PRIVATE BENEFITS OF CONTROL, ANTITAKEOVER DEFENSES AND THE PERILS OF FEDERAL INTERVENTION

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ABSTRACT

This paper develops a theory that sheds light on recent evidence according to which high quality issuers are the ones that adopt defenses in the IPO, and keys this behavior to the existing literature on private benefits of control. The paper analyzes the decision of the pre IPO owners concerning takeover defenses. This decision is shown to be influenced by the quality of the venture that goes public. High quality in firms that go public often means an abundance of growth and business opportunities, rather than sizeable existing assets. In such ventures managers are unlikely to consume much harmful control benefits, but they nevertheless derive a great deal of non-monetary control benefits from their stint in the promising entity. Consequently, takeover defenses help the pre-IPO owners to preserve their non-monetary control benefits without causing too much harm to the value of the enterprise. The argument of this paper is consistent with recent empirical evidence, which indicates that takeover defenses appear in the IPO in instances where defenses are highly beneficial for managers by shielding their positions in risky environments and that better underwriters serves the issuers that adopt defenses. The paper also shows that even if the conventional assumption that takeover defenses are harmful to shareholders is taken as given, then the inimical influence of takeover defenses is hard to trace, since the issuers that adopt them are those which shareholders should prefer in the first place. Finding a matching sample for the adopting issuers may therefore be an impossible task. The discussion also considers possible extensions that result from complications of asymmetric information, and finally concludes with the perils of federal intervention.

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I. Introduction

In a previous paper I argued that the inconclusive evidence about the influence of takeover defenses on the value of the firm is explicable by an equilibrium argument. The essence of the argument was that takeover defenses provide the target-firm with some benefits, but also divert takeover activity to unshielded firms, and thus the market ultimately reaches a state in which takeover defenses are benign to the public shareholders.\(^1\) Here, I will take the conventional assumption that takeover provisions are actually harmful to the public shareholders,\(^2\) and propose a different theory that can shed light on the concurrent empirical findings. Subsequently, the two theories will be merged to explain how an equilibrium of the type presented in the previous paper can be derived, even if adoption of takeover defenses is indeed harmful for the firm’s market value.

The vivid contemporaneous empirical literature on takeover defenses at the IPO stage may be summarized by the following four points:\(^3\) First, takeover defenses and definitely harsh takeover defenses are not adopted by all IPO firms. Secondly, it is hard

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to identify any characteristics that differentiate between the adopting and the non-adopting firms. Third and arguably, takeover defenses seem to hurt shareholders’ value. Takeover defenses are used in circumstances in which they are most needed to shield managers’ position, while least needed to create shareholders’ value. While I have previously argued that this finding is questionable, I will here take this assumption as given. Finally, and surprisingly enough, the adopting firms seem to be the most promising firms in terms of profitability and business opportunities.

As will be elaborated below, the first three clusters of empirical findings seem to suit the predictions of the theory that attributes takeover defenses to incidents of high private benefits of control. This paper argues that even the fourth empirical finding about the quality of the adopting issuers, that seemingly contradicts the predictions of the above-mentioned theory, may comfortably fit into the picture once some plausible assumptions are introduced. Additional complications that arise from asymmetric information may fit these empirical findings as well.

Private benefits that flow from the control of a public firm may derive decisions regarding ownership structures. Once ownership is dispersed among a wide group of shareholders that are unaffiliated with the manager-controller, a third party bidder may approach the shareholders directly and acquire control without the approval of the incumbent manager. In such a transaction, that does not involve the current manager, the bidder may wrest the private benefits of control from the hands of the incumbent manager without any compensation to the incumbent. This incentive for the bidder to grab control

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benefits without directly paying for them may cause the founder of the firm to maintain a
control block in the first place. Hence, the larger private benefits of control become, the
higher the likelihood that founders will sustain a lock on control when going public.

However, concentrating a high fraction of the personal wealth in a control block
may be too expensive a measure for the founder to take. Therefore, and where benefits
of control are still substantial, the founder may still partially shield her private benefits of
control by adopting takeover defenses. For this theory to be interesting and shed light on
a reality in which only part of the firms adopt defenses, one must assume that these
defenses have adverse effects on shareholders’ wealth. Otherwise, if defenses where
beneficial to shareholders, all firms would have adopted them. However, if antitakeover

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5 To be precise, a concentrated ownership structure will be chosen by the entrepreneur even if
shareholders value more a dispersed ownership structure if the net private benefits of control (less the costs
of a takeover bid) are higher than half the loss to shareholders from the concentrated ownership structure.
Or explicitly (assuming for simplicity that all managers are of equal qualities and not cash constrained):

\[ B_{cs} - C > 0.5(Y_{ncs} - Y_{cs}), \]

Where \( B_{cs} \) are the private benefits net of the private costs, \( C \) is the cost of the bid, and \( Y_{ncs}, Y_{cs} \) are the
values of the firm to the shareholders under a dispersed ownership structure and a concentrated ownership
structure, respectively.

The intuition is that a bidder must purchase at least half of the company to gain control and would
therefore need to pay at least half of the shareholders the value of their dispersed ownership holdings and
some administrative costs. The bidder would have incentives to take control in such a manner (and the
entrepreneur would react in deciding on a concentrated ownership structure) only if her concentrated
ownership of half of the shares that she purchases plus her net private benefits in that situation are higher
than the total costs of the bid that were mentioned above.

6 At least two direct costs result from the controller decision to maintain a large fraction of the firm
stock. First, under the conventional assumption that an individual controller is risk averse, the inability to
diversify the investment of her personal wealth and easily liquefy it is very costly to the controller. See
Anat Admati, Paul Pfleiderer & Josef Zechner, *Large Shareholders Activism, Risk Sharing, and Financial
Market Equilibrium*, 102 J. POL. ECON. 1097-1130 (1994); Patrick Bolton & Ernst-Ludwig von Thadden,
*Liquidity and Control: A Dynamic Theory of Corporate Ownership Structure*, 154 J. INST. & THEO. ECON.
177-211 (1998). Secondly, a high fraction of the shares in the hands of the controller reduces the public
float of the securities and in turn their liquidity. In the absence of a highly liquid market for the firm stock,
the reliability of the share value as an informative signal declines and the value of the firm is discounted
accordingly. See Bengt Holmstrom & Jean Tirole, *Market Liquidity and Performance*, 101 J. POL. ECON.
defenses harm the value of the firm from the perspective of the public shareholders, then
the founder will adopt defenses before going public only if the harm caused to
shareholders is less than the preservation of private benefits that such an act achieves.\(^7\)

Following this logic, the adoption of defenses must leave inimical traces on the
value of a firm that goes public with defenses. The value of the firm’s stock on the
exchange is the value for the public shareholders and does not include the private control
benefits that accrue to the manager-controller. Hence, a decision to adopt defenses that is
based on the need to preserve those private benefits at the expense of the firm’s
shareholders would end up in lower valuations for the adopting firms.\(^8\)

The empirical evidence, however, supposedly contradicts this prediction. High
quality underwriters tend to serve the issuers that chose to adopt defenses.\(^9\) Since high
quality underwriters are conventionally assumed to back firms that create the highest
value for shareholders it seems unlikely that adopting firms suffer from relative lower

\(^7\) Assuming conventional assumptions regarding the competitiveness of the securities markets. See
and Ownership Structures*, 4 J. Fin. Econ. 305-360 (1976); Frank H. Easterbrook & Daniel R. Fischel, *The
Economic Structure of Corporate Law* 4-7 (1991); Ronald Gilson & Reinier H. Kraakman, *The

\(^8\) Measuring Tobin Q of the adopting and non-adopting firms may identify these relative low
valuations of the adopting firms. Tobin Q is the ratio of the firm’s market value to its book value and
therefore a measure of shareholders value (i.e. how large are the business opportunities that the firm is
likely to developed after controlling for size of their assets).

\(^9\) Additional empirical findings show that adopting firms have superior performance before going
public. Specifically, adopting firms are significantly older, they have significantly higher operating income
in the year before the IPO, they have fewer years of negative operating income before the IPO, they have
fewer liabilities, and they are less likely to be in a developmental stage, *See* Field, *supra* note 3. However,
such findings cannot help in uncovering the effects of the adoption of defenses, and direct evidence
regarding the relative performance of adopting firms after going public is not reported.
valuations.\textsuperscript{10} Nevertheless, this chapter argues that the existence of high private benefits may still explain the behavior of the adopting firms. The same argument would explain why adopting issuers are the more profitable ones in the years prior to the IPO.\textsuperscript{11}

The empirical puzzle can be solved once we recognize that high quality firms tend to systematically produce higher private benefits of control, without these higher benefits aggravating shareholders’ loss from the adoption of defenses. This is especially true if quality is measured and defined by the scale of the business and growth opportunities that the issuer has. Consequently, issuers of better quality will more often be the ones to adopt takeover defenses. In turn, comparing the valuations of the adopting firms with the non-adopting firms is a biased measure for the effects of defenses adoption. The supposedly matching sample for the group of adopting firms is an inferior sample to start with, and possible lower valuations may expose this inherent characteristic and carry no robust evidence regarding defenses’ impact. Put differently, if high quality instigates adoption of defenses in the first place, the inherent high valuations of the adopting group may hide the harm that defenses cause to shareholders’ value.

To understand why high quality may lead to higher control benefits without causing harsher damage to shareholders, we must examine the specific properties of the private benefits of control. An entrepreneur who maintains control over the enterprise subsequent to the IPO endures many forms of private benefits of control that the public shareholders cannot share. Some of those forms are often wasteful and inimical to the


\textsuperscript{11} See Field, supra note 3 at 21.
corporate entity. Benefits flowing to the controller from self-dealing, insider trading in securities, perks consumption, investment in “pet projects” or unjustified expansion are all members of such a group of detrimental private benefits practices. In countries with effective legal regimes there are indications, though, that although these types of harmful activities indeed exist, their scope is limited.

Other forms of private benefits of control may be mere transfers of value from the public shareholders to the controllers, which do not entail any direct waste, such as excessive salaries. Finally, there are types of private benefits that the enterprise’s controller accumulates without any direct effect on the firm’s value. Such benefits are mostly non-pecuniary benefits that attach to the prestigious stint, including self-satisfaction from being the one in control of the enterprise and accordingly the respect and esteem inflicted by society.

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15 See Daines & Klausner, supra note 3, at 106-107.
role in this equation. The effectiveness of the legal regime that surrounds the corporation does not bind these types of private benefits, and whoever believes that managers are driven not only by monetary compensation and perks but also by prestige, satisfaction and authority considerations would not underestimate this type of private benefits.

Interestingly, the quality and value of the underlying issuer does not influence the size of the harmful and beneficial types of private benefits in a similar way. Generally, this paper argues that higher firm value usually leads to higher beneficial private benefits, but not necessarily to higher consumption of harmful control benefits, at least once some level of firm’s quality is achieved. This is especially true when the high value of the issuer is the result of its superior business and growth opportunities, and not necessarily the result of the value of its existing assets.

As for the beneficial control benefits, typically an entrepreneur would place high value on a secured controller position in a potentially successful enterprise, but will not cherish as much the equivalent stint in a less promising entity. Becoming the manager of the next Microsoft must be worth for the entrepreneur much more than being a manager of an ordinary firm, even when the pecuniary benefits are left out of the equation. Therefore, by and large, it seems sound to assume that beneficial private benefits rise with the quality of the underlying venture that is going public.

As will be elaborated extensively below, this link between beneficial control benefits and firms’ quality does not systematically carry on to the consumption of harmful control benefits. Under an effective legal regime the ability of the manager-controller to abuse her power at the expense of the public shareholders is limited. Surely, opportunities to benefit from a possible abuse may increase with firm value, but the legal
regime, along with other mechanisms, does not allow all possible opportunities to be consumed. Specifically, as will be discussed momentarily, the presence of valuable business opportunities prevents the managers of the firm from consuming some types of private benefits that are most detrimental to shareholders. Hence, beyond some threshold of quality the larger scope of potential opportunities would not translate into higher consumption of harmful private benefits.

Although each class of harmful private benefits should be analyzed separately, we can use managerial perks consumption as an example. While a low quality firm cannot provide its managers with enough means to consume expensive perks, the perks consumed by a mediocre firm’s manager may be similar to those consumed by a manager of an excellent firm. Social norms and potential adjudication may deter managers from consuming additional perks, even if her firm can easily afford them. Similarly, high firm value that is the result of high growth and business opportunities naturally brings the enterprise to exhaust all its resources and prevents the managers from spending the existing cash flows according to their whims.

To conclude, there are good reasons to believe that beneficial private benefits monotonously increase with the firm quality, while the consumption of harmful control benefits is not systematically linked to firm quality. Hence, if shareholders mainly fear that takeover defenses protect the consumption of harmful control benefits, then beyond some threshold of quality the IPO valuation discount for adoption of takeover defenses need not be greater for higher quality entities.  

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16 Additional reasons for a valuation discount due to adoption of takeover defenses are explored below. Specifically, the paper discusses possible inimical ex post effects and mismanagement ex ante effects. See infra section 3.
Consequently, the upside of adopting defenses is greater for superior entities, while defenses’ downside (i.e. the IPO valuation discount for their adoption) is by and large equal to that of their less successful peers. It therefore follows that high quality firms would more often be the ones to choose to adopt defenses.\textsuperscript{17} To be sure, other firms with idiosyncratic reasons to have high control benefits, such as family businesses, may choose to adopt defenses as well, but high quality is a systematic factor in the decision to adopt defenses.\textsuperscript{18}

Altogether, the above story fine-tunes the predictions of the private benefits of control theory in regards to takeover defenses adoption at the IPO. The recent empirical findings seems to fit these modified predictions with no contradiction. Adoption of defenses is not homogeneous among all firms, just as the dispersion of private benefits amongst firms is not homogeneous. Salient different characteristics of adopting firms are hard to trace, but there is some concrete evidence that the adopting firms are of higher quality.\textsuperscript{19} Finally, although defenses were found to decrease shareholders’ average premiums in takeover events, the adopting firm’s were often served by high quality underwrites that are assumed to be the best agents of shareholders value. This odd finding is explicable once we recognize that high quality firms tend to furnish more control benefits without this elevated benefits’ level causing additional harm to shareholders. The superior performance of the adopting firms may therefore cover any

\textsuperscript{17} See Field, supra note 3 at 20.

