direct *premium effect*, as depicted in Figure 2B, may lead to rational herd-like behavior in which IPO firms adhere to an established standard. This may also, arguably, help explain market behavior as was the case when the proliferation of takeovers in the early 1980s was countered by the proliferation of defenses in the late 1980s.

The two scenarios described above do not, however, fully exhaust the explanations proffered by our line of reasoning. There are still two types of situations that need to be discussed. First, there are scenarios that more closely resemble those predicted by the classic literature. Even when diversions in takeover activity are accounted for, it may theoretically be best for all firms to act in concert, when deciding whether or not to adopt defenses, regardless of the percentage of existing targets with defenses. Within the framework we have developed thus far, it may simply be that the Unshielded Curve continuously surpasses the Shielded Curve.<sup>93</sup> An opposite situation is also feasible.<sup>94</sup>

Second, and interestingly enough, multiple equilibria may emerge. This phenomenon would be represented on a graph by multiple intersections of the two curves. This type of

---

<sup>93</sup> This possibility is depicted by Figure A in Appendix 3.

<sup>94</sup> This possibility is depicted by Figure B in Appendix 3.

interesting situation is explored below, following the discussion on the various counter-effects among targets.<sup>95</sup>

#### D. The Disciplinary Effect

Unlike the *premium effect*, whose impact is conclusive, the impact of the *disciplinary effect* is subject to interpretation depending on one's belief regarding the *ex ante* influence of takeover defenses. For the sake of simplicity, this section will first adopt the conventional assumption that ATPs are harmful *ex ante*, as they reduce the deterrence effect of takeovers. Other perspectives will be discussed later.

In one way or another, diversion of takeover activity affects more than just the expected premiums that shareholders receive when their firm is purchased. It also alters the rules of the game vis-à-vis management. Whereas takeovers are lauded for the discipline they impose on management of poorly run firms, defenses were viewed as a way to temper such discipline.<sup>96</sup> However, diversion of takeover activity reveals that this disciplinary nature is not endogenous to the decision-making of each firm regarding defenses, but rather to aggregate ATP decisions of all firms in the relevant market. Takeovers that are diverted by shielded firms may wrest control from managers of well-run, but unshielded firms, simply because the latter are relatively easy to acquire. Hence, ATPs distort not only management incentives of the adopting firm, but also incentives of the market as a whole, and may thus be “contagious.”

This description is particularly apropos to what happened in the 1990s, when potential bidders were frequently widely held corporations with agency problems of their own.<sup>97</sup> In their quest to expand, managers preferred inefficiently run takeover targets. This allowed them to

---

<sup>95</sup> See *infra* section 3.I.

<sup>96</sup> But as just noted above even those who believe that many takeovers are opportunistic and harm the incentives given to managers of the targeted firms should still subject their opinion to the *disciplinary effect* that is discussed here. The more firms adopt ATPs, the more takeovers each member of the unshielded group can expect. Consequently, the disciplinary pressure on the unshielded managers grows, whether we believe this pressure to be positive or negative. One might also believe that once all firms are unshielded the takeover threat is beneficial for them all, but once some of them adopt defenses, and given the diversion effect revealed in this paper, the takeover institution becomes harmful to the unshielded firms. Such an event is depicted in Figure C at appendix 4.

<sup>97</sup> There is a rich literature about acquisitions that adversely affect the value of the acquiring firm since it overpays for the target. See, e.g., Bernard S. Black, *supra* note 9, at 624-26; MARK SIROWER, THE SYNERGY TRAP: HOW COMPANIES LOSE THE ACQUISITION GAME 147 (1997) (table A.1); Richard Roll, *The Hubris Hypothesis of Corporate Takeovers*, 59 J. BUS. 197 (1986) and ; RICHARD THALER, THE WINNERS CURSE 50-62 (1992).

satisfy their appetite, while reaping profits for their stockholders. If, however, there are no poorly run targets from which to reap such gains, management may still go forward in its quest to expand by launching an unsolicited bid for a well-run company.<sup>98</sup> Consequently, even well-managed firms may be relatively vulnerable to takeovers.

Here too, the classic literature provides only a partial explanation. While the threat of an unsolicited bid may have a *disciplinary effect* on management, this image may be distorted by an uneven dispersion of ATPs. The classic literature argues that an unshielded firm benefits more, *prima facie*, from a fervent market for corporate control since its management is likely to be disciplined for any wrongdoing. However, because takeovers are easier in relation to unshielded firms and because bidders are willing to pursue well-run firms, management of superior but unshielded targets may very well be severely penalized by the market forces for corporate control.<sup>99</sup> As a result, the advantages to unshielded firms in a takeover market diminish as the percentage of shielded targets increases.

By isolating the *disciplinary effect*, as more firms adopt ATPs, others will have greater incentives to follow suit. Conversely, as the percentage of unshielded targets rises, it becomes increasingly better to remain unshielded as well. These contagious outcomes of the *disciplinary effect* are depicted in Figure 3.

---

<sup>98</sup> The empirical work of Morck, Shleifer and Vishny uncovered the managerial tendency to decide on acquisitions that serve the managers interests at the expense of the shareholders' wealth. *See*, Morck et. al, *supra* note 6.

<sup>99</sup> This is a simplified version of the riches of the theoretical possibilities. It implicitly assumes that most managers of unshielded firms will perform well even in the absence of a market for corporate control. Therefore, when takeover frequency increases for the unshielded population notwithstanding the proper behavior of most of its managers, the *disciplinary effect* is negative. However, one can also imagine a scenario in which a higher frequency of takeovers among unshielded firms only magnifies the beneficial aspects of the takeover market as a disciplinary mechanism for unshielded firms. The framework that this paper puts forward may be used to analyze this possibility as well.

### The Disciplinary Effect

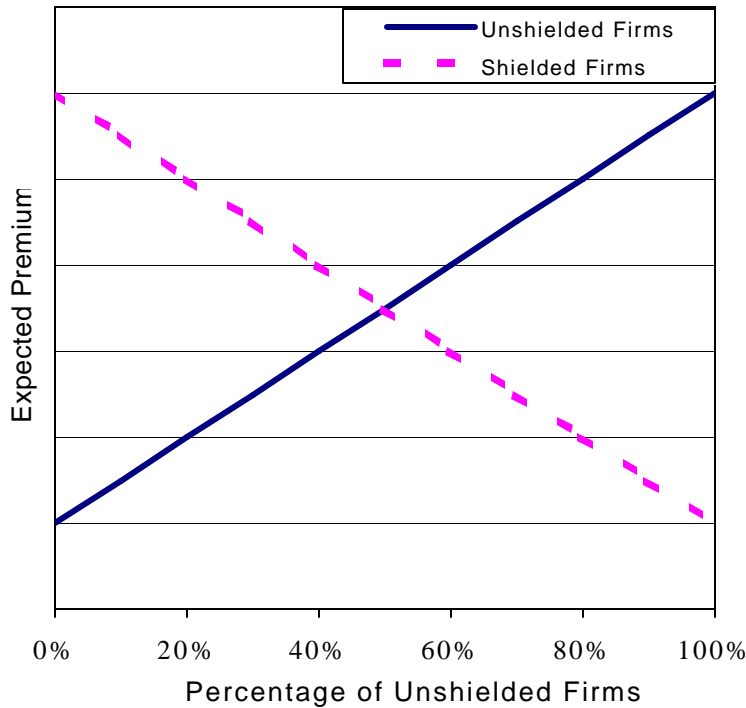


Figure 3

The intersection of the two curves in Figure 3 is not a stable equilibrium.<sup>100</sup> If the market shifts to a point at which the percentage of unshielded firms is greater than the percentage of such firms at the point of intersection, it is better for a marginal firm to reject defenses. In the long run, therefore, the market is pushed toward a point at which it is entirely unshielded. Conversely, if the market originates at a point left of the intersection, where there are fewer unshielded firms, it is better for newcomers to uniformly adopt defenses. In either situation, the *disciplinary effect* leads to herd-like behavior.

Of course, the real market is influenced by both the *premium* and the *disciplinary effects*. If one recognizes that the *premium effect* leads to an equilibrium between the adoption and rejection of defenses, as depicted in Figure 2A, then one must also recognize that this equilibrium may be undermined by the *disciplinary effect*. Whether a market is pushed toward a point of mixed-strategy equilibrium or to opposing extremes, will depend on which *effect* is

<sup>100</sup> Theoretically there may be no intersection between the two curves. In this case the predictions of the classic literature would prevail and the ATP decisions of firms would not rely on the relationship between shielded and unshielded firms. Appendix 3 is devoted to illustrating such possibilities.

more dominant than the other, and a look at the real market suggests that the *premium effect* is in fact the more aggressive of the two.<sup>101</sup>

Such conclusions, however, may be further complicated if one relaxes the underlying assumption that ATPs are inimical from a disciplinary point of view. Some scholars assume that ATPs provide managers with incentives, *ex ante*, that benefit shareholders.<sup>102</sup> If this is the case, then the consequences of the *disciplinary effect* should be rephrased as follows: being unshielded is, from an *ex ante* perspective, never advantageous; and when a market becomes increasingly shielded, there is even more reason to avoid being unshielded. This means that while firms are more likely to adopt defenses as the market becomes increasingly shielded, they will not necessarily reject them when the market is relatively unshielded. In short, the *disciplinary effect* can, theoretically, influence the value of a firm from a shareholder's perspective in many respects.

#### E. The Scale Economics Effect

In addition to the *premium* and *disciplinary effects*, which explain the two principal ways in which shielded and unshielded firms influence one another, there may be other, more subtle forces. One of these forces may be the *scale economics effect*, which describes how an increased rate of takeover activity, arising from a growing percentage of unshielded firms, leads to expertise in hostile takeovers and thus efficiency in the market place, which together in turn result in even more takeovers.<sup>103</sup>

Conversely, a high percentage of shielded firms suppresses takeover activity, which means that there is little expertise in the field; and the high price such expertise exacts for actually completing a takeover results in even fewer takeovers. The *scale economics effect*,

---

<sup>101</sup> This would also be the case if the *premium effect* took the course that is depicted by figure 2B, *supra*.

<sup>102</sup> See Jeremy Stein, Takeover Threats and Managerial Myopia, 96 J. POL. ECON. 61 (1988); Jeremy Stein, Efficient Capital Markets, Inefficient Firms: A Model of Myopic Corporate Behavior, 104 Q. J. ECON. 393 (1989).

<sup>103</sup> Commentators paid attention to agglomeration effects of the M&A industry but never contemplated the influence of one firm that exposes itself as a target on the takeover efficiency of other acquisitions. See the discussion in the following paragraph. Industrial agglomeration effects of different sources are frequently recognized in the literature. See Ronald Gilson, *The Legal Infrastructure of High Technology Industrial Districts: Silicon Valley, Route 128 and Covenants Not to Compete*, 74 N.Y.U. L. REV. 575 (1999).

which is simply another external factor, should be considered, whether from the perspective of premiums or disciplinary issues. A firm's decision to adopt shields reduces the frequency of takeover events with respect to the entire market, and thus causes other firms to reevaluate their own prior decisions whether or not to adopt shields.

Commentators have frequently paid attention to the agglomeration effects of the M&A market. Coates provides an excellent explanation that attributes such effects to merger waves: "The "go-go" merger wave of the late 1960s, in particular, generated dozens of M&A banks, law firms, and other specialists... Collectively, these firms play the role of M&A entrepreneurs and advocates, serving both to stimulate activity during "bust" cycles and to lobby for (or against) legal changes that promote (or dampen) M&A activity."<sup>104</sup> At a minute level, however, whatever is true for a takeover wave is also true, although to a much lesser extent, for the behavior of every potential target. Each firm that exposes itself to the takeover market confers external pressures on other targets by strengthening the efficiency and magnitude of the takeover market and its constituencies. The reverse effect is also possible.

