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WHY DO IPO FIRMS ADOPT TAKEOVER DEFENSES?

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ABSTRACT

The purpose of this thesis is to explain why IPO firms adopt takeover defenses. This is done by surveying and problematizing the theories the literature in the field has to offer. Furthermore, we check the theories validity by examining the empirical research available. Takeover defenses are commonly believed to increase agency costs and thereby reduce firm value. As investors take agency costs into account when buying shares in an IPO, the traditional view has been that pre-IPO owners minimize agency costs before taking a firm public in order to maximize their proceeds from the sale. If both these views are correct, one would expect that firms going public do not adopt takeover defenses. Several empirical studies have, however, showed that takeover defenses are very common in IPO firms. Our main conclusion is that there exists no convincing explanation to why IPO firms adopt takeover defenses. However, since some of the existing theories have not yet been tested empirically, it is possible that some of the explanations we have presented in this thesis will be given more support in the future.

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1. Introduction

The hostile takeover emerged in the 1960s and rose in importance after the investment bank Morgan Stanley advised on a hostile bid for International Nickel in 1974. The occurrence of hostile takeovers continued to grow during the 1980s and as an effect many companies started adopting takeover defenses around that time.

Takeover defenses are commonly believed to increase agency costs and thereby reduce firm value (see for example Daines & Klausner 2001, pp. 83-85). As investors take agency costs into account when buying shares in an IPO (Jensen and Meckling 1976), the traditional view has been that pre-IPO owners minimize agency costs before taking a firm public in order to maximize their proceeds from the sale (e.g. Hochberg, 2003; Daines and Klausner, 2001). If both these views are correct, one would expect that firms going public do not adopt takeover defenses. In a commonly cited book by Easterbrook and Fischel (1991, pp. 204-205, cited in Field and Karpoff, 2002), they state that "Firms go public in an easy to acquire form: no poison pill securities, no supermajority rules or staggered boards. Defensive measures are added later...". Several empirical studies have, however, showed that takeover defenses are very common in IPO firms.

1.1 Purpose

The purpose of this thesis is to explain why IPO firms adopt takeover defenses. This is done by surveying and problematizing the theories the literature in the field has to offer. Furthermore, we check the theories validity by examining the empirical research available. The focus is on takeover defenses in the United States of America, but most of our discussion is also applicable in other geographical settings.

1.2 Outline

In *Section 2*, we give a brief overview of the different form of takeover defenses available followed by a presentation of how common the use of takeover defenses are in IPO firms. In *Section 3,* we challenge the traditional view of takeover defenses; that they reduce firm value. In *Section 4,* we present the explanations for takeover defenses, assuming that they reduce firm value. Finally, in *Section 5*, two possible explanations for the variation in takeover defense adoption between firms are presented.

2. Takeover defenses

2.1 Introduction to takeover defenses

The legal devices used to obstruct hostile transaction are known as takeover defenses. "Takeover defenses" is a broad term, used to describe a number of different legal devices. The most notorious takeover defense is probably the shareholder right plan, known as the "poison pill". Poison pills are securities, possible for the board of directors to implement, that give their holders special rights if the issuing firm becomes the subject of a takeover bid. Typically a triggered pill gives the shareholders the right to buy shares of the target (so-called "flip-over" poison pills), the acquirer (so-called "flip-in" poison pills), or both at some fraction of the current market price of the common stock. The poison pill is usually triggered if a single shareholder, or allied group of shareholders, acquires more than a specified percentage[1] of the company's shares, against the wishes of the board of directors. The effect of the triggered pill is a dilution of the potential acquirers share in the target or a share in the acquirer for the targets shareholders. In both cases, a hostile takeover becomes significantly more expensive. However, even when a company has a poison pill, the bidder can request the votes of shareholders in order to replace the board of directors. If the replacement succeeds, the newly elected board of directors can remove the poison pill. The bidder can then continue to purchase the target's stock.