\textsuperscript{18} See Bebchuk, supra note 4.

\textsuperscript{19} See Field, supra note 3 at 27.
trace of the harmful effects that takeover defenses have on the value of the adopting issuer to the public shareholders.

Additional predictions may result from asymmetric information. First, if entrepreneurs hold private information concerning the quality of the managerial team, the issuers with high quality managers may signal their superiority by refraining from adopting defenses. 20 This signal can be persuasive since a better manager who runs her firm properly should fear less from a hostile takeover. Second, and counter intuitively, if the entrepreneurs possess private information regarding the quality of the venture and not in regards to the quality of the managerial team, then high quality issuers may signal their superior type by adopting defenses. As was discussed above, high quality ventures provide their controllers with additional beneficial private benefits of control without causing further harm to the shareholders. Hence, high quality ventures may adopt wasteful defense measures to help the market reveal their superiority, while the low quality issuers would find it too expensive to mimic this behavior.

The paper continues as follows: The second section briefly describes the emergence of takeover defenses, how they work and their proliferation in the 1980s. A description of larger scope may be found in the previous chapter of the dissertation. Section three presents the main argument that high quality firms should systematically adopt more defenses than their inferior peers. Section four then explains how the theory of this paper can shed light on the seemingly contradicting empirical findings, and suggest testable predictions for the theory. Section five merges the firm’s heterogeneity

theory developed in this chapter with the equilibrium argument of the second chapter of the dissertation in a novel framework. In section six the attention is turned towards cases of asymmetric information. Two signaling arguments a la Spence, 1973, are raised which suggest that defenses adoption (or rejection) are costly signals sent by superior types to help the market ascertain their identity. This section delineates the requisite background conditions for each of the signaling arguments to hold. Empirical evidence and predictions for the signaling arguments are also mentioned. Finally, section seven summarizes and discusses the normative implication of the descriptive arguments that were raised earlier. It is shown that one should be very cautious before proposing a federal intervention, of any sort, in the private order of takeover decisions.

II. Takeover Defenses

A. Hostile Takeovers and the Development of Incumbents’ Powers to Impede Bids

Unsolicited Control Transactions, otherwise known as hostile takeovers, became prevalent in the 1980s. The unique and defining feature of a hostile takeover is that the board of directors of the acquired firm condemns the offered transaction. Notwithstanding, the bidder who wants to gain control appeals to the shareholders of the corporate target to overcome the managerial disapproval.

21 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); Bernard S. Black, The First International Merger Wave (and the Fifth and Last U.S. Wave), 54 MIAMI L. REV 799-818 (May 2000) (extensively describing the different merger waves including the enormous hostile wave of the 1980s);


23 The merger wave of the 1980s was so fierce that an unbelievable thirty percent of the Fortune 500 companies were subject to takeover bids during that time. See Gerald Davis & Suzanne Stout, Organization
By law, directors are elected or dismissed from office by the vote mechanism of the firm at certain times or events. However, when a bidder successfully purchases a majority of the targets’ shares, it is only a matter of time until she uses the vote mechanism and replaces the reluctant directors with her proponents.24 Therefore, the ability to buy the shareholders’ stakes in a market transaction, usually by way of a tender offer, left the vote mechanism unemployed in early 1980s takeovers.25

However, innovative legal devices and landmark court decisions that allowed exploitation of such legal devices altered the takeover battlefield.26 Shareholders rights plans, notoriously known as poison pills, were designed by lawyers to impede hostile market transactions. Under the terms of such plans, a purchase of a significant fraction of the target stock without its directors’ approval triggers special rights for incumbent shareholders. As a result, the value of the hostile purchase is severely diluted up to the point in which the purchase is rendered self-defeating.27 Moreover, since shareholders right plans are distributed as dividends in kind, directors need not receive shareholders’

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24 In reality, whenever hostile bidders purchased enough stock albeit the directors disapproval, the incumbent board elected to resign without awaiting the formality of the vote process. See John C. Coates, Measuring the Domain of Mediating Hierarchy: How Contestable are U.S. Public Corporations?, Symposium: Team Production in Business Organizations, 24 J. CORP. L. 837, 850 (1999).

25 The tender offer mechanism was invented in the 1950s and since then became the major tool of acquiring shares in control transactions. See Douglas Austin & Jay Fishman, Corporations in Conflict 7-23 (1970) (describing the mechanism and the background for its development).

26 Moran V. Household Int’l, Inc., 500 A.2d 1346 (Del. 1985) (sanctioning the usage of the poison pill).

approval to employ the harsh measures, making their adoption easy for managers.\textsuperscript{28} This eventually marked the end of the pure market transaction as a possible mean to accomplish a hostile takeover.\textsuperscript{29}

Nevertheless, the mere adoption of poison pills and the court approval they received could not halt the flamboyant market for unsolicited control transactions. Simply put, poison pills do not temper with the vote or proxy mechanisms of the firms.\textsuperscript{30} Therefore, and notwithstanding the existence of a poison pill, bidders can solicit shareholders’ vote in order to replace the incumbent board of directors with bidder-proponents directors. Those, in turn, are to redeem the poison pill and allow the bidder to purchase the stock thanks to the fact that “poison pills can be removed by a board of directors as easily as they can be installed”.\textsuperscript{31} Thus, the vote process may circumvent the effect of poison pills that are not accompanied by further mechanisms.\textsuperscript{32}

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\textsuperscript{28} Notwithstanding the potential clash between the will of the shareholders and that of their firms’ directors, the seminal Delaware court decision in \textit{Moran} and many others to follow, legitimized the adoption of poison pills. For some time commentators debated whether boards decisions to reject control transactions, sheltered by poison pills, are about to be carefully scrutinized by the courts, \textit{See} Ronald Gilson \& Reinier Kraakman, \textit{Delaware Intermediate Standard for Defense Tactics: Is There Substance to Proportionality View?}, 44 BUS. LAW. 247 (1989); Marcel Kahan, \textit{Paramount or Paradox: The Delaware Supreme Courts Takeover Jurisprudence}, 19 J. CORP. L. 583 (1994). However, soon it became clear that in most cases boards are granted with a very broad mandate to reject acquisition offers.

\textsuperscript{29} Ronald Gilson, \textit{Unocal Fifteen Years Later (And What We Can Do About It)}, 26 \textit{Del. J. Corp. L.} 491 (2001) (explaining the development in the market for corporate control as a reaction to the adoption of the poison pill and Delaware’s jurisprudence).

\textsuperscript{30} Scattered shareholders usually do not show up for a vote but rather mail in their proxies that carry their decisions. Hence, the vote process is more accurately termed the proxy process.

\textsuperscript{31} \textit{See} Coates, \textit{supra} note 24 at 852.

\textsuperscript{32} Interestingly, the vote mechanism that was designed in the first place to allow control changes resumes its lead role in the poison pills era. However, 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 upon capturing the board. The 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 with which they can evaluate the quality of the bid. \textit{See} Lucian Bebchuk \& Oliver Hart, \textit{Takeover Bids, Proxy Fights and Corporate Voting} (Oct. 2001) (Discussion Paper No. 336), available at \url{http://papers.ssrn.com/sol3/papers.cfm?abstract_id=290584}. The
By all means, poison pills made hostile takeovers more expensive, but the out-of-pocket expenses of shareholders’ solicitation do not amount to a real obstacle for many hostile takeovers.\(^{33}\) The real costs that poison pills entail are the costs of delay.\(^{34}\) Market climates change rapidly and therefore deals are more valued when they may be finalized quickly. Moreover, the takeover activity engages the bidders’ managers, creating significant opportunity costs. Finally, the longer it takes for the deal to consummate the more competition the bidder should expect. As a result, if replacing the board takes much longer than a pure tender offer, then the poison pills effect becomes much more salient.

Surprisingly, this is not the case, or to be precise, this need not be the case. If, for example, a majority of the shareholders can nominate directors by way of written consent in lieu of a meeting, and if incumbent directors may be dismissed from office immediately and without cause, then soliciting such a procedure does not consume much more time than a pure takeover via tender offer.\(^{35}\) Moreover, and maybe even more surprising, this is exactly the default standard that the Delaware law applies, according to 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. See J. Harold Mulherin & Annette Poulsen, *Proxy Contests and Corporate Change: Implications for Shareholders Wealth*, 47 J. FIN. ECON. 279, 286 (1998).


\(^{34}\) See John C. Coates, *An Index of the Contestability of Corporate Control: Studying Variation in Legal Takeover Vulnerability*, unpublished manuscript (July, 1999), on file with the author.

\(^{35}\) Instead of the 20 days minimal period for tender offers imposed by the William 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.
which a proxy fight may be concluded in 45 days.\textsuperscript{36} Hence, a poison pill alone does not leave the managers of a defending target with much time to save their sinking ship.\textsuperscript{37}

There are various measures to be taken in order to cause delay and thus to magnify the strength of the poison pill. To implement such delays beyond the legal default arrangement, normally requires the firms to accept shareholders approval, in contrast to poison pills that may be adopted by the board of directors.\textsuperscript{38}

On top of these ATPs that cause delay, owners can chose to prevent hostile takeovers altogether by maintaining a controlling stake after the IPO or using dual class stock structures.\textsuperscript{39} The analysis of those harsh measures, however, lies beyond the stretch of this paper.\textsuperscript{40}

By and large, ATPs that cause delay and impede the proxy mechanism of the firm may be divided into ATPs that inhibit shareholders’ opportunities to express their opinions and ATPs that narrow shareholders’ means to wrest control from the incumbent board of directors. ATPs that limit shareholders’ opportunities to voice their opinion are

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For the William Act requirements see U.S.C. Sec. 78m(d)-(e), 78n(d)-(f) (1999). For the delays imposed by the S.E.C. involvement see Coates, supra note 24 at 853.

\textsuperscript{36} Since Delaware General Corporation Law allows action by written consent and removal of directors without cause as a default matter, it imposes no more delays over the minimal 45 days that the federal proxy regulation imposes. See DEL. CODE ANN., tit. 8, § 141, 228 (1999).

\textsuperscript{37} Therefore, it is not surprising that by itself a poison pill does not hinder much of the likelihood of being taken over. See Robert Comment & William Schwert, Poison or Placebo? Evidence on the Deterrence and Wealth Effects of Modern Antitakeover Measures, 39 J. FIN. ECON. 3, 4 (1995).

\textsuperscript{38} Alternatively, ATPs may be installed by in the initial charter of the firm or while ownership is concentrated before the initial public offering, when the tension between managers and shareholders is nonexistent.


\textsuperscript{40} For a relevant discussion see Hannes, supra note 1, at 1961.
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provisions that prevent the shareholders from using a written consent procedure in lieu of a meeting, provisions that foreclose shareholders rights to summon a special shareholders meeting, and provisions for staggered boards. ATPs that narrow shareholders’ means to wrest control from the incumbent board of directors include provisions that limit shareholders rights to dismiss directors or expand the board, leaving open only the opportunity to replace directors that served their full term. Each of which are briefly discussed below:

1. **WRITTEN CONSENT IN LIEU OF A MEETING**

The most rapid and easiest way for shareholders to voice their opinion and replace the board of directors is the written consent process. Consequently, even if the target firm is shielded by a poison pill, it may be captured within a minimal period of 45 days imposed by the federal proxy regulation.41 A charter provision that forecloses shareholders ability to act by written consent impedes this rapid avenue for shareholders action.

2. **SPECIAL SHAREHOLDERS MEETINGS**

A special shareholders meeting is a meeting scheduled in addition to the annual shareholders meeting and can thus facilitate rapid replacement of the management even in the absence of a written consent procedure. Shareholders may use the firm bylaws to set a procedure for a special shareholders meeting. However, one can often find charter provisions that preclude or limit the right to call for a special shareholders meeting. Once

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41 Assuming that shareholders possess the right to dismiss directors without cause or manipulate the size of the board.
the charter explicitly impedes shareholders’ right to summon a special meeting, the bylaws, and in turn the shareholders, lose control over the issue.42

This ATP that prevents special meetings postpones the opportunity of shareholders to express their opinion until the general annual meeting. With a right to summon a special meeting, proxy solicitation can be accomplished within 60-90 days, but without it shareholders have to wait for the regular annual meeting of the firm. The board is authorized to schedule annual meetings and the period between two regular meetings could be stretched to as much as 360 to 540 days, depending on the state of incorporation.43 This, undoubtedly, is a substantial delay.44

3. THE STAGGERED BOARD PROVISION

A most potent ATP, the charter provision that forms a staggered board,45 is to be blamed for delays beyond the shareholders annual meeting.46 According to the Delaware Code, all the members of the board must stand for election annually.47 However, a charter provision may form a staggered (“classified”) board, in which merely a third is

42 Another technique is to make a supermajority bylaw requirement regarding special shareholders meetings within the bylaws so that shareholders would not be able to change it.

43 See Coates, supra note 2 at 1403, table B-5, for the maximum days between annual meetings in the 50 different states.

44 See Coates, supra note 24 at 853.


46 For background, criticism and statistics regarding staggered boards see Alesandra Monaco, Corporate Governance Service 1999 Background Report C: Classified Boards, 1999 INVESTOR RESPONSIBILITY RESEARCH CENTER.
being replaced every year. Thus, to gain control over a company with a staggered board, one must win at least two consecutive proxy fights, which may take up to two, and in some cases even three years. In an upsurge from the early 1980s, today over 60% of all public companies have board of directors that are not fully replaced every year. Undoubtedly, this is a very lethal and frequently used ATP.