#### F. The Pool Definition

A fundamental pillar of the argument presented thus far is the assumption that bidders will select their target by first comparing potential targets. Accordingly, the *relative* legal protection enjoyed by a target plays a leading role in corporate acquisitions. In other words, every takeover candidate should consider itself as a member of a pool of potential takeover targets, while making its own decisions with a view toward those of the other members. Because empirical evidence of the 1990s shows that defenses adopted prior to an IPO can rarely be altered, an IPO-stage firm should make its decisions based on the earlier decisions of firms, within its pool, that have already gone public.<sup>105</sup>

Of course, in order to make the decision in question, a firm must first identify the pool to which it belongs. This is a fundamental requirement from the perspective of this article, which holds that a firm must first recognize which firms it is competing against in order to evaluate the

---

<sup>104</sup> Coates, *supra* note 21, at 850.

<sup>105</sup> Put differently, the strategic game is not a simultaneous one, but rather a sequential and evolutionary one.

pros and cons of ATPs.<sup>106</sup> Of course, there are bound to be many differences among various pools (e.g., the number of firms, the level of takeover activity, etc.) leading each to their own individualized equilibrium.

No one can reasonably expect to find solid boundaries that define every pool because every potential bidder has its own characteristics or considerations, which determine the type of targets in which it may be interested. Not only is it difficult to anticipate what may be attractive in the eyes of a potential buyer, it is also impossible to aggregate groups of potential bidders that share the same exact preferences. Nevertheless, there are some rough guidelines for identifying a particular pool. Interestingly enough, determining a firm's pool depends greatly on whether one defines it from the perspective of the *premium effect* or the perspective of the *disciplinary effect*.

From the perspective of the *premium effect*, a pool can probably best be characterized by the specific type of industry to which a firm belongs. This is because most of the merger and acquisition activity today is among firms within the same industry.<sup>107</sup> Although this was certainly not always true, it is now a fact of life.<sup>108</sup> Firms should, therefore, consider all other firms close to their industry niche as peers within their pool. This rough approximation may suffice insofar as the perspective of the *premium effect* is concerned. Generally, there is no significant competition for takeover activity and premiums coming from other industries, and a firm can thus ignore them when making its ATP decisions.

The *disciplinary effect*, in contrast, does not provide such clear answers. It assumes that agency costs may lead a bidder to pursue targets for the benefit of management at the expense of shareholders. This sort of distorted incentive means that targeted firms may have absolutely

---

<sup>106</sup> Firms themselves can hardly make such rational articulations, but investment bankers can more easily gauge the state of each pool to verify if it has too many or too few takeover defenses. To be sure, investment bankers can serve the market pretty well even if they are unaware of the equilibrium argument that this paper presents. They simply have to make recommendations regarding takeover defenses for every takeover pool if they sense that defenses are harmful or beneficial in such pool. As long as the market is at or around the equilibrium, investment bankers can justifiably be indifferent to ATPs.

<sup>107</sup> A recent study indicates that as much as 87% of current M&A activity takes place within the same industry segment. See F. Asis Martinez-Jerez, *Impact of Accounting Method on Market Assessment of Business Combinations* (2000) (unpublished manuscript, on file with author).

<sup>108</sup> The 1960s, for example, entertained an abundance of conglomerates with multiple business segments.

nothing to do with the primary business of the bidding firm.<sup>109</sup> Because no one can anticipate the whims of potential buyers, wasteful takeover activities that are of interest to the *disciplinary effect* encompass the entire market. Accordingly, the relevant pool, from the perspective of the *disciplinary effect*, is comprised of all firms in the market.

This is, however, somewhat of an exaggeration. Although some acquisitions certainly appear to make no sense whatsoever, managers do in fact generally take shareholder interests into account. Bad deals are often more the result of management bias toward expansion, or “empire building,” than they are the outcome of whims. Indeed, management preference is usually for firms that yield positive returns while also satisfying the desire to expand. If a buyout within the same industry makes the best financial sense, then it will attract the buyer’s attention. If some of the firms in this niche are highly protected by ATPs, then there is a good chance that a second choice from the same niche will be targeted, which thus leads to the *disciplinary effect*.<sup>110</sup> Nevertheless, from the perspective of the *disciplinary effect*, a firm should still look to the industry from which it comes to determine its pool. Thus, even from the perspective of the *disciplinary effect*, a firm’s industry determines its pool, albeit to a lesser extent than from the perspective of the *premium effect*.

#### G. The Relevant Takeover Activity

It is important to remember that takeover activity that is diverted by ATPs is first and foremost the unsolicited activity. However, the explanatory power of this model stretches far beyond this point. First, many friendly transactions are in fact the result of covert threats to launch hostile bids. In other words, hostile activity is not always apparent at first.<sup>111</sup> ATPs provide managers with leverage in negotiating what may appear to be friendly deals, which in

---

<sup>109</sup> See, Randall Morck et al., *Do Managerial Objectives Drive Bad Acquisitions*, 45 J. FIN. 31 (1990); Larry H.P. Lang et al., *A Test of the Free Cash Flow Hypothesis: The Case of Bidder Returns*, 29 J. FIN. ECON. 315-35 (1991), and PEKKA HIETALA ET AL., WHAT IS THE PRICE OF HUBRIS? USING TAKEOVER BATTLES TO INFER OVERPAYMENTS AND SYNERGIES (SSRN Working Paper Series No. 242098, 2000), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=242098](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=242098).

<sup>110</sup> I also assume that the population of targets’ managers consists of more good managers than bad ones, so exposing this entire population to higher takeover likelihood results in harmful deterrence instead of beneficial deterrence.

<sup>111</sup> Coates, *supra* note 21 at 858. The first sign of a takeover attempt that becomes public is usually the “bear-hug” letter, in which the corporate bidder presents its offer to purchase the target to the target’s shareholders.



turn means that the diversionary influence of ATPs is still very relevant. Second, although perhaps less important, every friendly overture stands on the backdrop of a hostile alternative.<sup>112</sup> Accordingly, shielded firms maintain greater power to negotiate, and thus some of the diversionary influence remains. Contributing to this notion is the empirical finding that *ATPs reduce not only the likelihood of hostile bids, but also the frequency of friendly M&A transactions.*<sup>113</sup>

#### H. How Rational Do We Expect Issuers to be?

Surprisingly, the discussion above and the conclusions therein do not rely on a high degree of rationality among market players, and particularly not from issuers. Equilibrium will persist in the market regardless of whether one recognizes the arguments raised here about takeover diversion. Market professionals, such as underwriters, are well equipped to determine at any point of time if ATPs are harmful, beneficial, or benign to a particular takeover pool, without even realizing that the state of a given market is a result of diversion of takeover activity. When the market is in a state of equilibrium, and takeover defenses are benign, it is only natural that an underwriter would be indifferent to ATPs and allow the issuer's attorney to select her preferred strategy.

An attorney may, in fact, take advantage of this indifference by advising corporate managers to adopt defenses at the time of an IPO in order to enhance their positions, without harming the value of the firm as it goes public. This type of systematic advice will eventually backfire as underwriters detect a market shift away from the point of equilibrium and begin to oppose the adoption of ATPs. There are some indications that the first part of this process has begun in the real market, as there is a surge of ATP adoption at the IPO stage, which is gradually causing ever more targets to become shielded.<sup>114</sup>

However, if the market loses its equilibrium for too long, underwriters will determine which strategy is best, and accordingly instruct issuers to systematically either adopt or reject

---

<sup>112</sup> Managers' buyouts (MBOs) can hardly be considered as part of this group of transactions as it is unlikely that managers will use the firms' legal shields against themselves.

<sup>113</sup> See, e.g., LAURA C. FIELD, CONTROL CONSIDERATIONS OF NEWLY PUBLIC FIRMS: THE IMPLEMENTATION OF ANTITAKEOVER PROVISIONS AND DUAL CLASS SHARES BEFORE THE IPO (SSRN Working Paper Series No. 150488, 1999), at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=150488](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=150488).

<sup>114</sup> See *infra* Appendix 2.

defenses. This will, of course, return the market to its point of equilibrium and cause underwriters, once again, to become indifferent to the ATP preferences of lawyers.<sup>115</sup> Unknowingly, and although it may take some time for the equilibrium to be re-established, the various players may be still playing the game depicted in this paper.

### I. Multiple Equilibria

The discussion on the consequences of various counter-effects may give the impression that there are only two stable, but extreme, alternatives: 1) when all firms systematically adopt or reject defenses; or 2) when there is a single, but mixed strategy leading to a situation in which only a certain percentage of firms adopt ATPs. This need not, however, always be the case. Each effect, and even more so the combination of effects created in the real world, may generate richer solutions, or multiple equilibria.<sup>116</sup>

The first step in analyzing such complex situations is to differentiate between stable and unstable equilibria. Then, by looking at the specific characteristics of a given market, one should be able to map all the possible routes of its evolution. Figure 4 below, provides an example for this type of analysis based on its specific market characteristics.

---

<sup>115</sup> Because underwriters are probably unaware of the externalities that one firm that adopts defenses confer on its peers, they cannot collude to adopt defenses in all firms, although doing so might be beneficial to all firms involved. The benefits of collusion are clear by observing figure 2A. The expected premiums of all firms in the equilibrium are far lower than if they all chose to adopt defenses.

<sup>116</sup> The discussion of multiple equilibria is not merely theoretical. One possible implication is discussed below in the section about ownership structures. *See infra* notes 163-170.

### Multiple Equilibria

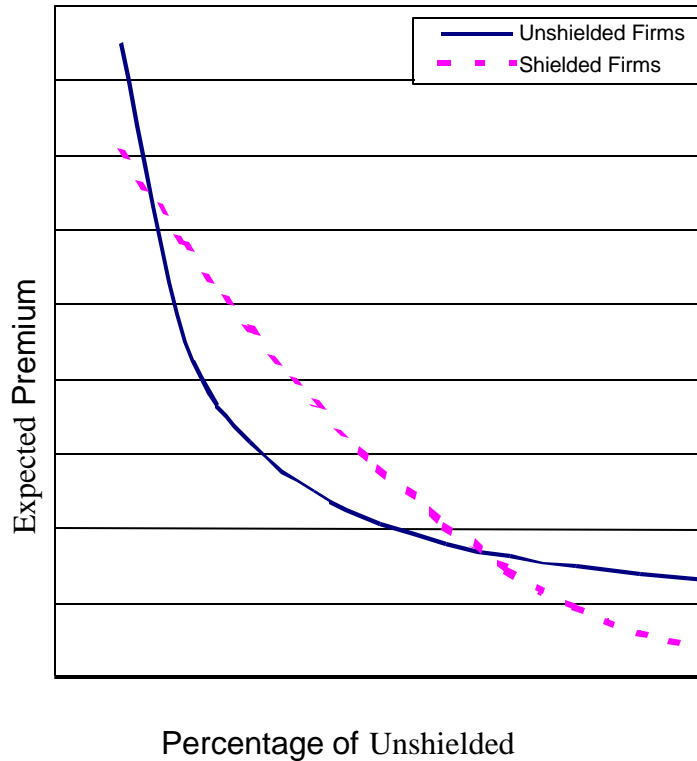


Figure 4

Points A and B both represent percentages of unshielded firms at points when their expected premiums equal those of their shielded counterparts. They do not, however, share the same virtues. There is no stable equilibrium at the intersection above point B. If the percentage of unshielded firms rises slightly above the percentage at point B, it is best for a newcomer to remain unshielded as well. As a result, the market depicted in this diagram is pushed toward a point at the extreme right representing a high degree of unshielded firms. Conversely, if the percentage of unshielded firms drops slightly below point B, it is best for new firms to adopt defenses. Consequently, the market in this diagram shifts further and further away from point B toward point A.