The replacement of the board of directors can, however, be a lengthy process if the company has adopted another form of takeover defense, the classified board of directors. This takeover defense requires shareholder approval to be implemented and a change of the company's charter. Takeover defenses that require changes in the company's charter is typically called antitakeover charter provisions (ATPs). The classified board is generally believed to be one of the most potent defenses available, especially when it's combined with a poison pill (Bebchuk et al, 2002). The classified board usually segments the board into three classes of directors with each class serving

[1] Typically 10-20 percent.

consecutive and overlapping three-year terms. Therefore, each year only one-third of the board is re-elected. This makes it impossible to gain control of the whole board instantly. The potency of the classified board lies in the costly delay they create.[2]

Another common takeover defense, especially in the Nordic region, is shares with different voting rights. For example, two types of stocks can exist, where one has voting rights that are superior to the other. The shareholders owning the shares with the higher voting rights are able to maintain control with a small equity investment and can prevent a hostile takeover. However, this type of defense is not something this thesis focuses on. The reason for this is that dual class shares is a quite specific form of takeover defense, compared to other defenses. Dual class shares separate control from ownership between shareholders, while most other takeover defenses shift control from shareholders to the board of directors.

As mentioned earlier, takeover defenses come in a number of different forms, the ones mentioned above are only an example of the more common ones. For an overview of other takeover defenses, see the *Appendix*.

2.2 The use of takeover defenses in IPO firms

As mentioned in the introduction, a traditional view has been that firms lack takeover defenses at the IPO stage. Contrary to this view, four empirical studies have showed that defenses are very common in firms going public in the US.

Field and Karpoff (2002) examined the presence of takeover defenses in sample of 1,019 IPOs in the US during the period 1988 to 1992. They found that 53 percent of the firms in their sample had at least one takeover defense at the time of the IPO. For example, 36 percent of the firms had

[2] Coates (2000) measures the potency of a specific takeover defense by the number of days it can delay the purchase of the target's stock.

classified boards, 2 percent had a poison pill[3], 5 percent had shares with unequal voting rights, 10 percent had a fair price provision, 30 percent had shareholder meeting restrictions and 29 percent had supermajority vote requirements.

Consistent with this finding, Daines and Klausner (2001) found that takeover defenses are surprisingly common at the IPO stage. In a sample of 310 IPOs in the US between January 1994 and July 1997, they found that 44 percent of the firms had classified boards, 95 percent had blank check preferred stock, 6 percent had shares with unequal voting rights, and 17 percent had a fair price provision. Moreover, they found that no firm had adopted any charter provision limiting the possibility of adopting takeover defenses in the future.

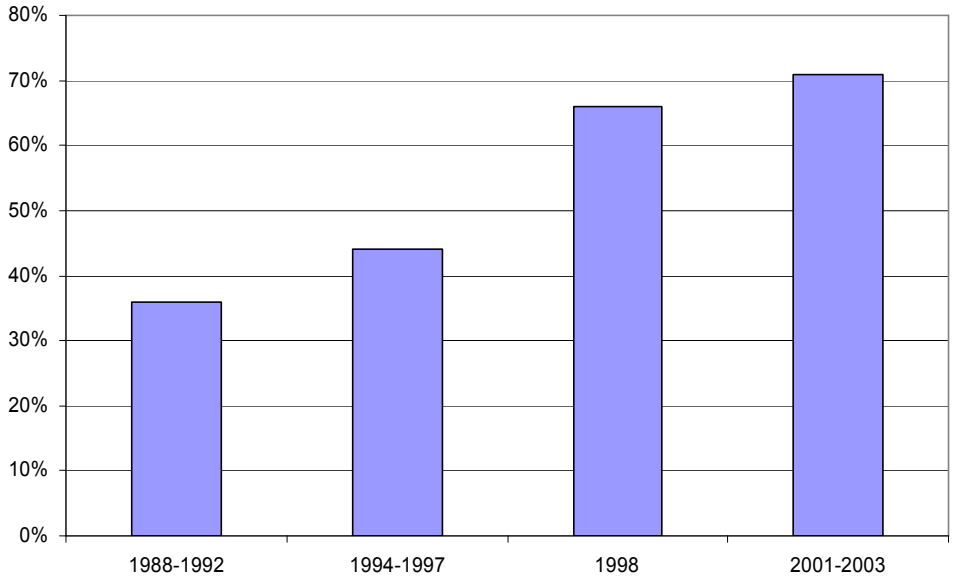
Coates (2000) examined 160 US IPOs between 1991 and 1992 and 200 IPOs during 1998. He found that 34% of the firms going public between 1991 and 1992 had classified boards, 11 percent had shares with unequal voting rights and 86 percent had blank check preferred stock. In 1998 the frequency of classified boards had increased to 66 percent.