4. PROVISIONS THAT LIMIT SHAREHOLDERS RIGHTS TO DISMISS DIRECTORS OR EXPAND THE BOARD

Assuming that shareholders have an opportunity to express their opinion, it does not automatically follow that they can easily alter the power structure in the boardroom. To accomplish a takeover, it is necessary for the bidder’s proponents to occupy a majority of the board sits. Such a majority could be achieved by replacing directors that served their full term, removing and replacing directors while they serve in office or expanding the board and packing it with a majority of new directors. However, well-structured ATPs may prevent shareholders from removing directors before their term is due. ATPs may also prevent the shareholders from circumventing the limitation on directors’ removal by expanding the board and electing a majority of new directors.


48 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, seen.

49 If the firms opts for cumulative voting and the managers have considerable influence on a small fraction of the firms’ votes, staggered boards may delay takeover for three years.

50 See Monaco, supra note 46
B. The Proliferation of ATPs in Seasoned Firms During the 1980s and Their Adoption Trends in IPO Stage Firms

Since a poison pill does not promise much delay without ATPs that hinder the availability of the proxy mechanism, it is of no surprise that the proliferation of poison pills was tightly followed by ATPs adoption. However, as discussed earlier, while poison pills are solely under managerial discretion, ATPs that impede the proxy process require shareholders’ approval to be implemented. Notwithstanding, the empirical data clearly indicates that shareholder did not stand in the managers’ way in the late 1980s, when many public corporations adopted such ATPs.\(^{51}\)

The fact that seasoned firms adopted ATPs did not convince many scholars that such adoption is efficient.\(^{52}\) Moreover, in the 1990s, the ease of ATPs adoption was all but gone. The growth in power and activity of institutional shareholders practically precluded managers’ ability to implement ATPs in seasoned firms.\(^{53}\) Surprisingly enough, although institutional investors block managerial proposals to add ATPs, they do

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\(^{53}\) “ATPs are... opposed by institutional investors. Institutional investors sponsored shareholder proposals seeking elimination of ATPs and adopted shareholder voting protocols under which they will automatically vote against the adoption of a charter amendment containing an ATP.” See Daines & Klausner, supra note 3, at 84.
not pressure IPO stage firms to defer ATPs implementation.\textsuperscript{54} Were institutional investors to despise ATPs in IPO stage firms as much as they despise them in mature firms, underwriters would advise issuers to abjure ATPs, which they apparently do not do.\textsuperscript{55} The trend of adoption of takeover defenses in the IPO stage by a large fraction of the issuers in the market, and the reluctance of investors to allow changes of this status in the midstream is explained below. First, in a setting of complete information, and then in a more complicated asymmetric information framework.

III. The Relative Advantage of High Quality Firms in Adopting Defenses as a Refinement to the Private Benefits of Control Theory

The private benefits of control theory suggests that high control benefits may lead to the adoption of takeover defenses by entrepreneurs even if, as conventionally assumed, these measures are harmful for the public shareholders. To exemplify, imagine a firm that is worth 100 for the shareholder without ATPs and additionally provides its managers with non-monetary private benefits of 20 that cannot be shared with the public shareholders. However, without ATPs the chances of a takeover that would oust the entrepreneur is 50\% and therefore the entrepreneur values the option of taking the firm public without defenses at 110 (i.e. 100 + 50\%*20). Alternatively, with ATPs the private

\textsuperscript{54} See Michael D. Klausner, Institutional Shareholders, Private Equity, and Antitakeover Protection at the IPO Stage, 152 PENN. L. REV (2003).

benefits would remain the same but the firm’s inherent value declines to 95 because managers may reject value-enhancing mergers. For simplicity, let us further assume that the probability of a takeover with defenses is zero.

Consequently, the entrepreneur would value the company with ATPs at 115 (i.e. 95 + 20), and prefer to take the company public with takeover shields (115>110). Note that the value of the firm with ATPs in this case is lower than the comparable value without ATPs, both in the eyes of the public shareholders (95<100) and social welfare (95 + 20 < 100 +20). Nonetheless, the entrepreneur preferred to install ATPs to protect her private consumption of control benefits, which is endangered by the prospects of a hostile takeover. In the next section of the paper I will discuss the empirical evidence, which are usually interpreted as indicating that ATPs are harmful for the public shareholders. If one believes in the validity of these evidence then the control benefits explanation seems appealing.

To sum up, two main factors determine whether entrepreneurs would decide to implement takeover defenses according to the control benefits argument: the private benefits that defenses secure vis-à-vis their effect on the value of the venture for the public shareholders. Possible harmful effects on the public shareholders must be taken into consideration since they lead to a discount in the value of the shares that the entrepreneur wishes to sell. Put differently, defenses are adopted only if they secure

56 This calculation is under the simplifying assumption that the bidder shall also exert private benefits of 20.
control benefits to a larger extent than the negative effect they may have on the public shareholders.\textsuperscript{57}

The overwhelming belief among scholars, that ATPs are harmful to shareholders has strong foundations at least form an ex-ante point of view. Simply put, and in terms of incentives, the threat of hostile takeovers, which takeover defenses undermine, restrains managers.\textsuperscript{58} If managers do not run their firm properly, shirk on the job, engage in harmful self-dealing, pursue empire building or invest in pet projects, the value of their firm in the marketplace will decline. In turn, hostile bidders will have an opportunity to buy such a company for a low price and reap the benefits of improving it or alternatively the payoff achieved by tearing the company apart. From this standpoint, any use of a takeover impediment is harmful and increases managerial agency costs.\textsuperscript{59} More defenses lead merely to more managerial misbehavior and may undermine more successful business combinations.\textsuperscript{60} Additional costs of takeover defenses may be revealed once a

\textsuperscript{57} Conventionally, the effects of takeover defenses are divided to ex-ante effects (i.e. their effects on the incentives of the managerial team to run the firm for the benefits of their principals – the shareholders), and ex post effects (i.e. their influence on the average premium paid to the shareholders in takeover. In this context it is assumed that defenses raise the premiums paid once a takeover event materializes but on the other hand reduces the bids frequency).

\textsuperscript{58} Note though that the literature also points out good reasons for the shareholders to allow takeover defenses from an ex ante point of view. If securities markets are inefficient and do not reflect a precise valuation of the firm, opportunistic bids may appear. Granting managers with discretionary power to defer such bids may prevent the managers from under-investing or over-investing in the first place to evade these opportunistic bids. See Jeremy Stein, \textit{Efficient Capital Markets, Inefficient Firms: A Model of Myopic Corporate Behavior}, 104 Q. J. ECON. 393 (1989); Lucian A. Bebchuk & L. Stole, \textit{Do short Term Objectives Lead to Underinvestment or Overinvestment in Long Term Projects}, 48 J. FIN. 719 (1993).

\textsuperscript{59} See Jensen & Meckling, supra note 7.

A takeover bid is launched. Backed by a takeover defense, a manager can refuse to accept takeover bids and thus foreclose shareholders’ ability to collect the fruits of the takeover premiums. This premium loss has two components: First, mismanagement that occurred due to managerial pursuit of her private benefits or incompetence may lead to poor performance. A bidder that can undo the effects of such ill performance would reap the improvement benefits and is therefore able to pay a large premium. If managers defer such a bid, the shareholders would not enjoy the premiums and continue suffering from the mismanagement discount. Secondly, some bidders may improve the value of the firm, even if the firm is perfectly run by the incumbent managers, due to possible synergies for example. Once again, the bidder is able to offer a premium, and if managers decline the bid shareholders would lose the possible value of improvement.

Note though, that there are at least three identified reasons indicating that shareholders may benefit from having anti-takeover defenses from a bargaining standpoint (i.e. ex post gains from defenses adoption). First, bids may be designed in a coercive way and anti-takeover mechanisms allow managers to block them. See Lucian Bebchuk, *The Pressure to Tender: An Analysis and a Proposed Remedy*, 12 Del. J. Corp. L. 911, 917-931 (1987); Lucian Bebchuk, *Toward undistorted Choice and Equal Treatment in Corporate Takeovers*, Harv. L. Rev. 1693 (1985). Second, managers can use ATPs to negotiate a better price from the bidder or procrastinate the bid until a better offer comes along from a third party; See Gilson, *supra* note 52; Elazar Berkovitch & Naveen Khanna, *How Target Shareholders Benefit from Value-Reducing Defenses Strategies in Takeovers*, 45 J. Fin. 137 (1990); Rene M. Stulz, *Managerial Discretion and Optimal Financing Policies*, 26 J. Fin. Econ. 3 (1990); Harry DeAngelo & Edward M. Rice, *Antitakeover Charter Amendments and Shareholders Wealth*, 11 J. Fin. Econ. 329-360 (1983); Kahan & Rock, *supra* note 2. Third, since markets are not fully efficient, at least not in the strong form, market prices may not always reflect real values, allowing bidders to trick shareholders by offering them too low of a price that appears promising. See Jeremy Stein, *Takeover Threats and Managerial Myopia*, 96 J. Pol. Econ. 61 (1988); Stein (1989), *supra* note 58. Under this view, managers backed by ATPs may therefore save shareholders from their ignorance in deterring such opportunistic bids.

Altogether, shareholders may hope for a better price (a higher takeover premium) when they choose to implement ATPs. The down side is that managers may use defenses to entrench themselves. Instead of keeping the interests of the shareholders in mind, the agents may prefer to maximize their own benefits and hang on to their jobs. Consequently, managers defer many takeover bids that shareholders should fancy. Ultimately, shareholders must balance between the higher premiums that ATPs may furnish and the decrease in takeover frequency that ATPs bring about.
As was pointed out earlier, the entrepreneur may implement defenses where they are privately optimal even if they are harmful for the shareholders and society.\textsuperscript{62} To be precise, to reach the possible conclusion that ATPs are inefficient to society and not only harmful for shareholders, we must also consider the welfare effects on the managerial team.\textsuperscript{63} These concerns are, of course, also essential for the decision-making entrepreneur. Although not every entrepreneur would care about the future private benefits of the managerial team of her firm,\textsuperscript{64} an entrepreneur that reckons she will stay in office and run the firm surely takes these effects into account.\textsuperscript{65}

While takeover defenses are not necessarily socially inefficient, even if they harm shareholders, some forms of private benefits that takeover defenses nourish are plausibly inefficient. The private benefits that managers earn from shirking on the job, consuming luxurious and wasteful perks, adopting pet projects or pursuing unjustified expansion, seem to be very modest in comparison to the harm they cause to the firm.\textsuperscript{66} These managerial private benefits, which takeover defenses secure and that are the direct cause of the costs firms endure, will therefore be further termed the \textit{harmful private Benefits}.

\begin{itemize}
  \item[\textsuperscript{62}] In the partition of the welfare function that this chapter refers to, the third player is the potential bidder. Intuitively and figuratively speaking, since the potential bidder does not sit around the table at the IPO stage, she cannot take place in arranging the efficient solution. This is the essence of the efficiency problem that may result from a social viewpoint.
  \item[\textsuperscript{63}] For a related discussion see Harold Demsetz, \textit{The Structure of Ownership and the Theory of the Firm}, J. L. & ECON. 375-390 (1983).
  \item[\textsuperscript{64}] While theoretically the entrepreneur can negotiate a lower salary with a manager that prefers takeover defenses and hence care about the welfare of the management team in any case, I doubt if such frictionless bargaining is realistic. \textit{See} Reinier Kraakman, Hyun Park & Steven Shavell, \textit{When are Shareholder Suits in Shareholder Interest?}, 82 GEO. L. J. 1733 (1994).
  \item[\textsuperscript{65}] Because we are interested in the entrepreneur decision in the IPO I neglect to account for externalities on other firm constituencies such as the employees, suppliers, consumers and hosting communities, which should definitely be included in the social welfare function.
  \item[\textsuperscript{66}] \textit{See} Bebchuk, Kraakman & Triantis, \textit{supra} note 39 (discuss the waste involved).
\end{itemize}
Note that this definition does not cover all managerial private utility gathered from managerial consumption of inefficient benefits, but only the fraction of such utility that would vanish if ATPs were not installed.67

Aside for these harmful private benefits one must also account for another type of private utility that ATPs secure. A manager typically derives psychic benefits from her top position at the firm.68 Such non-pecuniary benefits that attach to the stint include self-satisfaction from being the one in control and the respect inflicted by society. Political power and social stance are also byproducts of firms' control, leading in turn to both monetary and non-monetary benefits for the managerial team. Plausibly, prestige and power are not less important than direct monetary compensation and perks consumption and therefore, the psychic benefits should not be overlooked.

The consumption of such private benefits that cannot be shared with the shareholders does not generally harm the firm in any way. Nevertheless they are keyed to the stint and if the manager loses control over the firm, say in a takeover event, she will immediately forgo these private benefits. Hence, because ATPs reduce the chances for a takeover, they also help the manager secure her ability to consume the private benefits of the psychic type. These benign private benefits that ATPs preserve will be hereinafter termed the beneficial private benefits, in contrast to the harmful private

67 The term “vanish” should be seen from the manager’s viewpoint. The manager may lose her ability to consume private benefits where she is not protected by ATPs because of two reasons. First, the higher exposure to hostile takeovers may deter the manager from consuming some of the benefits. Secondly, because of the higher chances for a takeover to materialize, the manager endures higher chances to loose her ability to consume even the private benefits she chooses to consume.

68 See Daines & Klausner, supra note 3.
benefits that are inimical to shareholders.\textsuperscript{69} Once again note that this definition does not cover the entire scope of benign utility that managers derive but only the fraction of which that ATPs preserve.

Interestingly, the way that takeover defenses secure beneficial private benefits is somewhat different than the way in which they nourish the harmful private benefits. By reducing the frequency of takeovers, firms with ATPs promise their managers better chances of keeping their beneficial private benefits from being reaped off in a control transfer. This is, of course, true for the harmful type of private benefits as well, but ATPs not only secure harmful private benefits but also encourage their consumption. The consumption of harmful private benefits reduces the value of the firm and invites hostile raiders that prey for a cheap target. Once a manager is partially protected from the takeover market by ATPs, she can afford to consume more inimical private benefits without being fully disciplined by the market for corporate control. Put differently, ATPs do not only preserve harmful private benefits but also provide incentives for managers to enlarge their scope.