Point A is, however, a stable, mixed strategy equilibrium. By way of example, if the market shifts toward becoming more shielded, incentives are created to return to point A, because it is better to reject shields whenever the market is at a position left of point A.

Similarly, market shifts toward less defenses, create increasing pressure on new firms to adopt shields, which pushes the market back to point A, as long as the market does not reach a point at which there is greater percentage of unshielded firms than indicated at point B.

Having identified the nature of the two mixed strategy equilibria, it is now possible to map the characteristics of the path dependence. In the market depicted in Figure 4, almost all firms will eventually become unshielded if the originating point rests anywhere between point B and a point of no defenses whatsoever. In contrast, point A represents a long term equilibrium resulting from a market that originates anywhere between a zero percentage of unshielded firms and point B.

To generalize: the real market may present multiple equilibria, some of which may be stable. Path dependence will eventually lead the market to the mixed strategy equilibria points or to one of the extreme solutions where firms select pure strategies to uniformly either adopt or reject ATPs. The final outcome depends upon either the market's point of origin or its point of arrival in consequence to some sort of severe market deviation.

Policymakers must also be aware of this possibility. First, they have the power to shift the market from one point to another without having to resort to permanent intervention. The market may simply remain stable at its new point. Second, policymakers must evaluate the relative advantages of the different equilibria from society's perspective. It may be, for example, that it is healthier from society's point of view for a market to be at a particular point over another. However, the problems that multiple equilibria present to policymakers are only quantitatively, and not substantively, different from those posed by a single equilibrium. Even when market characteristics lead to a single equilibrium, society might still be better off with another type of market position. Thus, if we see, for example, that fifty percent of all firms in a given market maintain defenses, society's interests may nonetheless not support this market solution as an efficient outcome. Section 6 examines this normative implication of the model, as well as other possibilities. Finally, while this subsection is intended to enhance one's understanding of possible equilibria, the next section focuses on an additional perspective of the equilibrium concept that was not dealt with so far.

## J. Why Would Similar Firms Adopt Different Types of ATPs, each with a Different Shielding Strength?

There are numerous takeover defenses, and a multiple of combinations thereof, resulting in a variety of shields with different degrees of strength.<sup>117</sup> The shielded vis-à-vis non-shielded dichotomy discussed by the classic literature is, therefore, merely a simplification of the real conundrum. Firms cope with corporate overtures by resorting to a garden variety of tactics. The more one recognizes the scope of such tactics, the more one must disregard the classic approach that holds that there can only be one optimal tactic to exploit. Whether one believes that ATPs are beneficial or inimical, it makes no sense whatsoever that firms make intermediate choices that seem to serve the interests of no one.<sup>118</sup>

This challenge may be answered by the current framework, which stipulates that there is interaction among the choices made by firms. A good analogy may be found in the morning traffic entering a large metropolitan area. In such a situation, there are many drivers with basically the same preferences, who need to enter the city to begin their workday. There is no single time at which it would be best for every driver to leave home and begin driving; but there is a wide range of optimal alternatives that could be used if the drivers acted in concert with one another. One could wake up very early to avoid traffic, if one is willing to pay the price of getting up so early and the price of arriving at work before the appointed time. Or one could wake up a bit late, if one is willing to pay the price of wasting time in traffic jams and the aggravation of being delayed. There are, of course, endless solutions in between. The later a driver embarks, the heavier the traffic and vice versa.

Of greater interest to us here, however, is the fact that the choices made by drivers naturally interact with one another, and are thus interdependent. Suppose that everyone got up very early one Monday morning, let us say at 6:00 a.m, to avoid the morning rush hour, which we shall assume typically reaches its peak at 8:30 a.m., then the highway would be perfectly

---

<sup>117</sup> See the in-depth discussion in Section 2.A.

<sup>118</sup> The empirical results also eliminate the trivial possibility that ATPs are simply ineffective. See, e.g., Field & Karpoff, *supra* note 1, at 25.

clear at the traditional rush hour, which would then lead drivers to get up later the following day and eventually return to their custom of driving at about 8:30 a.m. The highway would once again become too crowded, and the option of rising early regains some of its attraction. If one puts the choices together, there is a tradeoff between the driver's optimal time of arrival and the driver's endurance for delays caused by traffic jams. Hence, drivers should maximize their advantages by opting for a wide range of choices. Drivers select their own tactics, whether to wake up early or later, and their behavior is rational even if their preferences are identical.<sup>119</sup>

If one accepts the basic premise of this paper that adoption of defenses by a firm increases the likelihood of takeover vis-à-vis less shielded firms, then the analogy to morning traffic is quite straightforward. Each firm can choose from a variety of defenses to delay a hostile takeover for a period of up to three years. The more shields a firm erects, the more takeover activity it diverts toward less shielded targets. In a state of equilibrium, the diversion is just enough to match the benefits of all firms concerned, no matter how well shielded they may be.

This does not mean, however, that all tactics whatsoever are appropriate. For example, only people with extremely odd preferences would actually decide to wake up at 3:00 a.m. to avoid rush hour traffic. Likewise, certain tactics are only infrequently resorted to by firms. Underwriters, for example, who easily accept any type of ATP without penalizing adopting firms, strongly resent dual class stock that may ultimately foreclose all opportunities for hostile takeovers.<sup>120</sup> It is, therefore, rare for firms to go public with such stock structures.<sup>121</sup> The disadvantages of such stock structures, which limit a firm's takeover prospects, cannot ordinarily be counterbalanced by the advantages they may yield; just as the discomfort of waking up at 3:00 a.m. can hardly be compensated by the advantages of little traffic at such an hour. In brief, there are tactics that are not part of the equilibrium and are, therefore, only adopted by players whose preferences differ immensely.<sup>122</sup>

---

<sup>119</sup> And the fact that in reality the preferences are not identical does not invalidate the point.

<sup>120</sup> In dual class stock structures, one class of shares enjoys a disproportionately high fraction of the voting rights in the firm. Therefore, if such a class is held by a small group of shareholders, control cannot be wrested out of their hands.

<sup>121</sup> Daines & Klausner, *supra* note 1.

<sup>122</sup> For instance, by entrepreneurs that put an especially high private value on their control of the firm.

#### IV. The Explanatory Power of the Theory

##### A. Shedding Light on the Empirical Evidence

In opposing adoption of ATPs by seasoned firms, Easterbrook and Fischel, described the behavior of IPO-stage firms, as they believed it to be: “Firms go public in easy to acquire form: no poison pill securities, no supermajority rules or staggered boards. Defensive provisions are added later, a sequence that reveals much.”<sup>123</sup> They could not have been more off target. Many firms go public with ATPs and about half of them employ extremely harsh defenses.

There are four important contemporary papers, which empirically investigate the widespread use of ATPs by IPO-stage firms, with findings that contradict the predictions made in the classic literature, but that support the framework of this paper.<sup>124</sup>

##### 1. DAINES AND KLAUSNER (2001)

Daines and Klausner conducted a comprehensive investigation of more than three hundred IPO-stage firms during the period of 1994-1997.<sup>125</sup> They intentionally over-sampled IPO corporations with venture capital and the backing of LBO experts. The over-sampling of firms with professional pre-IPO investors served as a clever control for their empirical research. Daines and Klausner reasonably assumed that these corporations could not be abused by their pre-IPO managers and that such managers would not resort to ATPs by mistake. Venture capitalists and LBO experts are both sophisticated investors with great influence over a given firm, leading to an optimal structure at the IPO stage.<sup>126</sup> Moreover, venture capital firms must liquidate their holdings within a short period of time in order to distribute profits to their investors. Thus, the presence of venture capital promises the dispersion of ownership, which in

---

<sup>123</sup> EASTERBROOK & FISCHEL, *supra* note 68.

<sup>124</sup> Coates, *supra* note 1; Daines & Klausner, *supra* note 1; Field, *supra* note 113; Field & Karpoff, *supra* note 1. Field’s 1999 findings are mostly reiterated in Field & Karpoff, *supra* note 1, and therefore do not receive particular attention in the text.

<sup>125</sup> Daines & Klausner, *supra* note 1, at 92.

<sup>126</sup> ROBERT GERTNER & STEVEN N. KAPLAN, THE VALUE MAXIMIZING BOARDS (SSRN Working Paper Series No. 10563, 1998) at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=10563](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=10563) (exploring the effects of efficient board structures on firms’ performance).

turn makes the market for corporate control most relevant to the firms in which such capital is invested.

The most salient feature among Daines and Klausner's findings is that IPO firms diverge greatly with respect to their ATP practices. Almost half of the firms they sampled adopted harsh ATPs, with mostly staggered boards, while another eighteen percent adopted milder ATPs, such as prohibitions on written consent procedures.<sup>127</sup> The remaining firms refrained from adopting ATPs altogether. Most importantly, these principal findings hold true for firms with either venture capital or the backing of LBO experts. It is clear, moreover, that this unique phenomenon is not due to a lack of sophistication on the part of investors.

Daines and Klausner then examined whether dissimilarities among the firms led to divergent behavior. Three common hypotheses of the classic literature were examined from an empirical perspective. The first hypothesis is that ATPs enhance bargaining power and that they are thus present in firms that are most in need of such power. The second hypothesis is that firms that are difficult to evaluate may be exposed to opportunistic overtures that lead to management myopia, which thus causes such firms to adopt more ATPs. Finally, a third hypothesis is that high private benefits for management may lead to the adoption of ATPs because managers become afraid to lose such benefits in a hostile transaction. While the first two hypotheses were refuted by the empirical evidence, the third was neither supported nor refuted by the evidence.<sup>128</sup> The authors argued, therefore, that it was practically impossible to attribute the variance in ATP practices to common dissimilarities among the issuing firms.

From our perspective, this is far from surprising because it is the very essence of this paper. Because defenses counteract one another, similar firms may in fact select different types of defenses. Differences among firms may by themselves render defenses more or less

---

<sup>127</sup> Daines & Klausner, *supra* note 1, at 95-96, 110.

<sup>128</sup> I am not convinced that the bargaining power and myopia hypotheses are indeed refuted by the empirical findings. First, the authors assumed that the more M&A activity in the industry, the less ATPs are needed because competition will drive the prices up notwithstanding defenses. However, one could make the opposite argument that when potential competition is present ATPs are most valuable to drive up the price because delaying the takeover will definitely allow competition to emerge. Second, the inquiry of the myopia hypothesis is also imperfect. The authors assume that high industry R&D levels calls for ATPs because of the fear of an opportunistic bid. However, it has been also argued in the literature that R&D levels may be excessive when asymmetric information exists. *See* Bebchuk & Stole, *supra* note 59. Thus it is possible that the exposure of such targets with excessive R&D to the market of corporate control can cure part of the waste, assuming that specialized bidders can identify excessive R&D levels. To sum up, while I do not fully accept the interpretation of Daines and Klausner, they definitely exposed the fact that it is hard to key dissimilar ATP practices to dissimilarities among firms.



desirable, but there is a dominant underlying force not recognized in the classic literature. Defenses divert takeover activity and premiums from one firm to another, thereby possibly creating the equilibrium in which some firms adopt ATPs, while others reject them. An analogous explanation, which can be found in Section 3.J., ultimately explains why even among firms that adopt defenses there is no evidence to support a unified solution, but rather a spectrum of defenses with varying degrees of strength. Most researchers who have pondered the IPO-ATP conundrum have not touched upon this analogous issue.