Finally, Baranchuk et al. (2004) examined the presence of takeover defenses in a sample of 182 IPOs in the US during 2001 to 2003. They found that 71 percent of the firms had classified boards, 87 percent had blank check preferred stock, 9 percent had a poison pill, 27 percent had shares with unequal voting rights and 5 percent had a fair price provision.

The findings on classified boards are summarized in *Figure 1*. As can be seen, classified boards are not only common; they have been adopted at an increasing rate during the last 15-20 years. At the same time, management proposals to adopt classified boards in seasoned companies have decreased dramatically – from 8.8 percent in 1986 to 0.3% in 2002 (Klausner, 2003).

[3] Note that this defense can be implemented at any time by the board of directors without the consent of the shareholders. Therefore all companies can be considered to have a "potential" pill.

Figure 1. Classified Boards in IPO Firms (Field and Karpoff, 2002; Daines and Klausner, 2001; Coates, 2000; Baranchuk et al, 2004).



3. Explanations challenging the view that takeover defenses reduce value

In this section, we examine whether the presence of takeover defenses can be explained by that they increase value. If takeover defenses increase value, the fact that firms adopt them is consistent with the view that firms go public in a value maximizing form.

As a first step in order to see whether there actually are reasons to believe that takeover defenses can increase value, we look at results of event studies that examine the effect of takeover defenses on stock prices. Since these studies are often referred to as support for the view that defenses reduce value, it is interesting to see whether the results are actually conclusive. Next, we review the general arguments for the view that defenses decrease value and the arguments for the view that defenses increase value. We then examine whether the empirical evidence support the explanation that takeover defenses are adopted because they increase value. Finally, we look at the evidence on the behavior of venture capitalists. Since venture capitalists are active and monitoring investors that assumingly are especially focused on maximizing value, we think their behavior can offer further insights into whether takeover defenses can increase value.

3.1 Effect on stock prices in seasoned companies

Evidence of a negative impact has among others been found by Karpoff and Malatesta (1989) who found a small but statistically significant decrease in stock prices of firms incorporated in states adopting takeover laws, i.e. laws functioning as takeover defenses. Bhagat and Jefferis (1991) also found that the enactment of an antitakeover amendment (ATA) is associated with statistically significant negative abnormal returns.

However, some studies have showed insignificant results. DeAngelo and Rice (1983) tested the stock price impact associated with ATA proposals for US companies over the period 1974-1979.

They found negative returns on average, but not significantly different from zero. Poulsen and Jarrell (1987) examined the effect on shareholder wealth of ATAs proposed between 1979 and 1985. For the whole sample, including different types of amendments, they found statistically negative abnormal returns. But for the sub-sample of only fair-price amendments, the results were insignificant.

Other studies have even showed signs of a positive stock price reaction. Linn and McConnell (1983) studied the impact of ATAs on stock prices and their results indicated that the announcements are associated with positive stock price reactions. McWilliams (1990) studied the effect of ATA proposals on US listed stocks for the period 1980-1984 and found a significant positive effect for firms having low levels of managerial share ownership.

One explanation for the mixed and weak results can be that the adoption of poison pills and ATAs may send signals to the market unrelated to the effect of the takeover defense itself (Coates, 1999). For example, the adoption of a pill can signal that management expects a bid, which probably will have a positive price effect. Moreover, as Coates (1999) points out, event studies do not study the wealth effects of takeover defenses but shareholders expectations of wealth effects. These factors make it difficult to draw conclusions on whether takeover defenses are good or bad based on the results of the event studies.[4] Nevertheless, the mixed results indicate that it is not unreasonable to question whether takeover defenses actually decrease firm value.

3.2 General arguments

As we mentioned in the introduction, takeover defenses are commonly believed to decrease firm value. In order to challenge the view that takeover defenses reduce firm value, we first present the major arguments in favor of this view. Second, we go trough the major arguments challenging this view.