\textbf{A. Private Benefits of Control and Firms’ Quality}

Another difference between the consumption of harmful private benefits and their beneficial counterparts lies in their correlation to the value and quality of the firm, especially when the excess value is the result of an abundance of business and growth opportunities. A successful venture surely provides its manager with much higher

\textsuperscript{69} As in the definition of harmful private benefits the definition of beneficial private benefits does not include all the psychic benefits that the manager consumes but only the fraction of such benefits that ATPs secure.
beneficial private benefits than a mediocre firm. A venture that would turn into the next Microsoft undoubtedly promises its entrepreneurs much more prestige, political power and satisfaction than any less successful venture. However, the correlation between the quality and value of the venture and the consumption of harmful private benefits is not so clear.

True, a company that performs well may offer its managers more opportunities to waste the shareholders’ wealth, especially if the successful firm also produces a hefty stream of cash flow. However, there are two reasons to believe that managers of better enterprises would not consume higher harmful private benefits, at least once a certain threshold of firm’s quality is achieved. First, an effective legal regime backed by fine tuned social norms bounds the ability to consume private benefits at the expense of the shareholders. Therefore, while a poor company cannot offer its manager much slack, the perks’ consumption and misbehavior of managers in mediocre and high end firms do not significantly differ.

This reasoning fits well some forms of private benefits that are potentially detrimental for the shareholders, such as self-dealing, insider trading and expropriation of corporate business opportunities. In an inefficient legal regime, a valuable firm may provide its controllers tremendous opportunities for such theft. However, once the legal regime is able to reduce this inimical behavior to a moderate level, high corporate value does not easily lead to soaring wealth transfers to the controllers.


71 Russia in the post communist era serves as a notorious incidence for such occurrence. See Bernard Black, Reinier Kraakman & Anna Tarassova, 52 Russian Privatization and Corporate Governance: What Went Wrong?, STAN. L. REV. 1731-1808 (2000).
The efficacy of the legal regime, though, has its limits. For instance, it seems almost impossible for any court system to intervene in cases in which managers are pursuing their own agenda without receiving any feasible material benefit out of doing so. Specifically, managers often pursue empire-building objectives, i.e., extending the firm’s sales and size instead of net revenue, which is the shareholders’ main concern. Once the legal regime is capable of reducing direct wealth transfers, these second-degree problems turn out to be a main source of concern for shareholders. This leads us to the second mechanism that can limit the consumption of harmful control benefits in high quality firms.

Superior entities sometimes provide managers with more opportunities to consume harmful private benefits, but they may also provide their managers with fewer reasons or incentives to consume harmful private benefits. While the managers of less successful entities may waste their time on inefficient empire building and diversification of their firms, the managers of successful enterprises can concentrate on justified expansion of their enterprises. Hence, these managers may satisfy their hunger for growth and expansion without causing any harm to the shareholders. Moreover,

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72 Recent empirical work provides evidence on the agency cost explanation for corporate diversification. The level of diversification is negatively related to managerial equity ownership and to the equity ownership of outside block-holders. Additionally, decreases in diversification are associated with external corporate control threats, financial distress, and management turnover. These findings suggest that agency problems are responsible for firms maintaining value-reducing diversification strategies and that the recent trend towards increased corporate focus is attributable to market disciplinary forces. See David J. Denis, Diane K. Denis & Atulya Sarin, *Agency Problems, Equity Ownership, and Corporate Diversification*, 52 J. Fin. 135-60 (1997).
flourishing investment opportunities may consume all available cash flows that managers of inferior entities may elect to misuse.\footnote{See Jensen, supra note 12.}

This logic does not carry out to the entire population of IPO stage firms that can justifiably be termed “high quality”, but only to those that are especially valuable due to their high growth opportunities. High quality ventures that already exhausted their development stage may arrive at the IPO with an ample stream of cash flow and lack of business opportunities. Obviously, this type of successful firms cannot be trusted to restrain their managers by their own business structure. In fact, they seem to be the ones that are most prone to destroy shareholders value by managerial pursuit of empire building and waste of free cash flows.\footnote{See Jensen (1986), supra note 12; Jensen (1988), supra note 12.} Nevertheless, valuable firms that reach the IPO stage are typically valuable due to their promising growth opportunities, in contrast to enterprises that already exhausted such opportunities. The reason is that successful entities that already materialized their business model need not normally engage in an IPO in the first place. Raising funds from the public equity markets is very expensive and firms, which enjoy an internal source of financing, usually evade outside financing.\footnote{Outside financing is expensive because equity and risky debt are information sensitive. Therefore the buyers account for the possibility that they are abused by the corporate insiders who posses superior information and accordingly discount the value of the offered securities. As a result firms prefer to use internal finance or risk free debt before they sell additional securities to the public markets. These preferences are known as the pecking order theory. See Stewart C. Myers, The Capital Structure Puzzle, 39 J. Fin. 575 (1984); Stewart C. Myers & Nicholas S. Majluf, Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have, 13 J. Fin. Econ. 187 (1984).} Therefore, by and large, the most valuable firms that reach the IPO stage are the ones that

\footnote{See Jensen, supra note 12.}

\footnote{See Jensen (1986), supra note 12; Jensen (1988), supra note 12.}

\footnote{Outside financing is expensive because equity and risky debt are information sensitive. Therefore the buyers account for the possibility that they are abused by the corporate insiders who posses superior information and accordingly discount the value of the offered securities. As a result firms prefer to use internal finance or risk free debt before they sell additional securities to the public markets. These preferences are known as the pecking order theory. See Stewart C. Myers, The Capital Structure Puzzle, 39 J. Fin. 575 (1984); Stewart C. Myers & Nicholas S. Majluf, Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have, 13 J. Fin. Econ. 187 (1984).}
are least prone to engage in harmful empire building and other forms of managerial misbehavior.

**B. High Quality Firms and Takeover Defenses Adoption**

The above discussion leads us to the conclusion that takeover defenses should not necessarily result in a higher market discount for firms of higher quality, at least beyond some threshold of firm quality. As explained above, this conclusion is especially robust where quality and value are derived from high growth and business opportunities. The market discount that is linked to ATPs adoption is the market penalty for a securities design that encourages managerial misbehavior. However, since managers of high quality firms should not be assumed to misbehave more than their less successful peers, the market discount should not fluctuate much with firms’ quality. Some indirect factors may render this conclusion false. For one, managers of more valuable firms may misbehave less often, but their misbehavior may distract them from running their firms properly, and this destruction is more harmful when there is more value to destroy.  

Additionally, if shareholders are troubled by managerial incompetence, the reduction in chances of managerial replacement once takeover defenses are in place may skew the “equal discount” conclusion. Simply, incompetent managers may cause greater harm when they are in charge of a more valuable firm. Nevertheless, if shareholders are primarily concerned with the direct effects of managers’ pursuit of private benefits, but

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76 Scharfstein for instance models managers’ agency costs as shirking (i.e. assuming disutility of effort). Shirking is likely to become more harmful with an increase in the firms underlying quality. However, it is arguable if shirking is a salient problem among the senior managements in the United States. See David S. Scharfstein, *The Disciplinary Role of Takeovers*, Rev. Econ. Studies 185-200 (1988).
otherwise trust the competence and performance of their managerial team, then the
discount for takeover defenses should not be higher for better firms.

And, if indeed the market discount for defenses adoption is not higher for firms of
higher quality, they are more prone to be the ones to adopt defenses. The reason is that
high quality firms systematically promise their managers higher beneficial control
benefits, even though they do not offer additional harmful control benefits. Due to the
fact that the private benefits of control theory assumes that issuers adopt defenses where
defenses secure more control benefits than hurt the share value, one should find high
quality firms adopting firms more often.

As we shall see in the next section our conclusions are consistent with the
empirical evidence that will be taken in this chapter as given. Defenses appear in
industry-sections where we often find control transfers, which are therefore the industries
in which managers must fear the most to loose their control benefits.77 Hence, the
adoption of defenses fits the general predictions of the private benefits of control theory.
Adding the conjecture that firm quality contributes to control benefits without necessarily
increasing the deadweight loss to shareholders may explain two additional findings.
First, the adopting firms have superior performance before the IPO stage.78 And secondly,
superior underwriters serve the adopting issuers, which suggest that these issuers carry
superior value to shareholder even after adopting the defenses.79

77 See Daines & Klausner, supra note 3 at 98.
78 See Field, supra note 3 at 20.
79 See Field, supra note 3 at 27.
Finally, the proposition concerning the relatively high quality of the adopting firms may still hold, even if the hypotheses that better firms that adopt defenses should not suffer from sharper valuation declines is somewhat exaggerated. High quality issuers will opt for defenses as long as they gain from the upside of private benefits preservation more than the sharper valuation declines that they would consequently sustain.

In section 6 that discusses a scenario of asymmetric information we shall see that the group of adopting firms may actually be wider than the one contemplated so far. In such a scenario, it will be argued that some firms may adopt defenses even when such behavior is privately wasteful for the entrepreneurs. Put differently, some firms would adopt defenses even if the private benefits that defenses secure to their pre-IPO owners is lower than the value discount that such defenses instigate. The reason is that in the IPO stage the entrepreneur of a better venture has an incentive to stand out and reveal its quality to the market by adopting harmful ATPs.

IV. EMPIRICAL EVIDENCE AND PREDICTIONS

Four recent empirical papers examined the adoption trends of takeover shields among IPO stage firms. These papers provide some evidence that takeover defenses do not serve the interest of the public shareholders but rather that of the managerial team. As we will see momentarily, defenses reduce the premium paid to shareholders in takeover events and do not often appear in circumstances where they can enhance

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80 See Coates, supra note 2; Daines & Klausner, supra note 3; Field supra note 3; Field & Karpoff, supra note 3.

81 These findings are therefore aligned with the arguments of the classic literature. See Bebchuk, supra note 22.
shareholders value. This highlights the possible role of the theory that attribute defenses to the entrepreneurs’ desire to protect their control benefits when going public where such benefits are large.

Following this logic all firms would have opted for defenses if those were not costly to adopt since, other things equal, controllers would always prefer to retain control. However, because defenses harm shareholders they cannot be freely adopted and all empirical studies indeed found that only a fraction of the firms adopts defenses. 82 Since shareholders discount the issuer value for any harm they sustain from an anti-takeover provision, it seems that only entrepreneurs that feel extremely vulnerable due to high control benefits are the ones that decide to adopt defenses.

While so far the control benefits story seems to fit the empirical picture, the direct evidence for high private benefits of the adopting firms are quite disappointing. 83 Some other findings seem puzzling as well and allegedly inexplicable by the control benefits hypothesis. Adopting firms are relatively more valuable and mature ventures and are often served by high quality underwriters. The main findings of the empirical literature are briefly summarized below. 84 It is shown that the theory developed in this paper can shed light on every seemingly contradiction in the empirical findings. Therefore, it is argued that the empirical findings, taken as they are, fit the modified predictions of the control benefits theory that this chapter puts forward.

82 See Coates, supra note 2 (reporting divergent behavior); Daines & Klausner, supra note 3, at 110 (reporting that only 50% of their sample adopted harsh defenses); Field & Karpoff, supra note 3, at 1884 (53% of the sample had at least one takeover defense).

83 See Daines & Klausner, supra note 3, at 106-110 (reporting that they could neither refute nor support the private benefits hypothesis).

84 A summary of larger scope may be found in section 4.A. of Hannes, supra note 1, at 1946-1958.
The first study was conducted by Daines and Klausner who perform a comprehensive investigation of 310 IPOs that took place in the period of 1994-1997.\textsuperscript{85} They intentionally over-sampled IPO corporations with venture capital or LBO experts’ backing.\textsuperscript{86} Daines & Klausner justifiably assume that the pre-IPO managers cannot abuse these corporations, nor do they use ATPs by mistake.

Daines & Klausner’s most salient finding is that IPO firms greatly diverge in their ATPs practices. Half of the sample adopts harsh ATPs, mostly staggered boards, and another 18% adopt milder ATPs, such as a prohibition on written consent procedures.\textsuperscript{87} The remainder refrains from any ATPs’ usage.

Then, Daines & Klausner find that defenses are less common in industries with low activity of mergers and acquisitions. In these low M&A activity industries shareholders are most in need for takeover defenses to enhance bargaining power, since competition to buy the firms is unlikely to emerge.\textsuperscript{88} The fact that defenses are more

\textsuperscript{85} See Daines & Klausner, supra note 3 at 92.


Moreover, venture capital firms liquidate their holding within a short period, as they have to distribute profits to their investors. Thus, the venture capital presence promises that the ownership is soon to be dispersed, which in turn makes the market for corporate control most relevant for the firms they invest in.

\textsuperscript{87} See Daines & Klausner, supra note 3 at 96.

\textsuperscript{88} As I have argued in the second chapter of the dissertation this explanation is inaccurate. 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 by claiming that where potential competition is present ATPs are most valuable to drive up the price because delaying a takeover bid allows for the competition to emerge. A recent empirical work indeed suggests that management opposition can improve the bid price in a takeover event only if it ultimately leads to a competition for the target firm, See Craig E. Lefanowicz & John R. Robinson, Multiple Bids, Management Opposition, and the Market for Corporate Control, 35 FIN. REV. (Working Paper No. 4, 2000), available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=246360.
common in high M&A activity industries points to the conclusion that defenses serve managers’ needs rather than those of the shareholders. Quite disappointingly, while this result suggests that control benefits are the driving force behind ATPs adoption in the IPO stage, direct evidence for high private benefits in the adopting firms were not found. However, the authors did not relate private benefits to the quality of the underlying issuers, as this chapter suggests.