## 2. FIELD AND KARPOFF (2000)

Field and Karpoff conducted their own extensive research of ATPs at the IPO stage. They investigated over a thousand firms that went public between 1988 and 1992.<sup>129</sup> This is the earliest sample of IPO-stage firms to have been investigated. Like other empirical studies in this field, their principal finding fits the model presented in this paper. Indeed, fifty-three percent of the firms they sampled had at least one takeover defense, while the rest refrained from adopting ATPs.<sup>130</sup>

A more innovative conclusion can be drawn from the work of Field and Karpoff; namely that IPO firms deploy more defenses if they have managers who are not well monitored by non-managerial pre-IPO investors, and if the interests of the former diverge from those of the latter.<sup>131</sup> Interestingly, this finding does not contradict the theoretical argument of this paper. The notion of an equilibrium in which firms enjoy the same benefits of the market for corporate control regardless of whether or not they adopt defenses, merely suggests that shareholders are indifferent to the question. Managers, on the other hand, always prefer the greater job security afforded by firms that adopt defenses when all other things are equal. Indeed, firms with strong management in the pre-IPO stage are more likely to be among those that entertain defenses.

However, as long as there are enough IPO-stage firms with undistorted managerial incentives (due to tight monitoring or powerful incentives), those firms will balance the trend by adopting fewer defenses than otherwise. The equilibrium may, therefore, persist even if some

---

<sup>129</sup> See Field & Karpoff, *supra* note 1, at 1.

<sup>130</sup> See Field & Karpoff, *supra* note 1, at 26.

<sup>131</sup> “Among IPO firms, the likelihood of a takeover defense is positively related to managers’ compensation, board size, and whether the CEO is also board chairman, and negatively related to managers’ shareholdings.” Field & Karpoff, *supra* note 1, at 27.

IPO managers are powerful and selfish enough to adopt defenses in the IPO stage to their shareholders' dismay. Most importantly, when there is an equilibrium in the market, even shareholders of IPO-stage firms with selfish and potent managers do not suffer from the biased decisions of their management teams. The diversion of takeover activity dissolves the pros and cons of being either shielded or unshielded.

This explanation also sheds light on the fact that a particular finding of Field and Karpoff is somewhat exaggerated. Specifically, they found that less monitoring and fewer incentives led to the adoption of more defenses. This finding is somewhat inflated because of the way firms with better monitoring react, as described above. Objective firms adopt relatively few defenses in order to counterbalance the opposite tendency among distorted firms. By combining these two tendencies, one can see a gap in the decision-making of the two types of firms that is not solely the result of management self-interest bias.

This discussion presumes, of course, that the finding of Field and Karpoff is robust. The findings of Daines and Klausner, however, suggest otherwise. First, Daines and Klausner found in their sample that higher levels of ownership by managers tend to increase the severity of ATPs, which completely contradicts the findings of Field and Karpoff.<sup>132</sup> Thus, from the perspective of Daines and Klausner, managers with incentives that are *more aligned* with the interests of shareholders are more likely to adopt defenses. Second, and more importantly, Daines and Klausner investigated a large control sample of IPO firms with venture capital and professional LBO investors.<sup>133</sup> Those firms did not have fewer defenses, which refutes the argument that rigorous monitoring leads to fewer defenses.

Finally, Field and Karpoff conducted yet another important analysis. They followed the firms in their sample for five more years after the IPO stage in order to measure the impact of ATPs on takeover activity and premiums. Although five years may be too short a period from which to draw absolute conclusions, many of the firms (168 or 16.5% of the sample) were acquired during this period. The first related finding is that ATPs actually do deter bids. The takeover probability during the five year period was 16.6% for unshielded firms and 11.3% for

---

<sup>132</sup> See Daines & Klausner, *supra* note 1, at 109-10. Field and Karpoff's results, on the other hand, are not unanimously significant in all their regressions. See the results of their sensitivity tests at Field & Karpoff, *supra* note 1, at 20.

<sup>133</sup> See Daines & Klausner, *supra* note 1, at 93.

firms with at least one defense.<sup>134</sup> This result is in accord with the argument raised in this paper. Once again, there is a tradeoff for using ATPs.

Field and Karpoff, however, did not find that ATPs tend to raise takeover premiums. This particular finding contradicts the aforementioned tradeoff, which is based on the assumption that ATPs decrease takeover frequency, while increasing takeover premiums. The fact that Field and Karpoff failed to recognize that ATPs yield higher premiums is not, however, surprising.

First, there are two inherent problems with their study. For one, the five-year benchmark may be misleading, as well as systematically biased against firms with ATPs. If hostile takeovers, unlike friendly ones, are generally directed toward mature firms, then the higher premiums that may be yielded by ATPs are not entirely reflected in the study. Second, unlike other empirical studies that focus on the gravity of defenses, Field and Karpoff focused on the number of defenses. As previously noted, some defenses are powerful, while others are rather weak.<sup>135</sup> Furthermore, certain defenses must work in concert with one another in order to achieve their full, or any, potential. Thus, because the sample used by Field and Karpoff was comprised of firms that adopted as few as a single defense of any type, they clearly could not expect anything but very rough results.

But beyond that, this paper also provides a theoretical explanation for the difficulty in showing the promise of ATPs for higher premiums. To understand this, one should remember that the *premium effect* influences both the likelihood of a takeover and the premiums paid once a takeover materializes.<sup>136</sup> ATPs increase a target's leverage, *prima facie*, and in turn its takeover premium. According to the *premium effect*, however, there is greater competition for unshielded targets in a market comprised primarily of shielded targets, which eventually leads to an increase in the price paid for unshielded takeover targets. Consequently, the gap between the higher premiums paid for shielded firms and those of unshielded firms is narrowed. Hence,

---

<sup>134</sup> Out of the 163 sample firms that were acquired, sufficient data exist for 148 firms only. *See* Field & Karpoff, *supra* note 1, at 25.

<sup>135</sup> *See supra* notes 38-44 and accompanying text.

<sup>136</sup> *See supra* notes 88-91 and accompanying text.

empirical conclusions regarding the impact of takeover defenses on takeover premiums are very difficult to discern when there is a high percentage of shielded firms.<sup>137</sup>

A close look at Field and Karpoff's report may expose this role of the *premium effect*. In the two days following a merger announcement of any of the firms in their report, shielded firms enjoyed a cumulatively abnormal return (CAR) of 18.4%, in comparison to 14.8% for unshielded firms.<sup>138</sup> At this point, it seems that ATPs do in fact enhance a target's bargaining power, while also yielding better takeover premiums. However, in the following months, until a purchase was finalized, Field and Karpoff found that the CARs of unshielded firms were higher than those of shielded firms.<sup>139</sup> It is possible to speculate that the increased price for unshielded firms was the result of competition emerging from unshielded firms, as is suggested by the *premium effect*.<sup>140</sup>

### 3. COATES (2000)

Coates investigated two samples of IPO firms. The main group of data includes over three hundred IPOs between 1991–1992, which is accompanied by a smaller control sample for 1998. His basic findings follow those of Daines and Klausner, as well as those of Field and Karpoff. There is a high degree of variance among the defense practices of firms that go public. Although there is an increased tendency for IPO issuers to adopt ATPs with time, even the 1998 sample indicates that there are still many firms that do not adopt defenses. Moreover, of the defenses that were adopted by firms, many were not harsh whatsoever.

Coates, like Daines and Klausner, empirically refutes all concurrent hypotheses in the literature that might explain why ATPs are better suited to some firms than others. Finally, Coates adopts an innovative approach by measuring the impact on ATP adoption of the market for lawyers. Quite reasonably, he finds that ATPs are more common among corporations that hire particular law firms over others. His conclusion from this is that a lawyer's preferences, rather than a client's need, carry greater weight in determining whether a firm goes public with

---

<sup>137</sup> Empirical studies regarding seasoned firms with ATPs face the same problem.

<sup>138</sup> See Field & Karpoff, *supra* note 1, at 24.

<sup>139</sup> CARs were higher but the results were not statistically significant. Field & Karpoff, *supra* note 1, at 25.

<sup>140</sup> However, the CARs for unshielded firms following the two days after the announcement still look excessive from the point of view of the *premium effect*.

or without defenses. The diversity of skills and attitudes among lawyers vis-à-vis defenses are thus the driving forces behind the divergence of ATP practices among IPO-stage firms.

Interestingly, this empirical finding does not contradict the one presented in this paper. Some lawyers always advise their clients to adopt defenses, while others always give the opposite advice, and the market may still return to a point of equilibrium. Moreover, as long as the equilibrium persists, both proponents and opponents of ATPs can continue in good conscience to give the same, uniform, advice to their clients, because when there is equilibrium it does not matter if a firm is shielded or not. However, because it is perplexing to some that the market can achieve a better solution than many of its members, this argument will be reexamined shortly.

Coates' finding, moreover, clearly suggests that many lawyers are unaware of the argument put forth by this paper. If they were, they surely would not dwell so long on searching for a systematic answer to the ATP question, since it simply cannot be answered.

#### B. Competing Explanations for the Variance in Takeover Defenses at the IPO Stage

Although no one has yet put forth a comprehensive theory to explain ATPs in firms that go public, the empirical literature provides three possible explanations for the intriguing findings. First, Daines and Klausner raised the possibility, which they subsequently seem to refute, that the IPO process is flawed and incapable of pricing the harmful effects of ATPs. According to this hypothesis, pre-IPO investors collectively abuse the public by selling overpriced securities. Second, Coates suggested that while IPO pricing is exacting and ATPs are generally beneficial, inadequately trained lawyers are responsible for misleading firms into adopting inefficient structures. According to this explanation, there are never any winners, and often big losers, among pre-IPO investors of firms that receive poor legal advice.

Finally, Field and Karpoff suggested that ATPs serve the interests of managers of IPO-stage firms. Although they believe that the market discounts the usage of ATPs, pre-IPO managers who are poorly monitored and have imperfect motives do in fact use defenses to their advantage when their firm goes public. The losers here are the pre-IPO investors who are not on the managing team. A discussion follows below on why each of these explanations is far from satisfactory and how they each fit into the framework of this article.

## 1. ABUSING THE PUBLIC SHAREHOLDERS WHO MISPRICE ATPS

Daines and Klausner suggest a few possible explanations for their surprising empirical findings.<sup>141</sup> One of their possible explanations argues against the well-established understanding of how the IPO market accurately prices different corporate schemes of governance.<sup>142</sup> Specifically, this explanation is based on the assumption that the market underestimates or ignores the harsh consequences of ATPs. Hence, pre-IPO owners adopt ATPs for the benefit of management at the expense of public shareholders, without the market reducing the firm's value. In more direct terms, a cheap and defective substitute is sold to the public for the same price as a genuine and more valuable product.

There are, undoubtedly, sound reasons to believe that such abuse of IPO-investors can be a tenuous argument, at least in the long run. Cheating a sophisticated market is no simple matter. But, without engaging in this debate, Daines and Klausner note that their empirical findings put the entire argument into doubt. Indeed, while many firms adopt defenses, many others reject them, and at least fifty percent of all firms do not adopt harsh measures. If defective governing structures can yield advantages for managers without harming a firm's value, then it would be logical for all firms to use them. Daines and Klausner, thus, conclude: "This interpretation, however, is also problematic ... if ATPs are not fully priced, why don't more firms adopt strong ATPs? Assuming that management would generally favor ATPs, all things being equal, the fact that strong ATPs are not universally adopted implies that there is some constraint on their adoption ... ."<sup>143</sup> This possible constraint on ATP adoption is precisely emphasized in the explanation put forward in this paper. There may be a point at which the market becomes saturated with ATPs.