[4] See Coates (1999) for further discussion about problems with the empirical studies on takeover defenses.

3.2.1 Managerial entrenchment

The view that takeover defenses reduce firm values is explained by the managerial entrenchment hypothesis (DeAngelo and Rice, 1983). According to this hypothesis, the demand for defenses comes from managers that want to protect themselves from takeovers. This protection has been argued to increase agency costs and thereby reduce firm value (e.g., Bebchuk, 2002; DeAngelo and Rice, 1983). The agency costs produced by takeover defenses can be divided into ex ante and ex post agency costs (Bebchuk, 2002).

Ex ante agency costs, i.e. costs before any bid has been made, arise as takeover defenses lessen the disciplinary impact posed by the market for corporate control. In a firm without strong defenses, a functional takeover market provides incentives for managers to act in the shareholders' best interest, since poorly performing managers are likely to be replaced after a takeover.

Ex post agency costs is the result of conflicting interests between management and shareholders when a bid has been made. Managers' interest may be to secure their jobs and private benefits by blocking the bid, while it may be more beneficial for the shareholders to accept the bid (Bebchuk, 2002). Additionally, managers may use their power to extract higher benefits for themselves instead of using their power in way that benefits shareholders (Subramanian, 2005). Moreover, even if management acts in shareholders best interest, the existence of takeover defenses may reduce the likelihood of receiving a premium bids (Coates, 2000).

3.2.2 Bargaining power

Among the arguments for the view that takeover defenses can increase firm value, the bargaining power hypothesis is the most prominent in the literature. This hypothesis holds that firms with takeover defenses may be able to extract a higher premium after a bid has been made. There exist some slightly different explanations to why this would be the case.

First, takeover defenses can solve collaboration problems among stockholders. DeAngelo and Rice (1983) present a model in which the acquirer has the potential to raise the bid when a tender offer fails. In this case each shareholder not tendering at the current price faces the risk of losing the premium if the bid succeeds. This could happen when the bid is conditional on that some percentage less than 100 percent, for example 50 percent, of the target shareholders tender. Because of different subjective probabilities of the outcome of the tender offer, each shareholder faces different incentives to hold out/not tendering. Therefore, there may be private incentives to tender, but the shareholder group as a whole would be better off by not tendering and thus inducing the bidder to raise the price. By giving management the possibility to block an offer, takeover defenses allow a more coordinated stockholder response to such an offer and enables the shareholders to extract a larger bid premium.

Second, Harris (1990) argues that management, owning some fraction of the firm, can be a better negotiator and extract a larger part of the synergies than a negotiating shareholder could. The reason for this is that management may have better incentives since they may lose their jobs if the firm is acquired and therefore demand compensation in the form of a higher bid.

Third, Shleifer and Vishny (1986) show that takeover defenses can benefit shareholders by allowing management to encourage a bidding contest.

3.2.3 Managerial myopia

An additional argument for the view that takeover defenses increase firm value is that they can reduce managerial myopia (Stein, 1988). Managerial myopia means that there may be an asymmetric information problem between management and the stockholders in the sense that the value of long-term projects cannot be successfully signaled to the stock market and investments in long-term projects thereby may cause the stock price to be temporarily undervalued. This may lead management to focus more on short-term projects. If management can prevent bids when the stock is undervalued, it allows them to invest in more valuable long-term projects.

3.2.4 Effective compensation contract

Another view is that takeover defenses are an implicit part of an effective compensation contract between managers and shareholders (Knoeber, 1986). The most efficient compensation contract could be one in which a large proportion of the compensation is delayed until performance can be better evaluated. In such case, takeover defenses can prevent the owners from opportunistically selling the firm before the delayed compensation is paid.