Daines & Klausner suggest a few possible explanations to their surprising empirical findings. Their most elaborated explanation undermines the well-established understanding that the IPO market accurately prices different corporate governance schemes. Specifically, they argue that the market underestimates or ignores the harsh consequences of ATPs. But Daines & Klausner themselves seem to reject this explanation and say: "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…".

Interestingly, this paper’s argument can shed light on the elusive constraint. ATPs may be harmful for shareholders, but nevertheless adopted by issuers with high

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89 See Daines & Klausner, supra note 3 at 111-113.

90 See Jensen & Meckling, supra note 7.

91 See Daines & Klausner, supra note 3 at 113.
control benefits and in instances where such benefits are at stake, as in the case of high M&A activity in the industry. High quality, defined by high growth and business opportunities, can serve as a good proxy for high control benefits for this matter. Daines and Klausner looked for other measures of private benefits, but good proxies for private benefits may be hard to find and therefore it is hardly surprising that they did not find any substantial evidence.

Field & Karpoff conducted a second research of ATPs at the IPO stage. They investigated 1019 firms that went public from 1988 to 1992. This is the earliest sample that was investigated. Similar to the other empirical studies they find that 53% of the firms in the sample had at least one takeover defense, while the rest refrained from ATPs adoption.

Field & Karpoff’s more innovative result is that IPO firms with managers who are not tightly monitored by non-managerial pre-IPO investors and whose interests diverge from that of non-managerial pre-IPO investors deploy more defenses. However, even if we accept the validity of this finding, its conclusion might be false. Managers that are

See Daines & Klausner, supra note 3, at 106-110.

See Field & Karpoff, supra note 3 at 1859.

See Field & Karpoff, supra note 3 at 1865.

See Field & Karpoff, supra note 3 at 1884.

Some of the findings by Daines & Klausner, however, raise doubts if Field & Karpoff’s finding is robust. First, in Daines & Klausner’s sample and entirely contrasting Field & Karpoff’s findings, higher levels of ownership by managers increase ATPs severity. See Daines & Klausner, supra note 3 at 101. Field & Karpoff themselves do not find significant results in all regressions. See the results of their sensitivity tests (See Field & Karpoff, supra note 3 at 1872). This means that managers with incentives that are more aligned with shareholders may adopt more defenses.
least monitored may be the most powerful managers that also enjoy the highest degree of private benefits. Hence, it might be the control benefits consideration and not the lack of monitoring that brought them to adopt defenses.

Field & Karpoff conducted another analysis that is important to our framework. They followed the firms in their sample for 5 years after their IPO to contemplate ATPs’ impact on takeover activity and takeover premiums. Five years may be too short a period to draw final conclusions, but evidently a large fraction of the firms (168 firms or 16.5% of the sample) was acquired during this period.

Following the firms, the authors assessed the influence of takeover defenses on takeover frequency and takeover premiums. First, they found that ATPs indeed deter bids. The 5-year takeover probability is 11.3% for unshielded firms, and 16.6% for firms with at least one defense. Secondly, Karpoff and Field do not find that ATPs raise the takeover premium, which means that shareholders are not compensated for the decrease in takeover frequency that ATPs bring about. This finding reinforces the notion in the literature that ATPs are harmful for shareholders but are nevertheless sometimes adopted. While this finding is also aligned with the control benefits hypothesis, Karpoff

Secondly, and more important, Daines & Klausner investigated a large control sample of IPO firms with venture capital and LBO professional investors. See Daines & Klausner, supra note 3 at 92. Those firms did not have fewer defenses, which makes the argument that rigorous monitoring limits defenses sound a bit awkward. Moreover, unlike the other empirical studies that concentrate on the gravity of defenses, Karpoff & Field concentrate on the number of defenses. As explained earlier, some defenses are mighty while others do not hold much water. Further, some defenses must work in concert to achieve their full (or any) impact. Therefore, because Field & Karpoff's report the impact of adopting “at least one defense” of any type, they should hope for no better than very crude results.

97 Out of the 163 sample firms that were acquired, sufficient date exists for 148 firms only. See Field & Karpoff, supra note 3 at 1873-1877.

98 In section 4.A of Hannes, supra note 1, I raised doubts regarding the validity of this point.
and Field too were able to show only slight direct evidence for high control benefits among the adopting issuers.\textsuperscript{99}

But while direct evidence for the existence of high levels of private benefits of control among the firms that adopt defenses can hardly be obtained, a related previous work by Field shows that better issuers are the ones that opt for defenses.\textsuperscript{100} The argument of this chapter is therefore consistent with reality. In particular, Field finds that ATPs adoption is significantly more common among firms that use higher quality underwriters,\textsuperscript{101} and the relevancy of this finding will be discussed momentarily.\textsuperscript{102} Additionally, adoption of defenses is more common in firms with higher operating income in the year before the IPO, fewer liabilities, and fewer years of negative operating income in their record.\textsuperscript{103} These salient findings directly reinforce the stance of this chapter, that high quality is systematically linked to adoption of takeover defenses.

According to the argument of this chapter the key aspect of ‘quality’ that raises private benefits without aggravating agency problems is superior business opportunities. It is therefore best to test for this by direct measures of business opportunities such as Tobin's q or industry adjusted P/E ratios. However, and since this test was never

\textsuperscript{99} Aligned with the control benefits theory they find that firms with takeover defenses usually overpay their managements. However, high managerial compensation is also naturally related with the firms quality and size. Therefore, even this finding does not add to the main argument of this paper that one should look for high benefits of control among the high quality ventures and consequently also more takeover defenses. See Field & Karpoff, \textit{supra} note 3 at 1884.

\textsuperscript{100} \textit{See} Field, \textit{supra} note 3.

\textsuperscript{101} \textit{See} Field, \textit{supra} note 3 at 21.


\textsuperscript{103} \textit{See} Field, \textit{supra} note 3 at 21.
reported in the empirical literature, it is plausible that high business opportunities were partially translated into higher profits (relative to those with less business opportunities) already at the stage where the firms go public. As mentioned earlier, this prediction is consistent with Fields’ findings.

It is also highly plausible that the finding about the quality of underwriters of issuers that adopt defenses also indicates that the adopting issuers are of higher quality. Surely, each and every issuer would like to be served by the best underwriters. The best underwriter provides the market with the best signals about the private information of the issuer and also helps the issuer to develop its business plan and provides the issuer with the underwriter’s network of business connections. The fact that the underwriters’ main task is to gap the information asymmetry between the market and the issuer does not mean, however, that only firms with private information that is hard to verify appreciate the services of the best underwriters. The reason is that the market needs the signal that the firm was scrutinized and there is no adverse private information that is not reflected in the price. The best underwriters provide the best signal of this sort and consequently reduce the uncertainty discount that would otherwise follow.

Therefore, and since all or most firms are interested in the services of the best underwriters, those (like any other professionals in high demand) can pick and choose the best issuers to work for. Presumably, this argument is consistent with the commonsensical notion that in order to get the services of Goldman Sachs, Merrill Lynch

104 A summary of the literature regarding underwrites’ ability to signal issuers’ private information to the market exists in Randolph Beatty & Ivo Welch, Issuer Expenses and Legal Liability in Initial Public Offerings, 39 J. L. & Econ. 545 (1996).

105 I assume here that the market cannot verify if the issuer possesses any relevant private information.
or Morgan Stanley, one must be an excellent firm. The conclusion of this discussion is that our results regarding the quality of the issuer that adopts defenses is consistent with the Fields finding about the quality the underwriters of such issuer. This leads us to another empirical study that raises similar findings, conducted by Coates.

Coates investigated two samples of IPO firms. The main data set includes 320 IPOs from 1991-1992 accompanied by a smaller control sample for 1998. His basic findings follow that of Daines & Klausner and Field & Karpoff. There is a high variance in defenses’ practices among firms that go public. Although the trend of ATPs adoption among IPO issuers seems to increase through time, even in the 1998 sample there are still many firms that do not adopt defenses, and a high proportion of firms that do not adopt harsh defenses.

Coates reinforces Fields’ finding concerning the quality of the underwriters which is central to the argument of this chapter: “…Underwriters have an apparent effect on defense adoption, but contrary to the general… Hypotheses, companies advised by higher-quality underwriters are more likely to adopt defenses, not less.”

Finally, Coates’ innovative maneuver is to measure the impact of the lawyers market on ATPs adoption. He finds that ATPs are more common among corporations that hire specific law firms rather than others. Coates therefore argues that lawyers’ preferences rather than clients’ needs determine whether a firm goes public with or

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106 This means that good underwriters are very different from good doctors. Good doctors work for the patients with the gravest problems and not the ones that are most famous. Good underwriters, though, are required by all issuers and hence do not serve the clients with the gravest private information ‘problems’, but rather the most successful ones (actually – some excellent doctors that have sufficient demand from the gravest patients indeed take the patients that are most successful and famous).

107 See Coates, supra note 2 at 1367.
without defenses. The divergence in the skills and attitudes toward defenses in the legal world drives the divergence in ATPs practices of firms in the IPO stage.

Coates’ finding concerning the legal market, though, also fits the predictions of this chapter. Just as better firms are associated with specific underwriters, they also employ certain lawyers. However, unlike investment banking firms, legal firms are not clearly indexed for quality. Therefore, it is hard to verify if issuers that use “better” law firms systematically adopt more takeover defenses. On top of that, it seems that underwriters screen their clients more rigorously than lawyers do, which leads to relatively tighter links between the quality of the issuer and the quality of its underwriters. Nevertheless, if indeed lawyers that serve better issuers advocate defenses, it might simply be, as this chapter argues, that defenses fit those high quality firms better. Put differently and opposing Coates’ conjecture, defenses may be employed by better lawyers because of the nature of their clients and not because they have different views than other lawyers about the qualities of takeover defenses.

It is therefore hard to differentiate, at least in the short run, between the predictions of Coates’ theory and the predictions developed in this chapter regarding firms’ quality. However, Coates suggests that a learning process is going on. The rising numbers of firms that adopt defenses in the IPO stage may imply that many lawyers mimic the behavior of the best lawyers that were the first to identify the importance of defenses at the IPO stage. According to Coates’ theory this trend should only increase. However, the empirical predictions of the theory of this chapter are different. If a learning process is going on, then it is a mistaken process. Lawyers of mediocre firms should not mimic the behavior of the lawyers of the best firms, as antitakover practices
do not fit all clients. It is therefore predicted that the trend of increased ATPs adoption will overturn at some point in the future.

Moreover, some evidence regarding mature firms seems inexplicable by Coates’ theory, but still make sense from the point of view of this chapter. Since the beginning of the 1990s institutional investors actively opposed most managers proposals to add takeover defenses.\(^{108}\) For Coates theory to hold we must assume that this massive opposition movement of highly sophisticated players in the capital markets is irrational, since it opposes adoption of measures that are healthy for the owners of the firms. However, the theory of this paper, and the private benefits theory at large can explain this finding more persuasively. Some issuers elect to adopt defenses in the IPO stage for the welfare of their controllers. Since the costs of these measures are priced in the IPO, investors are not harmed by the adoption of defenses. However, investors justifiably oppose the midstream adoption of defenses since there is no pricing mechanism to compensate them for the loss associated with the adoption of defenses.

V. Consolidating Two Theories of Antitakeover Practices of IPO Stage Firms

A different theoretical perspective, which I pursued in a different paper,\(^ {109}\) explains that even similar issuers may diverge in their antitakeover decisions. Simply, there is a point of equilibrium where the market becomes loaded with ATPs and from there on issuers would not choose to adopt defenses. The relative possible advantages of

\(^{108}\) See Lucian A. Bebchuk & Allen Ferrell, A New Approach to Takeover Law and Regulatory Competition, 87 VIRG. L. REV. 111-164 (2001); Coates, supra note 24 at 861, chart 5.

\(^{109}\) See Hannes, supra note 1.
takeover defenses fade away the more firms adopt defenses. Put shortly, the reason is that non-shielded firms enjoy more attention the more their peers become shielded, as they are relatively cheaper and easier to acquire. With more and more firms adopting defenses, there is a point where the advantages of being shielded matches the mounting benefits of remaining unshielded. Therefore, the market is composed of both shielded and unshielded issuers.

The concept of equilibrium, which was just mentioned, can also accommodate the existence of heterogeneity among issuers, and specifically different levels of control benefits. Interestingly, the modified equilibrium concept will be a one in which the market value of the issuers that adopt defenses is hurt, but the pre-IPO owners are nevertheless indifferent between adopting and rejecting defenses at the IPO.

To understand how the equilibrium argument can accommodate a reality with multiple types of issuers, I shall frame the equilibrium argument in a novel concept of demand for unprotected firms. For simplicity I will concentrate on the premium effect of ATPs. The private control benefits argument will subsequently be presented as a theory of supply of unprotected firms. For simplicity this section will put aside the main argument of this paper that the quality of the issuers should be regarded as a proxy for private benefits.

The classic literature approach to takeover defenses could be phrased as a theory of demand for unshielded firms, which is indifferent to the fraction of shielded firms in the population. The reason is that the classic literature does not acknowledge the equilibrium argument, which states that shielded firms divert takeover activity to unshielded firms. Hence, the expected premium that an unshielded target can hope for is
fixed and does not fluctuate with the fractions of firms in the market that adopts defenses.
In the same spirit, the equilibrium argument or the takeover diversion argument can be
termed as a theory of a declining demand function for unshielded firms. The price, i.e.,
the expected premium, that an unshielded firm can hope for is dependent on the fraction
of shielded firms in the population. The existence of shielded firms raise both the
likelihood of a takeover event and the actual premium paid in such event for an
unshielded target. Conversely, the more unshielded firms there are, the lower the price
that each of them can hope for. Put differently, being unshielded is a product with similar
characteristics to many other products. When more products are available in the market,
the lower the price paid for each. The downward sloping demand curve for unshielded
firms is delineated in figure 1 below.