Moreover, the imperfect market explanation ignores another conundrum. Why is there so much variance among the combinations of defenses used by firms that opt for ATPs? This additional challenge can be resolved from the perspective of this paper. Shielded firms confer positive externalities on unshielded ones. The basic argument of the paper is that there may be market equilibrium in which the benefits of being shielded equal those of being unshielded.<sup>144</sup>

---

<sup>141</sup> See Daines & Klausner, *supra* note 1, at 110-13.

<sup>142</sup> See Jensen & Meckling, *supra* note 55.

<sup>143</sup> Daines & Klausner, *supra* note 1, at 113.

<sup>144</sup> See *supra* section 3.A.

This same line of reasoning may explain why there are multiple combinations of defenses with varying degrees of strength. There may be a stable balance at which point all firms (non-shielded, fully shielded, and partially shielded) enjoy the same net benefits of the market for corporate control.<sup>145</sup>

To sum up, the suggestion that an IPO does not properly price governing structures is inconsistent and excessive if one recognizes the inherent diversionary characteristic of takeover activity. Targets influence each other by the decisions they make regarding defenses when they go public, which leads to a broad spectrum of pertinent defenses.

## 2. THE FAILURE OF THE MARKET FOR LEGAL ADVICE (COATES)

In contrast to the argument put forth by Daines and Klausner regarding the imperfect securities market, the hypothesis raised by Coates, regarding the influence of lawyer preferences, generally complements the one proffered by this paper. The present framework, however, sheds a different light on the crux of Coates' argument, while also contrasting some of his specific conclusions.

Coates certainly gives a good illustration of how lawyers are frequently quite opinionated about ATPs. Indeed, some utterly despise them, while others regard them as being highly beneficial. Accordingly, while lawyers may give their best advice to clients, similar firms will either adopt or reject defenses based on the biases of their particular legal counsel. Because Coates did not find any relevant dissimilarities among various firms to explain the divergent practices, he assumed that only one group of lawyers could possibly hold the right view of takeovers. He held the other group of lawyers responsible for misleading and harming their clients' interests in the securities markets, which punish entrepreneurs with inferior governing structures. Several findings, including the fact that more lawyers now prefer ATPs, led Coates to conclude that the proponents of ATPs were right all along.<sup>146</sup>

This paper accepts the fact that lawyers may misjudge a market, and ironically concludes that ATP proponents and opponents are equally wrong. The theory of this paper,

---

<sup>145</sup> See *supra* section 3.J. for an in-depth explanation.

<sup>146</sup> Coates has launched several attacks on the conventional academic conception that ATPs are harmful and raise agency costs. See John C. Coates, *Takeover Defenses in the Shadow of the Pill: A Critique of the Scientific Evidence*, 79 Tex. L. Rev. (2000). And as Coates mentions in his papers, he served as a partner in the firm that is credited with the invention of the poison pill. See Coates, *supra* note 1.

however, explains exactly why so many people have been wrong for so long. It is very simple; any legal advice will do when the market is in a state of equilibrium. The presence of an equal number of shielded and unshielded firms in a given market offsets any systematic benefit that might be reaped from either the adoption or rejection of ATPs. Even if legal counsel drives the market slightly away from a point of perfect equilibrium, there is not much risk in making the wrong choice vis-à-vis defense options. From the perspective of this paper, ATPs can be regarded neither as harmful nor beneficial if the market is in a state of equilibrium, and only a significant deviation from said state is apt to cause much damage.

Moreover, if legal counsel drives the market to a severely distorted position, then the market professionals will have to expose the problem. For example, the research department of an investment bank can expose the abnormal returns of firms that chose one tactic, and thus recommend that new firms systematically adopt or reject defenses depending on whatever was done by the earlier firms with abnormal returns. Market forces can thus overcome the deviation and a state of equilibrium will prevail.

This is both the point of intersection and divergence between Coates' argument and the one postulated by this article. Coates underestimates the professional expertise of the securities markets that lies beyond the confines of law firms. This paper argues, like Coates, that legal counsel can cause harm, albeit up to a certain point. Beyond the point at which such harm might actually become significant, other professional players in the market would exert their influence to limit the influence of the lawyers. Interestingly, like practitioners, legal scholars may continue to debate the ATP question forever. If the market is indeed in a state of equilibrium, as argued in this paper, empirical evidence will never reveal a preference for one side of the argument over the other.

Finally, Coates underscores the empirical finding that many lawyers craft either illegal or ineffective defenses. In Coates' view, this is an indication of both the extent to which lawyers are frequently ill-equipped to deal with ATP issues and the fact that clients are easily persuaded to follow poor advice. Ironically, these lawyers and clients are the real winners in the ATP game. Because it is irrelevant if one adopts defenses or not when the market is in a state of equilibrium, it is certainly best not to waste money on attorney fees from long billable hours. As long as there are enough players in the market, such as underwriters, who will not tolerate substantial deviation from the market's point of equilibrium, lawyers can afford to remain rather



ignorant about ATPs, while taking a free ride on the coattails of market professionals with vested interests.

### 3. ABUSING THE PRE-IPO INVESTORS WHO ARE NOT PART OF THE MANAGEMENT TEAM (FIELD & KARPOFF)

Field and Karpoff believe that IPO firms are somewhat similar to seasoned firms with dispersed ownership. Although they agree that managers of pre-IPO firms usually own more equity in their firm than managers of seasoned firms, one must bear in mind that managers seldom own all of a firm's stock when it goes public.<sup>147</sup> Because managers are inclined to favor defenses, Field and Karpoff believe that the dispersion of ownership and control allows managers to abuse their other pre-IPO investors by going public with devaluating defenses. The greater incentives managers have and the less they are monitored, the more they adopt defenses. Because Field and Karpoff believe, unlike Daines and Klausner, that governance structures are accurately priced in IPOs, they regard the decisions of managers to adopt defenses as harmful to the interests of other pre-IPO investors.

In order to underscore the point that differences between IPO firms and seasoned ones are only a matter of degree, Field and Karpoff compared the widespread use of defenses among both types of firms. They hypothesize that managers of mature firms hold very little equity and thus adopt quite harmful ATPs, while managers of IPO firms usually hold a greater share of stock and thus tend to adopt fewer ATPs. By way of comparison, Field and Karpoff indeed found that seasoned firms at the time (1988-1992) tended to adopt more defenses than IPO-stage firms, and thus concluded as follows: "We propose, however, that taken as a whole, these results imply that the use of takeover defenses is inversely related to the share of the costs that are internalized by decision-making managers. Viewed thus way, IPO managers deploy fewer takeover defenses than their counterparts at seasoned corporations because they generally own a greater fraction of their firms and are monitored more closely by non-management shareholders."<sup>148</sup>

---

<sup>147</sup> "[W]e propose that IPO firms have agency problems. Just like seasoned corporations. Agency costs are likely to be low, due to IPO firm's concentrated ownership. But to the extent that managers of IPO firms own less than 100% of the pre-IPO stock, conflicts will arise between them and non-management investors." Field & Karpoff, *supra* note 1, at 2.

<sup>148</sup> Field & Karpoff, *supra* note 1, at 27.

Fortunately, the erroneous impression left by Field and Karpoff was countered with newer data than their sample.<sup>149</sup> During the late 1980s, there was a surge in ATP adoption rates among seasoned firms, while antitakeover devices were almost unheard of among IPOs. In the 1990s, however, pressure from institutional investors brought ATP adoption among seasoned firms almost to a complete halt, while at the same time there was a significant surge among firms that were going public.<sup>150</sup> Today, IPOs tend to adopt defenses more often than is common among their seasoned counterparts. This change poses a serious challenge to the arguments posited by Field and Karpoff. Because it makes no sense to argue that IPO firms are more vulnerable to the distorted incentives of management than are seasoned firms, it is unreasonable to argue that adoption of ATPs at the IPO-stage allows managers to entrench themselves at the expense of shareholders.<sup>151</sup>

Other than that, and as previously noted, the equilibrium that this model presents may persist even if some IPO managers are totally selfish and out of control. Quite simply, by adopting fewer defenses, the group of IPO firms with healthy governing structures can counterbalance the tendency of unruly managers to over-adopt.<sup>152</sup> If this is the case, then the finding of Field and Karpoff is sound, but not the conclusion they draw from it. Managers can in fact sometimes implement their favorite solution without harming the interests of shareholders.<sup>153</sup> Finally, it is doubtful whether the difficulties confronting shareholders and managers of seasoned firms with respect to renegotiation are applicable to most IPO-stage firms. A small group of investors can reach an efficient result by compensating managers for

---

<sup>149</sup> Also, Field & Karpoff's data are skewed by the inclusion of poison pills adoption as an ATP. Poison pills may be adopted in most firms at any stage at the sole discretion of the board of directors. Therefore, it is irrelevant whether a firm has or has not adopted a poison pill. Poison pills, though, are more common among seasoned firms that have had more time to adopt them, which distorts the results reported in the paper.

<sup>150</sup> The theory of this paper may explain this development too. *See supra* notes 114-115 and accompanying text.

<sup>151</sup> Unless one believes that reality is explained by the rational herd-like behavior setting that was delineated earlier, which is another possibility that this paper accommodates. *See supra* Figure 2B and accompanying text.

<sup>152</sup> An explanation of larger scope appeared earlier. *See supra* note 131 and accompanying text.

<sup>153</sup> They are not hurt directly by the managerial decision to adopt defenses but may nevertheless be otherwise abused by their powerful managers. Therefore, any additional finding regarding shareholder abuse in such firms may be the result of their managers' leverage and not the consequence of the implemented ATPs.

the lack of ATPs, when such a solution is in order. Hence, the argument of Field and Karpoff is not particularly appealing for a number of reasons even beyond the issues raised here.

### C. Testable Predictions

The principal empirical prediction made by this paper is that the percentage of firms with takeover defenses should reach a stable point to which it should always return following any disturbance. In the real world, it may be some time before markets settle down because ATPs only began to emerge as a major influence in the mid-1980s, “the poison pill era,” and IPO-stage firms only began to adopt defenses in the late 1980s. It is, nevertheless, not too early to conduct empirical work to test the validity of the argument raised in this paper.

As previously explained, competition for takeover activity is primarily between firms from within the same market segment.<sup>154</sup> Every firm, therefore, should consider defenses according to the current rate of ATP adoption within its respective industry segment. While the markets for some industries may already be approaching a point of equilibrium, other markets may still be distorted with either too many or too few defenses. Distorted market segments are readily apparent by extreme percentages of shields or absence thereof. The empirical prediction of this paper holds that issuers in markets with extremely low percentages of shield adoption tend to systematically adopt more defenses than firms in other markets. Conversely, new issuers in markets with markedly high percentages of shielded firms are more apt to refrain from adopting defenses than are issuers in other markets.

Moreover, one should verify the underlying assumption of this discussion as to whether there is in fact similarity among the firms. Although, the empirical work conducted thus far indicates that there is no significant difference between firms that adopt defenses and those that do not, further measurement of issuers’ characteristics might shed light on the assumption of similarity. However, this assumption was made here primarily for purposes of simplifying the analysis. Additional predictions, which can be tested, for the theory developed in this paper are found in an additional paper by this author on the heterogeneity of firms.<sup>155</sup>

---

<sup>154</sup> See *supra* section 3.F.

<sup>155</sup> See SHARON HANNES, WHY WOULD ENTREPRENEURS OF BETTER VENTURES ADOPT TAKEOVER PROVISIONS THAT ARE HARMFUL TO SHAREHOLDERS?, Unpublished Manuscript (2001) (on file with author).