On the other hand, the private control benefits theory can be rephrased as a supply
theory for unshielded firms. A pre-IPO owner will agree to take her firm public without
defenses only when the total utility she gains without defenses tops the utility gained by
defenses. This utility is therefore the ‘price’ the owner requires to ‘produce’ an
unshielded target and hence this consideration can be termed a supply theory of takeover
defenses. The assumption of the theory is that there are multiple types of issuers and
hence multiple supply curves. Three such supply curves are delineated in figure 1. The
curves are horizontal because the theory assumes that the costs of going public without
shields are unrelated to the fraction of unprotected issuers in the market.110

Now we can see that instead of the single equilibrium in which ATPs are benign
we can have multiple equilibria, and there is no requirement that in any of them the

110 Some simple versions of the equilibrium argument of my previous paper also yield such horizontal
supply curve. See Hannes, supra note 1, at 1967-68.
public shareholders will be indifferent to ATPs adoption. For clarification, we must note that there might be a pure strategy equilibrium in which all firms would reject or adopt defenses. For instance, if the demand would top all existing supply curves then all issuers will remain unshielded, since the price offered for an unshielded firm can satisfy even issuers with the most considerable private benefits consideration. Conversely, if the demand function lies below all supply curves, all issuers would opt for shields since the price for unshielded targets cannot compensate for the costs of remaining unshielded.

Let us now observe the three equilibria delineated in figure 1. The highest supply curve stands for the types of issuers with the highest private benefits. For these issuers adopting takeover defenses can protect much utility and hence they require a lot to reject shields. This high requirement can be fulfilled with a relatively low fraction of unshielded firms in the market, where the price paid for each unshielded target is relatively high. The intermediate supply curve represents issuers with less private benefits and hence their pre-IPO owners are less reluctant to adopt shields. Finally, let us assume that the lowest supply curve represent issuers with no considerations of private
benefits for their pre-IPO owners. The reason that such issuers still demand some positive values to supply an unshielded target must therefore lie in another explanation, such as the increased leverage that ATPs provide targets in negotiations to sell the firm.

Since the demand curve is decreasing with the fraction of unprotected firms, each higher level of private benefits brings about an equilibrium that has less unshielded firms. However, as long as there is an intersection between the curves, there will always be a mixture of shielded and unshielded firms for each type of issuers. The predictions of the private benefits theory that more private benefits leads to more protected issuers are thus reinforced but still modified. Moreover, the elasticity of the demand curve is the fundamental element in judging which theory is more important in predicting ATPs behavior. The more elastic the demand curve is, the more important the private benefits theory becomes.\textsuperscript{111} Conversely, if the demand curve were very steep, even sizable changes in private benefits would not change much the fraction of unshielded issuers for each type of firms.

This supply and demand framework can also be helpful to create a complex testable prediction of the equilibrium theory. Using data on ATP usage in industry sections with different private benefits levels one may be able to delineate the slope of the demand curve. Put differently, the date on the supply side may serve to instrument for the demand.

Finally, we should understand why the notion of equilibrium does not necessarily mean that shareholders would be indifferent to ATPs adoption in the IPO stage. In figure 1, indifference of the public shareholders is achieved only in the lowest equilibrium.

\textsuperscript{111} This simply means that there is not a lot of takeover diversion going on.
Since we assumed that this curve represents firms with no private benefits considerations, the interests of the pre-IPO owners is aligned with maximizing the market value of their ventures. Simply put, they have no other utility consideration than the price they can receive for their firms in the marketplace. Hence, in equilibrium ATPs cannot be harmful or beneficial from the perspective of the public shareholders. However, the two other supply curves represent the considerations of entrepreneurs with private benefits concerns.

The point of equilibrium is a point where the entrepreneur is indifferent between ATPs adoption or rejection but has more to consider than the mere market value of the firm that goes public. Specifically, she has to consider the loss of private benefits that is keyed to an unshielded position. Hence, and since we assumed earlier that ATPs are harmful to the public shareholders, the result is that in equilibrium ATPs hurt the market value of the firm, although the entrepreneur is indifferent to the ATP question. In a previous paper I have argued that reality tends to persuade that the equilibrium is more of the type of the lowest equilibrium in figure 1, where ATPs are benign to the market value of the firm.\(^{112}\) However, there are some evidence that ATPs are harmful for the shareholders, and as we just saw accepting such evidence does not contradict the equilibrium concept of the earlier paper.

\[^{112}\text{See Hannes (2003), supra note 1 at 1964.}\]
VI. Adoption or Rejection of Takeover Defenses as a Signal sent by Superior Issuers

So far the analysis concentrated on a scenario of complete information in which the value of the issuers is common knowledge in the market. The decision to adopt takeover defenses by high quality issuers therefore does not provide the market with any additional information regarding the type of the issuer. In the following section, the assumption of complete information is relaxed and adoption or rejection of defenses is viewed as a signal that bridges over the gap caused by the inability of the market to directly observe the quality of the issuer.

A. The Problem of Asymmetric Information

A classic argument explains that entrepreneurs commit to maintain a large portion of the firm equity after the initial public offering to signal their belief in the quality of their enterprise. This expensive measure is required in order to overcome the market’s asymmetric information problem in determining the quality of the underlying venture. Informational asymmetries, as will be elaborated below, can also explain adoption of takeover defenses at the IPO stage or conversely refraining from such adoption, even where these decisions are costly for the entrepreneur. Using these expensive measures may help the market sort out high value issuers from their low value peers. Conversely,

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114 This measure is expensive for the risk-averse individual that other things equal would rather diversify the investment of her fortune to minimize risks.
and under a different set of assumptions, it is also possible that rejecting defenses would be used as the proper signal.

An entrepreneur that intends to take her venture public naturally possesses information that is not transparent to the market. The extensive disclosure requirements of the federal regulation, as well as the wishes of high end ventures to reveal their type, cannot entirely overcome the information gap. The close acquaintance of the entrepreneur with the specific properties of her venture translates into private knowledge that can hardly be credibly conveyed to the market.\(^{115}\) Ironically, this asymmetry of information poses a threat to owners of superior entities. Since the market cannot fully distinguish between issuers of different qualities, it must attach them an average valuation.

In the extreme, when the average valuation does not top the payoff that a superior entity owner can achieve without going public, she will defer the decision to offer securities to the public. Consequently, public markets would become thin and composed of merely the inferior issuers that fully deserve low valuations.\(^{116}\) It is therefore the task of superior entities to break the vicious circle and prove that they are worthy of higher valuations by separating themselves from the other firms. Although the private information that they hold cannot be directly verified by the market, hence cannot be directly conveyed to the market, the mission is not doomed for failure.

\(^{115}\) Leland & Pyle, *supra* note 113.

\(^{116}\) George A. Akerlof, *The Market for ‘Lemons’: Qualitative Uncertainty and the Market Mechanism*, 84 Q.J.E. 488-500 (1970). Akerlof formalizes a familiar story about the market of “lemon” cars. Since the buyers of used cars can hardly detect a car with harsh defects, they must discount the value of all cars due to the possibility of buying a lemon. In turn, this could discourage the owners of the better cars from selling them in the open market. In the extreme the market could collapse and only lemon cars would be available for sale.
Interestingly, usage or rejection of takeover defenses may signal the issuer’s type to the market. The first possible signaling phenomenon may drive entrepreneurs of high value firms to refrain from defenses adoption even if such defenses were optimal for them under complete information. This may happen if the asymmetric information is in regards to the quality of the managerial team. Better managers may run their firms in a way that would result in maximal share price in the secondary securities market and hence provide fewer opportunities for a hostile takeover. These lower takeover opportunities translate into lower risk of losing their control benefits for the better managers. Consequently, better managers may refrain from defenses adoption in order to persuade the market that they are the high quality types, while their low quality peers would find such exposure too risky. The higher IPO valuation that this signaling could promise firms with a better managerial team may compensate for the loss in private benefits that would presumably follow.

A second signaling phenomenon may counter-intuitively drive high value firms to adopt takeover defenses even where they are privately wasteful for the entrepreneur. This may be the result of an information asymmetry regarding the quality of the underlying venture and its business opportunities. This section first concentrates on such possible outcomes since they are close to the argument about the influence of quality on defenses adoption.\textsuperscript{117} Similar to the results in section 3, high quality issuers will eventually adopt defenses, but the group of adopting firms will be larger than assumed before. Then, under a different set of assumptions, the opposite signaling scenario will be

\textsuperscript{117} See infra section 3.
discussed as well, and the result would be that firms with better managers may refrain from using defenses.

**B. Adoption of ATPs as Signals Sent by Firms with Superior Business Opportunities**

The notion that inefficient anti-takeover charter provisions (ATPs) result from asymmetry of information at the IPO stage is indeed tempting. However, to simply argue that market professionals cannot comprehend the harsh effects of such means may be overreaching. Furthermore, such a straightforward argument cannot untangle the mystery of heterogeneity of ATPs’ adoption practices at the stage of the initial public offering. Put differently, it does not help us understand why some issuers adopt defenses while others reject them.

The signaling argument suggests a refined understanding of the nature of the information asymmetry that ATPs entail. Similarly to the private benefits of control theory, this framework can clarify why some firms eventually adopt ATPs at the IPO stage, while the rest of the firms refrain from such restricting strategies. The advocated approach assumes, as before, that the harsh effects of ATPs are by and large transparent to the market.\(^{118}\) Therefore, entrepreneurs that taint their firm’s charter with an ATP sustain market penalties, as the value of the shares they wish to dispose at the public offering are being appropriately discounted to account for the costly provisions.

However, while the market penalty for ATPs usage is unavoidable since takeover defenses are easily verifiable, not everything is transparent to the market. Specifically,

\(^{118}\) See supra section 3.B.
there is a gap between the entrepreneur’s knowledge in regards to the quality of her venture and the information which is available to the market. Coincidentally, and as was extensively discussed earlier, the scope of private benefits of control is plausibly also tied to the quality of the underlying venture. Recall our previous conclusion that the upside of ATPs may be relatively much higher for superior entities. This conclusion remain intact even under the new assumption that the private benefits that defenses secure cannot compensate even the superior types for the market discount that ATPs brings about. Simply put, even if takeover defenses inflict a net private loss to all issuers, the loss is smaller for firms of higher quality.

Interestingly, the signaling argument reckons that the market cannot directly observe the quality of the issuing venture but can easily notice the decision of the entrepreneur to adopt or reject takeover defenses at the IPO stage. Along with a few more requisite conditions, to be contemplated below, this reality may lead high quality enterprises to adopt inefficient ATPs, while low quality ones would defer such adoption. Once again the key assumption is that quality should be measured by the size of the business opportunities of the firm, and such high quality does not aggravate the loss in market value that ATPs bring about. As will be exemplified momentarily, ATPs are costly to install, but may nevertheless be required to sort high quality ventures from poor ones, thanks to the fact that the sacrifice is less painful for high quality entities. Put differently, entrepreneurs of low quality ventures may choose not to mimic the restricting behavior of the high quality types since they cannot secure as much private benefits from ATPs adoption as their more successful peers.
Altogether, the above story delineates an intriguing equilibrium. Better firms tend to adopt inefficient anti-takingover charter provisions and as a result may receive lower valuations than their inferior peers, but the pre-IPO owners of the superior issuers are still better off. On the one hand, the lower valuations that ATPs bring about discourage low quality firms from imitating the restricting behavior, thus providing the market with a way to sort high quality firms from poor ones. On the other hand, the larger scope of private benefits that ATPs guarantee better firms, along with the exposure of their superior nature to the market, compensates the high quality ventures for the costly ATPs adoption. Thus, it may justify the adoption of the inefficient charter provisions by the high quality firms in the first place, and provide an additional rational for the enigmatic divergence in ATP practices among IPO stage firms.

1. A Simple Numerical Example

Assume there are two types of ventures in the market, a high quality venture and a low quality venture, with valuations of 1100 and 900, respectively. There is an abundance of low quality types in the population and only few high quality ones. The entrepreneurs of both types of ventures wish to sell their entire holdings to the public market. However, the market cannot distinguish between the two types of ventures and will therefore value each at the average valuation, which is close to 900. Each entrepreneur also faces the decision whether or not to install an anti-takingover mechanism in the corporate charter prior to the IPO. Assume that such mechanism is widely
recognized by the investment community as inefficient and therefore its adoption depresses the value of the relevant enterprise by a fixed penalty of 300.\textsuperscript{119}

However, since the entrepreneur of both types intend to stay around and manage their ventures after selling the stock to the public, the entrepreneurs earn some private benefits by shielding their position from takeovers. Since higher firm quality brings about higher psychic control benefits, we assume that the control benefits secured by defenses equal to 10\% of the value of the firm, i.e. 110 for the high-end type and 90 for the low-end type.

Since the market penalty for ATPs usage (300) is much higher than the private benefits that ATPs secure for both types of ventures (90 and 110), it is obvious that under complete information no firm would adopt defenses. However, since the market cannot tell apart the high quality type from the low quality type, the high quality type would adopt defenses to distinguish itself from its inferior peers. At the same time, it will not be worthwhile for any inferior type to mimic the behavior of the superior type.

Let us first verify that the superior type would rather opt for defenses than receive an average valuation without defenses. If the superior type refrains from any action it will receive about 900 for its stock, which is the average valuation in a market with many inferior types. However, if it will adopt defenses and the market believes that it is therefore the superior type, it can hope to receive 800, which is the true value of the superior type (1100) minus the market penalty for adopting defenses (300). To this calculation the entrepreneur of the superior type should add her 10\% secured private

\textsuperscript{119} Also assume that the ability to consume harmful private benefits is bounded, so that superior ventures do not suffer from harmful absorption of private benefits more than lower quality ventures. See the discussion above, supra section 3.A.
benefits which amount to 110. Altogether, she is therefore better off adopting defenses than receiving the low valuation without defenses:

$$1100 - 300 + 110 > 900$$

This does not end our inquiry, as we should still understand why the market should credibly believe that only the superior types would opt for defenses. The reason for that is simply that no inferior type would rationally adopt defenses, even if such act were to grant it with the valuation of the superior type. To see that let us contemplate the decision making process of the entrepreneur of the inferior type. If the market believes that every adopting enterprise is superior, it will grant it a valuation of 800 (1100 minus a penalty of 300). To that the entrepreneur of the inferior type should add 10% of the real valuation of her venture to account for the private benefits that she gains from ATPs adoption. But, all this adds up to merely 890 and she would rather remain exposed as the inferior type and reject all defenses:

$$900 > 1100 - 300 + 10\%*900$$

Hence, no inferior issuer would rationally adopt defenses to mimic the behavior of the superior type. Consequently, and as shown above, the superior type would do better by adopting defenses and revealing its type to the market. Adopting defenses may be expensive but still worthwhile to some.