## V. Two Analogous Legal Choices: Ownership Structure and State of Incorporation

### A. State Law Competition

States compete to attract firms by enacting laws to accommodate and facilitate the process of incorporation. The consequences of this competition are highly debated in the literature, but no one doubts that the State of Delaware is the clear victor.<sup>156</sup> The small state of Delaware is the corporate domicile for half of America's largest businesses and is host to eighty percent of all reincorporating firms.<sup>157</sup>

Nevertheless, while firms select Delaware as the state in which they choose to incorporate or reincorporate, one cannot ignore the fact that a significant number do not wish to do so. Although it is possible that they merely have different preferences, the framework of this paper recognizes that firms with similar preferences may not necessarily all choose to incorporate in the same state. The reason for this is that decisions regarding incorporation have much in common with those regarding the adoption of takeover defenses. Every state has its own body of corporate law, which either restricts or facilitates takeover tendencies.<sup>158</sup> For example, states have different requirements regarding the timing of board meetings, which can play a major role in takeover battles. Delaware requires corporations to hold a board meeting at least every thirteen months; whereas Nevada allows a lapse of eighteen months.<sup>159</sup> Thus a

---

<sup>156</sup> The two extreme views on the consequences of the incorporation race are termed "the race to the top" vis-à-vis "the race to the bottom." Professor Romano represents the current view of proponents of the race, while Professor Bebchuk represents concurrent dissenters. See, e.g., ROBERTA ROMANO, *THE GENIUS OF AMERICAN CORPORATE LAW* 14-51 (1993); Lucian A. Bebchuk, *Federalism and the Corporation: the Desirable Limits on State Competition in Corporate Law*, 105 HARV. L. REV. 1435 (1992); see also Lucian A. Bebchuk & Allen Ferrell, *Federalism and Corporate Law: The Race to Protect Managers from Takeovers*, 99 COLUM. L. REV. 1168 (1999).

<sup>157</sup> Delaware is home to one-half of the largest American corporations, and is the new host of 80% of reincorporating firms. See Roberta Romano, *Law as a Product: Some Pieces of the Incorporation Puzzle*, 1 J. L. ECON. & ORG. 224, 225 (1985); see also Demetrios G. Kaouris, *Is Delaware Still a Haven for Incorporation?*, 20 DEL. J. CORP. L. 965, 1012 (1995) (reporting that 89% of his sample of companies that reincorporated between 1982 and 1994 moved to Delaware).

<sup>158</sup> The divergent takeover standards include both divergence in the default standards that the states offer and divergence in mandatory restrictions on defense adoption, which states sometimes impose. See ROBERT C. CLARK, *CORPORATE LAW* 579-88 (1986) (summarizing state takeover case law); ERIC ROBINSON, JOHN C. COATES & MITCHELL S. PRESSER, *STATE TAKEOVER STATUTES: A FIFTY STATE SURVEY* (1989).

<sup>159</sup> Coates, *supra* note 1, at table B-5 (Coates surveys the maximum periods between annual meetings in all 50 states).

hostile bidder will have to wait much longer to replace a board if it is targeting a firm in Nevada, than it would if it were targeting a firm in Delaware.

Moreover, hostile takeovers are easier in Delaware because of a network effect. As host to so many large corporations, Delaware sees a great number of takeovers; and thus one can more readily anticipate the types of hurdles and judicial treatment that takeovers are likely to experience in Delaware than elsewhere. Indeed, it has been empirically proven that firms that incorporate in Delaware enjoy much greater chances of being acquired.<sup>160</sup>

Because, as this paper argues, the decisions of firms interact with one another, firms outside of Delaware are not only less likely to be targeted for takeover, but also tend to divert attention to the more easily acquired firms in Delaware. Thus a firm's decision to incorporate outside of Delaware increases the likelihood of takeover vis-à-vis firms in Delaware.

One possible outcome from this chain of decision-making is an equilibrium of the type depicted in Figure 2A. The benefits of incorporating outside of Delaware, such as the possibility to obtain higher premiums, will be negated if too many firms adopt the same tactic.<sup>161</sup> The increased likelihood of takeover in Delaware, resulting from the decisions of other firms not to incorporate there, enhances the value of incorporating in Delaware. It is, therefore, quite understandable that some firms choose to incorporate in Delaware while others do not.

## B. The Determinants of Ownership Structures

The United States, Canada, Great Britain, and Australia are dominated by public corporations that lack a controlling shareholder. Typically, firms in these countries have dispersed ownership structures with many owners each holding a miniscule portion of the firm's equity. In contrast, other large security markets such as Germany, Japan, and France, have public corporations with a controlling shareholder or a coalition of shareholders.<sup>162</sup> Moreover, although dispersed ownership structures are the norm in the U.S., one-fifth of its public

---

<sup>160</sup> See Daines, *supra* note 81, at 1.

<sup>161</sup> While the higher takeover frequency of Delaware firms is recorded in the empirical *literature*, I am unaware of any empirical research that compares the premiums of Delaware vis-à-vis non-Delaware firms. See Daines, *supra* note 81.

<sup>162</sup> Rafael La Porta et al., *Legal Determinants of External Finance*, 52(3) J. OF FIN. 1131-50. (1997); Rafael La Porta et al., *Law and Finance*, 106(6) J. POL. ECON. 1113-55 (1998); Rafael La Porta et al., *Investor Protection and Corporate Governance*, 58 (1-2) J. Fin. Econ. 327 (2000). This large and important empirical body of literature is the first global comparison of ownership structures. The analysis ties the ownership findings to the quality and characteristics of the legal system in each country.

corporations have a shareholder who holds more than thirty-five percent of the firm's equity.<sup>163</sup> This sort of diversity is extremely rare in economies that are dominated by concentrated ownership forms.<sup>164</sup>

The choice between dispersed and concentrated ownership structures is actually a matter of choosing a control structure.<sup>165</sup> Once ownership is concentrated in the hands of a controlling shareholder, control cannot be contested because every transaction becomes subject to the controller's consent. Thus, it is not surprising that ownership structures have already been associated with takeover defenses.<sup>166</sup> A firm with takeover defenses is partially contested, and intermediate form between the concentrated and purely dispersed modes. It is, therefore, only natural to analyze a firm's choice of ownership structure through the prism of the takeover diversion argument. Just as shielded firms divert takeover activity to unshielded ones, firms with concentrated ownership structures may divert takeover activity toward ones with dispersed ownership structures.<sup>167</sup>

Most of the literature on this subject is preoccupied with the distinction between countries with predominantly dispersed ownership structures and those with concentrated ownership structures.<sup>168</sup> No one, however, has ever addressed the question as to why countries with concentrated ownership structures do not readily accommodate other forms, while countries with a predominance of dispersed ownership structures do. The infrastructure

---

<sup>163</sup> Since many of the concentrated ownership firms are seasoned corporations it is unlikely that they are all in a stage of transformation to dispersed ownership structures. See Coates, *supra* note 21, at 848 and Wayne Mikkelsen & M. Megan Partch, *Managers Voting Rights and Corporate Control*, 25 J. FIN. ECON. 263 (1989).

<sup>164</sup> No country with a majority of concentrated ownership structures has more than 10% of firms with dispersed ownership. See Rafael La Porta et al., *Legal Determinants of External Finance*, 52(3) J. OF FIN. 1131 (1997).

<sup>165</sup> See Bebchuk, *supra* note 67.

<sup>166</sup> See Bebchuk, *supra* note 67, Bebchuk & Zingalas, *supra* note 72; Daines & Klausner, *supra* note 1, at 85.

<sup>167</sup> For the analogy to be perfect one needs to first prove that concentrated ownership firms actually enjoy less takeover activity but receive more premiums once acquired. While an exact scrutiny of the relevant empirical literature lies beyond the scope of this paper, some anecdotal evidence is in order. Thus, for one, the U.S. economy, known for its many dispersed ownership firms, has a unique abundance of merger activity, which is unknown in countries where most firms have concentrated ownership. Additionally, there is evidence that premiums paid for blockholders outside of the U.S., where concentrated ownership is the norm, is higher than premiums paid in control transaction within the U.S.

<sup>168</sup> See Mark Roe, *Political Foundations for Separating Ownership from Corporate Control* 53 STAN. L. REV. 539 (2000); and Bebchuk, *supra* note 67.

established in this paper may provide some answers. At this juncture, reference should be made to Figure 5, which uses the same graphic format as the other models in this paper, except that concentrated ownership structures have replaced shielded firms, while dispersed ownership structures have replaced unshielded firms.

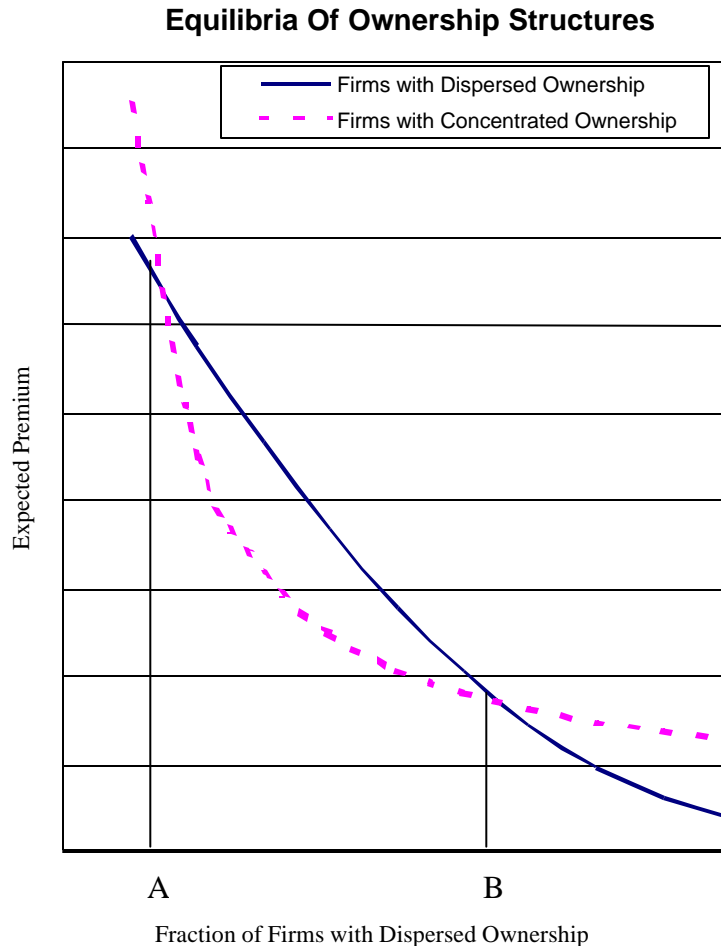


Figure 5

Figure 5 is a case of multiple equilibria.<sup>169</sup> The market can reach two points at which it becomes stable. The first is point *B*. If the market is comprised primarily of firms with dispersed ownership structures, there are greater incentives for newcomers to have concentrated structures, as represented by the relative positions of the curves to the left of point *B*. Conversely, if there are too few firms with dispersed ownership structures, there are greater incentives to have such structures, until the market reaches point *B*. Point *B* may, therefore,

<sup>169</sup> General analysis of multiple equilibria was performed earlier. *Supra* Figure 4 and accompanying text.

represent the composition of ownership structure in the U.S., where the majority of firms have dispersed ownership structures, but co-exist with others that prefer concentrated structures.