2. A Generalized Signaling Argument

One of the routes high quality types can choose to help the market distinguish them from poor quality types is sending the market an expensive signal that only they can
afford.\textsuperscript{120} If the inherent characteristics of high quality types also make some possible act less expensive for those types to embark on, as this paper argues, this act may serve as the proper signal. Although such signal seems wasteful it may be necessary to dispatch it in order to be sorted out as the high-end types.

Two of the assumptions that were adopted in the earlier discussion about the complete information scenario are necessary here too.\textsuperscript{121} First, in line with the literature’s overwhelming conclusion, takeover defenses must be expensive for the entrepreneur to install. The conventional assumption is the combination of the prevailing belief that ATPs are harmful to shareholders,\textsuperscript{122} along with the common understanding that the issuer absorbs any inefficiency that she sets in the firm structure at the IPO stage.\textsuperscript{123}

As was earlier discussed, even if takeover defenses are expensive to install they may be worth while for the entrepreneur to implement if the private benefits they preserve are higher than the value they destroy. However, the signaling argument deals with a group of firms that even after accounting for private benefits’ consideration would rather not adopt defenses. Put differently, the signaling argument assumes that defenses are not merely harmful to shareholders, but also privately counter productive for the entrepreneur to implement.

\textsuperscript{120} See Spence (1973), \textit{supra} note 20; Spence (1974), \textit{supra} note 20.

\textsuperscript{121} See \textit{supra} section 3.A.

\textsuperscript{122} e.g., Shwartz, \textit{supra} note 52.

\textsuperscript{123} This point was clearly stated by Harris and Raviv: “Jensen and Meckling (1976), among others, emphasize that the entrepreneur or founder bears the agency costs when the firm goes public, because investors anticipate conflict of interest with management and value the securities issued accordingly. Therefore the entrepreneur maximizes his wealth by designing securities (including voting rights) that induce him to deviate as little as possible from total-value–maximizing resistance behavior.” \textit{in} Milton Harris & Arthur Raviv, \textit{The Design of Securities}, 24 J. FIN. ECON. 255-287 (1989). \textit{See also} Jensen & Meckling, \textit{supra} note 7; Easterbrook & Fishcel, \textit{supra} note 7 at 4-7.
The second assumption is taken from our conclusion in the earlier discussion that better issuers may gain more (or in this context suffer less) from defenses adoption.\textsuperscript{124} In short, the reason is that as long as the market-discount, along with the \textit{harmful private benefits} that derive it, is more or less fixed for every entity beyond a certain quality, it is always true that ATPs secure higher \textit{beneficial private benefits} for better firms.\textsuperscript{125} Simply, better firms systematically bring their managers more prestige, stance, respect and satisfaction. Or from another angle, if the market discount is not contingent on the quality or valuation of the company but \textit{beneficial private benefits} are increasing with the firm quality, then takeover defenses are less costly for better ventures.

Based on the above discussion it will further be assumed that the costs of ATPs adoption for the entrepreneur are declining with the firm’s quality. Note, however, that takeover defenses do not pose a binary choice for firms but rather a continuum of defenses alternatives, each with deferent shielding strength.\textsuperscript{126} Consequently, the assumption should be modified to assume that the marginal cost of each additional level of defenses adoption is higher for inferior issuers.

This assumption is delineated in figure 2. The Y axis represents the market value of the venture, i.e. the payoff that the pre-IPO owners receive when going public from the public shareholders without accounting for the private benefits which defenses secure.

\textsuperscript{124}See supra notes 71-75 and the accompanying text.

\textsuperscript{125}One should actually distinguish among three groups of firms. In firms of the highest quality, private benefits preservation tops any harm that shareholders may sustain from defenses and hence even under perfect information these firms will opt for ATPs. Conversely, in the lowest quality firms the private benefits which defenses may secure fall way short of the benefits they secure. Hence, no firm in this inferior class may ever select to adopt defenses. Finally, for intermediate values of firm quality, defenses cause more harm than the private benefits they secure but defenses may still act as a signal for firms’ quality within this class.

\textsuperscript{126}Supra section 2.A.
The X axis represents the level or strength of defenses that the venture adopts. The two curves, I(H) and I(L), are the indifference curves for the high quality issuer and for the low quality issuer, respectively. The indifference characteristic of the curves is the result of their design to capture all the combinations of takeover defenses and market valuations that leave the entrepreneur indifferent. Following our second assumption, ATPs provide better issuers with higher private benefits than secured for the less successful entities. Therefore, both entrepreneurs have a downward facing indifference curves, indicating that they enjoy more private benefits the more defenses they adopt, and hence a lower market valuation would leave them indifferent to such adoption. However, the indifference curve of the high quality type, I(H), is steeper than the one of its low type peer, I(L), indicating that defenses secure more benefits to better firms. Put differently, the better type would settle for relatively higher market penalties for defenses adoption.

![Indifference Curves](Figure 2)

For a given increase in takeover defenses, we can easily see that in order to remain indifferent for different combinations of market values and defenses levels, the inferior type can forgo marginally lower market values than the superior type. Of course,
the indifference curve for each type of firm that is depicted in figure 2 is only one of the
infinite possible indifference curves, which could be drawn. Parallel indifference curves
that promise each issuer better utility lie above the two indifference curves in figure 2 and
parallel indifference curves that provide less utility lie beneath them.

Now, let us contemplate the decision making process for each of the ventures. As
a starting point, figure 3 examines the case of perfect information, where the market can
accurately price each issuer. Since the market attaches the proper value to each venture,
both ventures will certainly choose to refrain from defenses adoption. In figure 3 there is
one indifference curve, I(i), that can represent either type of the ventures, together with a
shadow indifference curve with lower utility for the same venture type (the dotted curve),
whether we assume it is an inferior or a superior issuer. The final curve is the value that
the market is willing to pay for the issuer in question. The decision not to adopt defenses
is represented by the intersection between the indifference curve and the market valuation
line. The intersection occurs at a point with no takeover defenses. Hence, and
notwithstanding the type of the venture, opting for higher levels of defenses would only
lead to lower utility, exemplified by the intersection between the horizontal valuation line
and the dotted utility curve. The intersection with the dotted curve is clearly inferior, as
the dotted curve is parallel to the indifference curve, I(i), and lies beneath it. This follows
our assumption that the preservation of private benefits that defenses bring about falls
short of the harm caused to the public shareholders and in turn to the market value of the
issuer. Therefore, the lower market value that is attached to defenses by the market
cannot leave the entrepreneur indifferent to the decision to adopt defenses.
Put differently, when valuations are transparent, ventures cannot reach a higher indifference curve than the one that appear in figure 3 by adopting takeover defenses. The reason is simply that defenses are not only wasteful but also convey no information when the market is fully informed about the value of the issuers.

![Complete Information](image)

However, when the market cannot directly observe the value of each venture the picture is different. If the superior type remains unshielded, it will have to forgo its superior valuation and receive an average valuation together with the inferior type. By adopting a high level of takeover defenses, though, it can differentiate itself from the poor type, taking advantage of its relatively lower costs of defenses adoption.

If the value of the superior type and the inferior type, without defenses, is denoted by $V_H$ and $V_L$, respectively, and if ATPs bring about a market penalty of $Q(D)$ which is a function increasing in the level of defenses, but also secure private benefits of $d(V_i, D)$...
which is an increasing function of the firm’s quality and the level of defenses adopted, then the inferior type will not adopt defenses as long as: \(^{127}\)

\[
V_L > V_H - Q(D) + d(V_L, D)
\]

At the same time the superior type will opt for defenses to evade the consequences of the market belief that issuers that do not adopt defenses are inferior:

\[
V_H - Q(D) + d(V_H, D) > V_L
\]

The adequate level of takeover defenses that the superior type would adopt to reach such separation lies just to the right of point \(D'\) in figure 4. \(^{128}\)

In figure 4 the value that the market attaches to both types of issuers for any level of defenses is depicted by two parallel and downward sloping curves. They are parallel

\(^{127}\) Accompanied by the market belief that whoever adopts defenses is a superior type.

\(^{128}\) To reach such a separating equilibrium we must also add the proper market beliefs “off the equilibrium path” that all issuers that adopt defense levels that are higher than \(D'\) cannot be inferior. However, while other beliefs may also be consistent with a perfect Bayesian equilibrium definition they are illogical as \(D > D'\) is a dominated strategy for inferior types. Pay attention, though, that we did not rule out possible perfect Bayesian pooling equilibria (or hybrid equilibria), but see I. K. Cho & David Kreps, *Signaling Games and Stable Equilibria*, 102 Q.J.E. 179-221.
to reflect our simplifying assumption that the market penalty for each level of defenses adoption, Q(D), is fixed for both types of issuers. The market value curve for superior issuers is of course above the market value for low value curve to reflect their difference in quality in the eyes of the market. We chose to delineate an indifference curve for the low value type that starts from the point of maximal market value for a type, which is identified by the market as inferior (which as we found earlier is the point of no defenses). The level of defenses at the intersection between this indifference curve for the poor quality type, I(L), and the market value curve for the superior type is denoted by D’. Finally, I have delineated through the same point of intersection an indifference curve for the high quality type, I(H).

We can see that the inferior type is indifferent between receiving the “low” accurate valuation while rejecting all defenses and receiving the high valuation while adopting a level of defenses of D’. Furthermore, if the level of defenses slightly tops D’, the inferior type had rather not adopt defenses at all even if this behavior exposes it as the inferior type. Graphically, we can therefore observe in figure 4 that every intersection between the superior valuation line and a level of defenses which is higher than D’ lies below the depicted indifference curve of the inferior type. Hence, it is logical for the market to believe that anyone adopting the defenses level of D’ or higher cannot be the inferior type.

This complimentary market belief that any issuer not adopting defenses is a poor quality one, makes the separating equilibrium a stable one because the superior type is definitely better off adopting a level of defenses of D’ and thus evading the lower
valuation of the inferior type. Note, however, that the superior type would choose, if possible, a level of defenses that is as close to D’ as possible because any higher level of takeover defenses is both costly and excessive.

The conclusion is that even if we adopt the restricting assumptions that takeover defenses are wasteful for both the shareholders and the entrepreneurs, there may be a justification for some ventures to adopt defenses in the IPO context.

Before I continue to discuss the second possible signaling scenario, it seems that a few words are in order regarding the relationship between the private benefits of control theory and the theory of signaling by usage of takeover defenses. According to the private benefits of control theory, takeover defenses may be beneficial for entrepreneurs to adopt since they secure control benefits. The downside of defenses is not ignored - takeover defenses harm shareholders and therefore reduce the valuation of the firm at the IPO. However, where the preservation of private benefits is worth more than the reduction in share price that ATPs bring about, the entrepreneurs would choose to adopt defenses. The signaling argument discusses a different situation, a situation in which defenses are adopted even if they are privately wasteful for the entrepreneur to adopt as they reduce the firm value by more than the private benefits they conserve. Since the evidence presented earlier may be interpreted as indicating that ATPs are harmful for the shareholders of the adopting issuers (but are nevertheless adopted), this explanation

129 Because the indifference curve of the superior type is steeper than the indifference curve of the inferior type, any point on the market valuation line for inferior issuers lies below the superior type indifference curve through D’ (as the indifference curve for the inferior type only meets such valuation at the point of no defenses).

130 For a numerical example see supra note 57 and the accompanying text.
seems appealing, just as the same phenomenon fits the predictions of the above-mentioned signaling argument.

In any case, accepting Bebchuk’s argument regarding the protection of private benefits of control does not necessarily contradict the signaling argument presented above. Bebchuk’s argument distinguishes between two groups of firms. In the first group the preservation of private benefits outweighs the market discount for ATPs adoption, and hence their managers had rather adopt costly defenses at the IPO stage. Conversely, in the group of issuers where the preservation of private benefits falls short of the market discount, ATPs are rejected.

The signaling argument then engages the group of firms that according to the private benefits preservation argument would rather not adopt defenses. Since it is cheaper for the better issuers in this group to adopt ATPs, they may decide to signal their quality with ATPs adoption even if considerations of mere preservation of private benefits of control do not justify doing so. However, for this signaling procedure to succeed the market must first distinguish between the issuers that adopt ATPs because of the signaling consideration, and those that do so due to private benefits preservation considerations.\textsuperscript{131} While this makes sense in some circumstances, such as in a securities offering of a family enterprise or a sports team with idiosyncratically high private benefits of control, it may be implausible in other circumstances.\textsuperscript{132}

\textsuperscript{131} In particular, the market should be able to draw a line between quality levels in which defenses adoption is privately beneficial for the entrepreneur and quality levels in which defenses are privately costly. Additionally, the market should be able to distinguish between quality reasons for high levels of control benefits and other genres of high private benefits incidences.