This analysis does not, however, apply to point *A*. The market simply cannot rest at point *A*. To the left of point *A*, where there are few firms with dispersed ownership structures, it is best for firms to adopt concentrated ownership structures, until at last the market comes to rest at some point on the extreme left. Hence, the point of stable equilibrium is not point *A*, but rather an extreme point to the left of it where the market is comprised almost exclusively of firms with concentrated ownership structures. If, however, the market somehow overcomes point *A*, with a sufficient number of firms with dispersed ownership structures, then there are greater incentives for even more firms to adopt such structures. Eventually, the market will in fact reach point *B*, and the dispersed ownership structures will prevail, albeit in coexistence with a significant minority of firms with concentrated ownership structures.

If Figure 5 is an accurate representation of the real world, then this analysis has revealed another explanation for the stagnation of ownership structures in various countries.<sup>170</sup> Once a country settles on its paradigmatic structure, change is almost impossible. Moreover, if a country is comprised primarily of firms with concentrated structures, there can simply be no evolution toward greater diversity without artificially creating a pool of firms with dispersed ownership structures. Help in this process might be provided by way of governmental intervention through sophisticated subsidization or privatization. The framework of this paper thus shed light on the fact that countries with predominantly dispersed ownership structures also accommodate concentrated ownership structures, while the opposite cannot be said of countries with a prevalence of concentrated structures. Although symmetry here might be intuitive, it is not necessarily guaranteed.

## VI. Summary and Normative Implications

---

<sup>170</sup> Compare the text with Lucian A. Bebchuk & Mark J. Roe, *A Theory of Path Dependence in Corporate Governance and Ownership*, 52 STAN. L. REV 127 (1999) (discussing path dependence that results both from the political pressures in the relevant countries, and the fixation of the financial structures of the individual firms).



Although many lawyers either fervently advocate for or against takeover defenses, the analysis of this paper suggests that adoption of ATPs neither harms nor benefits shareholders. To be sure, ATPs are quite influential, but the delicate forces of the market foreclose any opportunity to significantly benefit or lose from their adoption or rejection.<sup>171</sup> In order to accept this proposition, one must assume that takeover defenses have the potential to raise premiums up to a point where it is worthwhile to adopt defenses, and that the relative advantage of being shielded disappears as shielded targets divert takeover activity to their unshielded peers.

This paper suggests that ATPs divert takeover activity among firms, which is in sharp contrast to the traditional and almost unanimous views of legal scholars and economists, who believe that ATPs merely influence the takeover probability and premium of the targeted firm. In other words, this paper holds that takeover exposure is not endogenous to the decisions of a single target. The diversionary effect of takeover activity, which constitutes a heretofore unrecognized externality, negates any effect from the adoption of ATPs. When the market is in a state of equilibrium, firms become indifferent to ATPs. It is no wonder, therefore, that empirical research has never provided a clear answer to whether takeover defenses are either harmful or beneficial to shareholders.<sup>172</sup>

The equilibrium of the market also explains how lawyers can continue to take sharply opposing positions regarding takeover defenses. Even if the logic behind their conflicting positions is flawed, not much harm can be done by following their contradictory advices. ATPs are simply benign at the point of equilibrium. If, however, legal counsel pushes the market away from its point of equilibrium, then gains can be reaped from either adopting or rejecting ATPs. When such gains become substantial, shrewd market professionals will, eventually, identify the opportunity and push the market back to its point of equilibrium by systematically adopting or rejecting defenses. Meanwhile, the ones who really benefit from this sort of

---

<sup>171</sup> In the jargon of Merton Miller it means that ATPs are not innocuous or “neutral mutations” in the design of corporate securities. See Merton Miller, *Debt and Taxes*, 32 J. FIN. 261-75 (1977).

<sup>172</sup> For surveys see Romano, *supra* note 52; Coates, *supra* note 146; and for examples see DeAngelo and Rice, *supra* note 63; Scott Linn & John McConnell, *An Empirical Investigation of the Impact of Antitakeover Amendments on Common Stock Prices*, 11 J. FIN. ECON. 361-39 (1983); Gregg Jarrell & Annette Poulsen, *Shark Repellants and Stock Prices: The Effects of Antitakeover Amendments Since 1980*, 19 J. HN. ECON. 127 (1987); Anup Agrawal & Gershon N. Mandelker, *Large Shareholders and the Monitoring of Managers: The Case of Antitakeover Charter Amendments*, 25 J. HN. & QUANTITATIVE ANALYSIS 143-61 (1990); Victoria McWilliams & Nilanjan Sen, *Board Monitoring and Antitakeover Amendments*, 32 J. FIN. & QUANTITATIVE ANALYSIS 491-505 (1997).

situation are the unskilled lawyers who do not invest much time or resources in addressing questions with answers that are of little significance. Finally, although the theory presented here is mostly descriptive, a few words about its normative implications are in order. Within the flexible boundaries imposed by state and federal laws, U.S. firms are generally free to adopt any strategy to cope with the market for corporate control. Many scholars highlight the negative influences inflicted by shareholders who allow takeovers on other constituencies of their firms, including managers, consumers, employees, suppliers, and hosting communities. These negative influences are regarded as justification for mandatory restraints on the ability of shareholders to leave their firms unshielded.<sup>173</sup> Shareholders, arguably, allow too many takeovers without considering the resultant harm to others. The shareholders' freedom to contract must be restrained to protect the social welfare. In other words, some defenses should be imposed upon shareholders for the sake of society.

Commentators argue, in contrast to these arguments, that shareholders have a natural tendency to adopt too many defenses.<sup>174</sup> The reason is, again, rooted in a possible external influence. In the event of a possible takeover, shareholders of a targeted firm may elect to adopt defenses in order to absorb higher premiums from the acquiring firm. Again, this is a negative externality of a firm's ATP decision, but the difference between this argument and the former is twofold. First, the negative external influence here is a consequence of the decision to adopt defenses, rather than of a decision to remain unshielded, which then results in too many defenses. Second, this external influence is internal to the entire population of shareholders once the shareholders of the bidding firm are also taken into account. Therefore, even when only the best interests of the shareholders are at stake, they cannot be relied upon to reach the best

---

<sup>173</sup> See generally Jeffrey N. Gordon, *The Mandatory Structure of Corporate Law*, 89 COLUM. L. REV. 1549 (1989).

<sup>174</sup> Defenses promise higher premiums in a takeover event but reduce the frequency of takeover bids. Shareholders may elect to adopt defenses at the expense of the potential bidders. From a social welfare viewpoint this is an excessive level of defenses. See Scharfstein, *supra* note 63; Sanford J. Grossman & Oliver Hart, *Takeover Bids, the Free Rider Problem, and the Theory of the Corporation*, 11 BELL J. ECON. 42, 43 (1980); Bebchuk & Zingales, *supra* note 72; see also Luigi Zingales, *Insider Ownership and the Decision to Go Public*, 62 J. ECON. STUD. 425-48 (1995).

decision.<sup>175</sup> Hence, the time may be ripe for the law to intervene and temper the defenses that shareholders tend to adopt.

This paper and its theory of the diversionary effects of takeovers may contribute another dimension to the argument on external influences. The externality in question is the higher takeover likelihood enjoyed by an unshielded firm as a consequence of the adoption of defenses by its peers. From the perspective of premiums, this is clearly a positive thing. Unshielded firms gain by the adoption of defenses by other firms. By itself, this effect results in individual firms adopting too few defenses than is good for the entire group of shareholders and the social welfare. Nevertheless, there is still insufficient justification for mandatory government intervention.

The effect revealed by this paper furnishes a partial remedy for a firm's natural tendency to adopt too many defenses. The need for government intervention, at either the state or federal level, is all the more perplexing if one considers the diversionary effect of adopting takeover defenses. In short, although this paper demonstrates that one cannot trust the decisions of individual parties vis-à-vis corporate takeover, this is hardly sufficient grounds for mandating government intervention. There may be fewer defenses than previously justified, but it is unclear whether this is beneficial or inimical to society. The principal focus of this paper is, therefore, reserved for the descriptive arena, and explains why seemingly similar firms mysteriously diverge in their takeover practices.

---

<sup>175</sup> From the point of view of all shareholders involved, the premiums that change pockets are a wash, but the higher premiums that defenses impose preclude some takeovers, thus creating a cost for shareholders (of potential bidders) and social welfare.

Suppose there are two potential takeover targets  $T_1$  and  $T_2$  and two bidders  $B_1$  and  $B_2$ . We model the adoption of antitakeover mechanisms and their effects on subsequent bidding behavior as a two period game. In the first period, the two target firms decide whether to adopt a takeover defense. Bidders observe this decision and decide in the second period on a bid for the target companies.

In this simple model, a firm consists of an owner and a manager. The owner can take one of two actions: she can decide to delegate decision making on a takeover bid to the manager by adopting harsh takeover shields (action  $S$ ), or she can choose to hold on to that power herself (action  $NS$ ). The manager holds a certain share  $a$  in the company's stock. To abstract away from standard agency problems we assume that the manager has no disutility of effort. However, the manager incurs a cost  $c$  from losing his job if the company is taken over by a bidder in the second period. This implies that the manager will consent to a merger only if the premium  $p$  paid by the bidder to the stockholders of the company is sufficiently large, *i.e.*

$$p a = c$$

The manager will reject some take-over bids in the second period, which are profitable for the owners but which are costly for her. However, in return the owner can credibly commit to reject low takeover bids in the second period by irreversibly delegating the decision power to the manager. Therefore, owners might implement an antitakeover mechanism in the first period for strategic reasons.

There is ex ante uncertainty about the bidders' valuation for each of the two target firms. With probability  $q$  target firm  $T_i$  has a valuation of  $w > ?$  for Bidder  $B$  and

valuation  $v_j$  for Bidder  $B_j$  ( $j \neq i$ ). With probability  $1 - q$  target firm  $T_i$  has valuation of  $v_i$  for both bidders. This setup captures the idea that bidders can enjoy private benefits (for instance, synergy effects) from taking over a target firm thanks to a unique characteristic that each target may develop (both  $w$  and  $v_j$  are private values for the bidder beyond the stand alone value of the firm). We also assume that each bidder can take over one company at most.

The second period is subdivided into three sub-periods. In period 2.1 the uncertainty about the bidders' valuation is resolved and becomes common knowledge. In period 2.2 bidder  $B_i$  makes bids  $b_{ij}=0$  for each of the two target firms  $j$ .<sup>176</sup> In period 2.3 target firms decide whether to accept a takeover bid, and payoffs are realized.

We look for subgame perfect equilibria of this game, and solve it through backward induction. In the second stage we have to distinguish between three possible cases.

**Case I:** *Both firms do not delegate to the manager.* In this case both firms will submit bids  $b_{ij}=0$  for both firms regardless of the realization of their valuation. Both targets will accept one bid each. Target firms are indifferent between both bids. Note, that the bidder appropriates the entire surplus.

**Case II:** *Both firms delegate to the manager.* In this case a company can only be acquired by a bidder if the bidder's valuation is greater than  $c/a$ . We assume that  $c/a < w$ . Otherwise, the antitakeover mechanism would prevent *all* takeovers which cannot be in the interest of the owner.

---

<sup>176</sup> We do not have to allow bidders not to bid for a company because they can always bid zero for a target and bidding is assumed to be costless.

**Case III:** Only a single firm delegates to the manager. Without loss of generality assume that  $T_1$  is protected. To make this case interesting we have to assume that  $c/a > ?$ . This implies that a bidder would attempt a takeover only if he has a high valuation of the target company. Otherwise, the bidder prefers to bid for the second company. Both bidders will compete for target  $T_2$  in this case, bid  $b_{i2} = ?$  and the company will be sold to  $B_2$  for premium  $p = ?$ .<sup>177</sup>

We have solved the equilibria of the period 2 subgames. This allows us to represent the decision problem of the target firms as a two by two game in the first period. Recall that the owners of each target firm can take two possible actions: adopt a takeover shields (S), or retain control (NS).

		<b>T<sub>1</sub></b>	
		<b>NS</b>	<b>S</b>
<b>T<sub>2</sub></b>	<b>NS</b>	0, 0	(1-q)v, qc/a
	<b>S</b>	qc/a, (1-q)v	qc/a, qc/a

if  $q < \frac{1}{1+C/aV}$  then Nash is (S, NS) and (NS,S)  
 equilibria (D,ND) and (ND, D) if  $q < 1/(1+c/av)$ .

## Conclusions

The owners will choose to implement an antitakeover mechanism if the manager has few incentives to use them ( $c$  is low). If  $c$  is too large the manager would prevent all mergers. In this case, the firm would choose to avoid any takeover defenses.

For intermediate values of  $c$  takeover defenses prevent some mergers but extract a higher price from high valuation buyers. The owners' optimal strategy will then depend on the probability  $q$  of finding a high valuation bidder in the second period. If that probability is large both target firms would prefer takeover defenses.

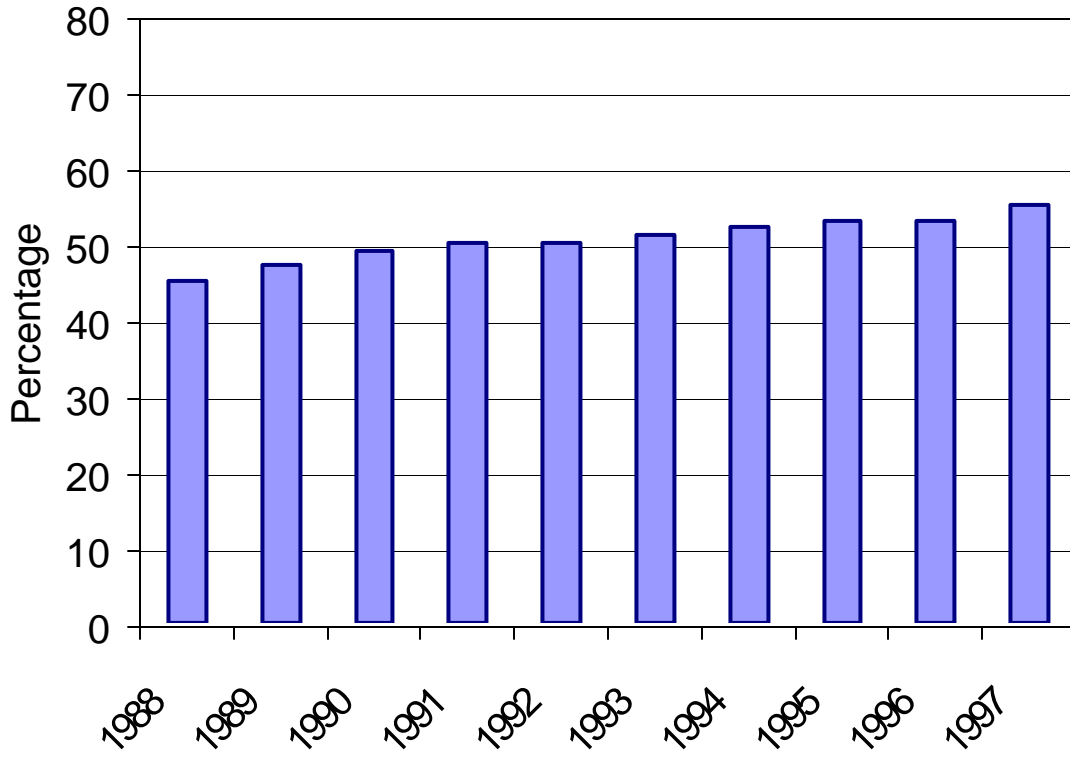
We will see companies adopting both strategies if the probability of finding a high valuation buyer is not too high (in particular,  $q < 1/(1+c/av)$ ). In such an environment some firms can benefit from not adopting takeover defenses because of the resultant competition among bidders.

---

<sup>177</sup> Any price below  $p$  is not a Nash equilibrium because both firms have an incentive to bid  $p+e$ . If B2 has a low valuation the target can go to either bidder. If B2 has a high valuation it will obtain the target for sure.

**Incidence of Classified Boards in the Firms of the S&P 1500**

Appendix 2





Appendix 3

States of the Market in which one Strategy is Always Superior

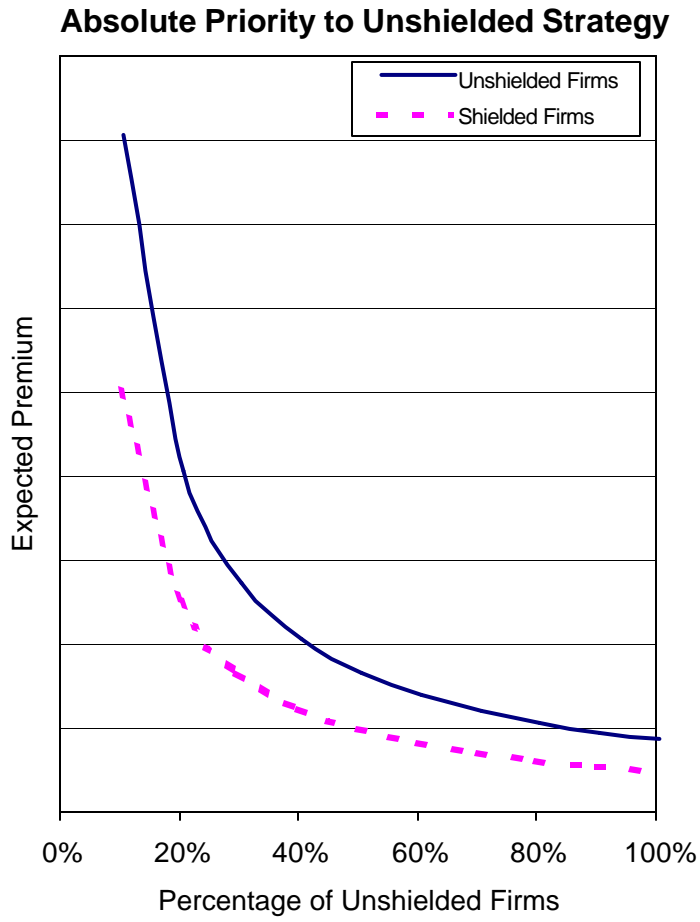


Figure A

### Absolute Priority for the Shielded Strategy

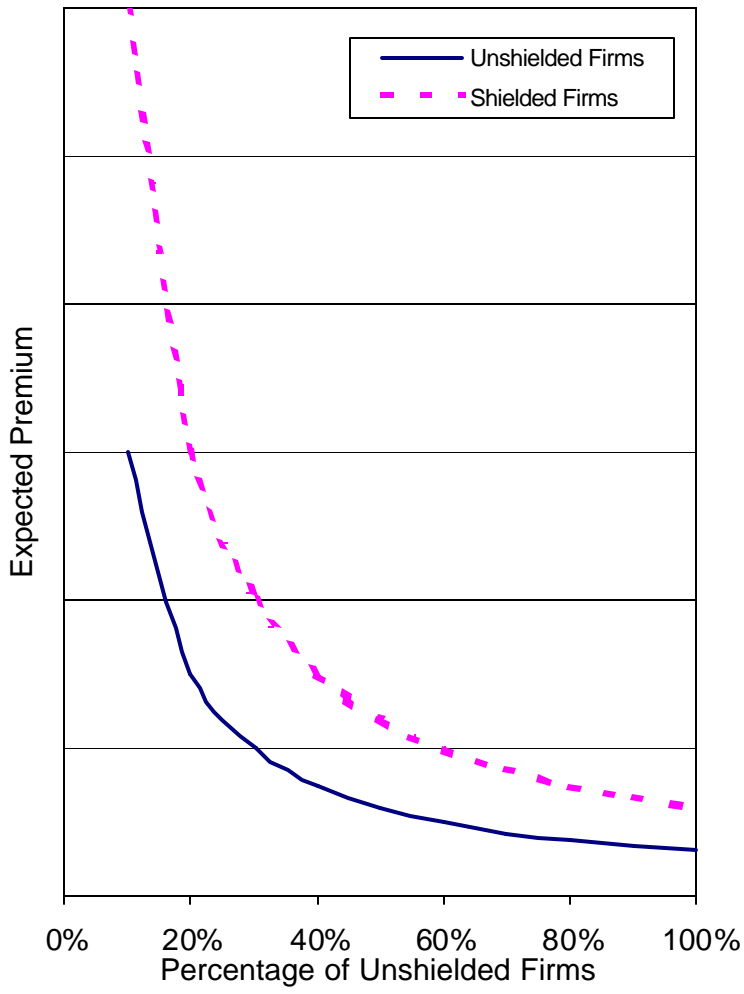


Figure B

#### Appendix 4 - VARIATIONS OF THE DISCIPLINARY EFFECT

Figure C, below, illustrates a *disciplinary effect* that is beneficial for unshielded firms while such firms comprise a large percentage of the population, but detrimental to them as the population becomes more shielded. Isolating the *disciplinary effect*, this illustration poses a severe coordination problem for the firms. If the majority of firms adopt defenses, they should all do so, despite having to forfeit some of the advantages of corporate control; but it would be best for them to all maintain an unshielded position. Although this is a common feature of the *disciplinary effect*, Figure C indicates that the advantages to unshielded firms, when most of the market is shielded, are not only declining but eventually become liabilities. Ironically, this allows attorneys who successfully advocated for the defenses to argue that market conditions endanger firms that remain unshielded. The seed of the poisonous fruit thus leads to the planting of poisonous trees.

### Fruits of the Poisonous Tree

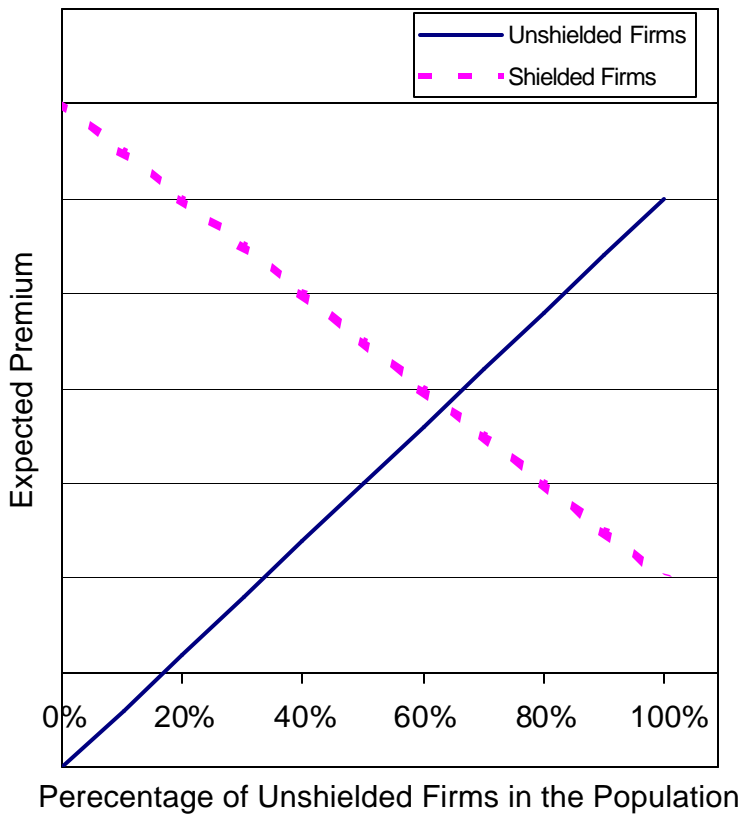


Figure C