\textsuperscript{132} Family enterprises and sport teams are two genres of verifiably high private benefits incidences that Bebchuk mentions in his paper: Bebchuk, \textit{supra} note 4.
C. Rejection of Defenses as a Signal Sent by Firms with Superior Management

Quite a different and somewhat contradicting set of assumptions is needed for signaling with rejection of defenses to occur. However, this set of assumptions is plausible if the high quality and value of the superior entity is the result of unverifiable managerial skills. The first required assumption is that better managers suffer less from the prospects of a takeover. While I assumed so far that the size of private benefits consumed by all types of managers is similar, it still makes much sense that the best managers are less susceptible for hostile takeovers and the resulting loss of benefits.\textsuperscript{133} Simply, better managers may more often run their firms in a manner that will guarantee high market values, and hence produce less takeover opportunities. Consequently, good managers should fear less from losing their private benefits in a takeover event.

To make this case interesting, I shall further assume that even though good managers are less susceptible for takeovers they would rather maintain shields, as even the minimized loss of private benefits justifies defenses adoption from their point of view. Without this assumption, issuers with good managers will refrain from adopting defenses but the act is not costly and therefore should not be regarded as signaling.

To exemplify possible signaling by rejecting defenses, consider the following scenario: The market consists of two types of issuers; the superior type has an entrepreneur that has excellent managerial skills and thus creates a value of 1100 for the entity she runs. The inferior type has a manager that justifies a valuation of 900. Both managers also derive control benefits of 400 that are not part of the “market” value of the

\textsuperscript{133} The assumption that good managers consume the same private benefits as less efficient managers is necessary to differentiate this signaling effect from the opposite signaling that is based on the quality of the underlying venture.
firm but rather personally accrue to the manager. Each can choose to go public with takeover defenses that would fully preserve the consumption of private benefits, and such decision also entails a valuation penalty of 100 to reflect the decrease in incentives caused by defenses. Without defenses the poor type has 80% chance of losing its private benefits while the high-end type only suffers a lower 50% chance of losing it benefits. One can see that under complete information both types would rather adopt defenses, since the preservation of private benefits for them both is higher than the market discount entailed: 100 < 50%*400 < 80%*400.

Things, however, change once we assume that the market cannot differentiate between the two types of managers. The inferior type would not mimic the superior type and reject defenses even if the market believes that each rejecting entity is entitled to the highest valuation. The reason is that the valuation of the poor type (900) minus the market penalty (100) is lower than the valuation of the good type (1100) minus the loss in private benefits that the poor type sustains (80%*400):

900 – 100 > 1100 – 80%*400

At the same time, the superior type would rather reject defenses than suffer from the belief that the ones that adopt defenses belong to the poor type. The superior type valuation (1100) minus the private benefits sustained by the high-end type (50%*400) is worth more than the valuation of the poor type (900) minus the market penalty for adopting defenses (100):

1100 – 50%*400 > 900 – 100

More generally, if the valuations of the good type and the poor type are $V_H$ and $V_L$, respectively, the market penalty is $Q$, and the loss of private benefits is $B(V_i)$, a
function decreasing in the quality of the managerial team, then the conditions for a separating equilibrium are:

(1) $V_L - Q > V_H - B(V_L)$ accompanied by the logical market belief that each entity rejecting defenses is a superior one. And;

(2) $V_H - B(V_H) > V_L - Q$ accompanied by the logical market belief that each entity adopting defenses is an inferior one.

Hence, it is possible that issuers with high quality managers would reject defenses even if this act were costly for them.

D. Empirical Evidence and Testable Predictions for the Signaling Arguments

Since signaling is a mechanism that is based on the need of the issuers to overcome the inability of the market to recognize their type, it is hard to trace evidence for a signaling phenomenon. Using variables for the quality of the venture or the managerial team that are publicly known is self defeating, since the available evidence mean that signaling was not necessary in the first place.

Testing for the two types of signaling is possible, however, with indirect measures. For instance, one could compare measure of quality such as Tobin Q or industry P/E ratios of adopting and non-adopting issuers and control for all direct evidence of firm quality. If one group would have been found to have higher quality than the other one, a quality that is unexplained by overt data, it could support one

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134 Tobin Q is the ratio of the market value of the firm over its assets, and therefore the higher this ratio is the better the company uses its assets. The P/E ratio is the ratio of the price per share over the earning per share of the company, and is again indicative of the quality of the underlying company.
signaling hypothesis or the other. Such a test was never conducted but some hints for the signaling phenomena may be hiding in existing data.

For instance, Daines and Klausner’s findings teach us that common justifications for ATPs adoption do not easily fit reality. They acknowledge that it remains a query why some firms adopt takeover defenses while others defer their usage. If researchers were unable to find any overt characteristic to differentiate between the adopting and non-adopting types, it might be that the market is unable to distinguish among them too and the signaling is the cure for the distinguishing problem.

The work conducted by Field sheds light on the insight that better issuers adopt takeover defenses to prove their quality.\textsuperscript{135} This is relevant to the signaling mechanism that argues that defenses are adopted by entities with superior business opportunities. Field finds that ATPs adoption is significantly more common among firms that use higher quality underwriters.\textsuperscript{136} Seen through the eyes of the signaling argument, better issuers adopt wasteful ATPs to prove their quality to the top underwriters, who are only then willing to represent them. To be sure, if signaling succeeds the market does not need underwriters to help it identify the superior quality of the issuer that adopt defenses. Moreover, any underwriter and not necessarily a reputable one could offer a higher tag price to targets that select to adopt defenses, and thus distinguish between high and low quality targets. However, once firms can take advantage of defenses to help underwriters and the market ascertain their type, the high quality issuers would finally be the ones to receive the services of the better underwriters. This is the result of our earlier discussion,

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{135} See Field, \textit{supra} note 3.
\item \textsuperscript{136} See Field, \textit{supra} note 3 at 21.
\end{itemize}
\end{footnotesize}
which concludes that all issuers value the services of the best underwriters, while those select only the best issuers to represent. The signaling apparatus is therefore a coordination mechanism between high quality firms and reputable investment bankers. And as suggested by Coates’ study, a similar relationship may exist between issuers and their legal counselors. These findings though should not be accepted literally as evidence for the signaling argument, since it is possible that underwriters attached high values to the issuers due to overt information. Hence, it is important to control for all available data on issuer’s quality before using the underwriters’ data for signaling matters.

Field finds additional evidence that ATPs are adopted by higher quality ventures. Adoption of defenses is more common amongst firms with higher operating income the year before the IPO, fewer liabilities, and fewer years of negative operating income in their record. However, unlike the quality of the underwriters, these measures are all direct evidence for quality. As noted earlier, if a firm can prove its quality directly to the market by pointing out such measures, it need not signal its quality by adopting costly ATPs. Nevertheless, all those findings are consistent with the prediction that signaling can succeed only among firms that the market can ascertain that they have reached some initial threshold of quality. Only beyond such threshold can the underwriters and the market comfortably assume that the cost of implementing an ATP for the entrepreneur is negatively correlated with the quality of her firm.

137 See supra notes 104 – 106 and the accompanying text.
138 See Field, supra note 3 at 21.
139 See infra section 3.A.
VII. Normative Implications and the Perils of Federal Intervention

The notion that takeover defenses are more common among better issuers may be surprising to some, but is readily recognized by the empirical literature. One commentator summarizes his empirical findings and conclusions as follows: “Given the findings that companies advised by law firms with more M&A expertise, higher-quality underwriters, and VC funds are all more likely to adopt defenses, and that pre-IPO defenses are more common now than in the past, it seems more plausible that such defenses are optimal for all firms than it is that they are optimal for non.”140

The theory developed in this chapter is consistent with, and sheds light on, these empirical findings, without sharing the harsh conclusions stated above. Admitting that better issuers, and especially those that stand out in their vast business opportunities adopt defenses, does not necessitate the conclusion that defenses are optimal for all firms. Rather, this chapter advocates the approach, which claims that takeover defenses are more likely to appear in firms with high private benefits of control, and that the quality of the firms is a good proxy for the scale of these benefits. Coates reads the fact that more lawyers are advocating defenses today as suggesting that there was a failure in the market for corporate law, a failure that is being amended through time. However, it is possible that the corporate law market current problem is that many lawyers mimic the advice of the best lawyers without paying attention that this advice does not fit all clients.

According to the approach that links takeover defenses to incidences of high control benefits, defenses answer controllers’ need to protect the benefits of their position

140 See Coates, supra note 2 at 1381.
from the possibility of a hostile takeover.\textsuperscript{141} Implicitly, this theory also reckons that takeover defenses are harmful for the public shareholders. Otherwise, all firms were to adopt takeover defenses, as those would be both in the interest of the controllers and the public shareholders. On the other hand, if defenses are inimical for the public shareholders, and therefore also reduce the value of the firms that go public with defenses, then only controllers with much to lose, i.e. controllers with high private benefits, would be the ones to adopt defenses. Note, that one may easily interpret this theory as claiming that the adopting firms should be the ones that are less valuable for the public shareholders due to the inimical effects of takeover defenses.

Surprisingly, empirical studies hardly found direct traces for high private benefits in the adopting firms, nor did they find that adopting-firms are inferior to non-adopting firms. On the contrary, and as summarized in one of the recent studies: “[T]he evidence on private benefits for firms implementing antitakeover provisions is not obvious… However, there is substantial evidence that firms implementing antitakeover provisions before the IPO are of higher quality than firms without provisions”.\textsuperscript{142}

These two findings: the lack of direct evidence for high control benefits in adopting firms and the surprisingly higher quality of the adopting group, are both explicable by this paper. This paper argues that high quality by itself may bring about high control benefits without intensifying the costs born by shareholders. The kernel of the argument is that beneficial control benefits such as prestige and satisfaction always rise with the quality of the firm, while detrimental control benefits such as self-dealing

\textsuperscript{141} See Bebchuk, supra note 4.

\textsuperscript{142} See Field, supra note 3 at 20.
and perks consumption are capped by the legal system and other limits. This argument is especially robust when the higher quality is attributed to high business and growth opportunities. Hence, the higher quality of issuers that adopt defenses is an endogenous prediction to the private control benefits theory, while the inherently higher quality also erases any inimical traces that ATPs may leave on the value of the adopting issuers.

Furthermore, the link between high quality and high control benefits may also indicate that in some cases takeover defenses are signals adopted by better issuers to expose their quality. If takeover defenses are wasteful for all issuers but even more wasteful for the inferior ones, then high quality issuers will adopt defenses to distinguish themselves from their inferior peers. This explanation goes a step beyond the private benefits theory as it reckons that defenses are adopted because of reasons of asymmetric information. Superior issuers adopt defenses to convey information while such defenses are costly not only for the public shareholders but also wasteful for the controllers that take the firms public.

This explanation too mitigates the tension between the two seemingly contradicting empirical findings. One, that takeover mechanisms harm the shareholders of the firm that adopts them. And two, that high-end issuers nevertheless choose to adopt such defenses. According to the signaling argument, the cost incurred while adopting a takeover defense is the “price” one has to pay to prove ones quality to the market. The classic financial literature mentions a few costs that new issuers must bear

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143 And the analysis shows that the opposite result – signaling by rejecting defenses – is also possible if high quality is attributed to the eminence of the managerial team.

144 See, e.g., Field & Karpoff, supra note 3 at 25.

145 One of the costs entrepreneurs have to bear to reveal their type and overcome the market asymmetry of information problem is to hold on to a large fraction of cash flow rights after the public
to prove their type to the market. Adoption of takeover defenses may very well be another strategy for high quality issuers to choose from.

Finally, the discussion leads us to the counter intuitive normative implication of the theory presented in this paper. Even if takeover defenses may be as detrimental to the value of the firm as most scholars believe, the conclusion that such mechanisms should be banned is hardly justifiable. Takeover defenses are often adopted in the IPO stage to prevent deprivation of control benefits in future control contests. Moreover, the firms that adopt such defenses are systematically the better firms, which have more to lose in terms of control benefits. This means that pre-IPO owners sometimes prefer to sustain the reduction in the firm value that is keyed to defenses adoption than endanger their benefits of control. Banning the usage of defenses in the IPO stage may only tunnel controllers’ efforts to less efficient avenues. Maintaining a complete lock on control by holding a control block or refraining from going public altogether may be good examples of this possible social waste.

Put differently, if it was guaranteed that firms go public and ownership becomes dispersed, consideration of control benefits would distort choices towards socially excessive takeover defenses. But, if takeover defenses were to become illegal, the fear to lose control benefits would drive firms towards even more distorted ownership structures. Hence, a mandatory restriction on ATPs adoption in the IPO stage may not be beneficial for society although ATPs reduce firms’ value, and any mandatory intervention would hurt the best firms the most.

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offering. Such high fraction promises the market that the entrepreneur believes in her venture but is costly to the entrepreneur in terms of liquidity and risk bearing. See Leland & Pyle, supra note 113.
Milder interventions in the firms’ freedom of choice that were presented recently may result in similar costs for society.\textsuperscript{146} Rather than mandating particular substantive takeover arrangements, Bebchuk and Ferrell suggest a form of federal intervention that would increase shareholders choice, without compelling them to act in a single way. According to this suggestion, federal law should allow the public shareholders, regardless of managers’ wishes, to opt for a takeover regime that is more permissive to takeovers than the state of incorporation currently entertains. If indeed takeover defenses reduce shareholders’ value, as they most probably do, it would be only a matter of time until shareholders use such an avenue and render vestigial some or all the restrictions on takeover activity that were adopted in the IPO stage. Such a result is therefore similar to a mandatory ban on takeover defenses.

As good as the suggestion may seem ex post when the firms are already public, it may still cause harsh distortions at the IPO stage. Controllers would know that there is no point in adopting takeover defenses, and may therefore alter their decisions regarding ownership structure and going public in the first place. Furthermore, since takeover defenses are priced at the IPO just like any other governance term, changing the rules of the game in the midstream enriches the public shareholders at the expense of the controllers that already paid for their freedom to adopt defenses. Once again, this paper argues that this possible scenario should not concern all firms, as not all firms are interested in takeover defenses to start with. Surprisingly, only the best firms and their controllers would therefore sustain such harm, caused by seemingly benign federal intervention.

\textsuperscript{146} See Bebchuk & Ferrell, \textit{supra} note 108.