3.3 The validity of the general arguments for IPO firms

In this section, the validity of the arguments presented (except for the argument regarding an effective compensation contract, since the IPO do not change its validity) in the previous section is investigated in an IPO context. In general, as long as ownership by managers is over 50%, takeover defenses could be considered irrelevant since it would be impossible for an acquirer to gain control of the firm without the managers' consent. When takeover defenses are irrelevant, obviously none of the general arguments are valid. In practice, even ownership of less than 50% can be enough to make the firm invulnerable to takeovers since the acceptance condition in tender offers usually is higher than 50%. Further, the more managers own of the firm, the higher is the required acceptance rate among non-management shareholders, in order for a hostile takeover to be successful. For example, if managers do not own any shares of the firm and an acquirer need 51 percent to take control over the firm, then the required acceptance rate among shareholders is obviously 51 percent. However, if managers own 30 percent of the firm and the managers reject the offer, then 73 percent (0.51/0.7) of the non-management shareholders must accept the offer in order to grant the acquirer the 51 percent. Nonetheless, as concentration decreases, takeover defenses will at some point become relevant.

3.3.1 Managerial entrenchment

The validity of managerial entrenchment as an argument against takeover defenses may vary across companies. The amount of increased agency costs following an elimination of the disciplinary effect of the threat of hostile takeovers is probably dependent on the governance

structures in the company (Kahan and Rock, 2003). The increased agency costs is assumingly smaller in a company with little free cash flow, effective alignment of managerial incentives and effective monitoring structures, than in a company lacking effective governance structures.

Companies going public have incentives to adopt effective governance structures and lower the agency costs (Jensen and Meckling, 1976). To the extent that agency costs are priced at the IPO, the former owners have to bear the costs of ineffective governance structures. The fact that owners and management tend to be the same at the time of IPO implies that the fear of increased agency costs because of takeover defenses should be less of a problem at the IPO stage.

There is also another aspect that might limit the validity of the managerial entrenchment hypothesis at the IPO stage. Zingales (1995) argues that an IPO can be the first stage in selling the control of the company. This view is supported by empirical evidence showing that the turnover of control in newly public firms in Italy is about twice as high as for the Italian economy at large (Pagano et al, 1998). The value of future private benefits should be low if the pre-IPO owner takes the company public with the intention to sell also the control of the company soon after the IPO.

3.3.2 Bargaining power

Even though the IPO is a considerable step in the transition to dispersed ownership, pre-IPO owners usually keep significant ownership stakes. Mikkelson et al (1997) examined changes in ownership after IPOs. They found that median ownership by officers and directors was 44 percent immediately after the IPO and then declined to 18 percent in ten years after the IPO. Even if management does not have an ownership stake that is large enough to block a bid, the ownership can still be relatively concentrated among a few large owners. If that is the case, collaboration should be less problematic and the increased bargaining power provided by takeover defenses should be low.

3.3.3 Managerial myopia

Firms at the IPO stage are probably younger and to a larger extent in a development stage in

comparison to public companies in general. The risk of mispricing is probably higher for firms in a development stage, since the value of future cash flows are harder to estimate. Asymmetric information between management and market participants could therefore be a larger problem in development stage companies. This indicates that takeover defenses can make more sense in IPO firms.

Additionally, it can be argued that takeover defenses make more sense in IPO firms if it takes some time for the market to efficiently price newly public firms. Moltchanov (2004) studied how stock prices of newly public firms react to new information and he found evidence of overreactions to both positive and negative events. Takeover defenses can benefit the shareholders if a bid is made at price that is lower than the fundamental value of the firm, and the manager can not signal the true value to the shareholders. However, Moltchanov only found evidence of mispricing during the first 30 days after the IPO. It is very unlikely that a firm would be subject to a takeover bid that soon after the IPO.

3.3.4 Conclusion

The theories about the effects of takeover defenses may all provide pieces of the truth. How firm value is affected should therefore depend on the net effect of these theories. Kahan and Rock (2003) argue that the net effect of takeover defenses vary from company to company. They mean that the decision to adopt defenses depends on empirical factors like the significance of the board's informational advantage and ability to constrain agency costs.

Consequently, the explanation for the presence of takeover defenses may not be that they are generally value increasing or generally value decreasing. Instead, it could be that some firms benefit from defenses and consequently adopt them, while other firms do not. This would explain why some firms adopt takeover defenses, while other firms do not.

3.4 Empirical evidence on the view that takeover defenses can increase value

3.4.1 Agency costs

Takeover defenses are more likely to be value enhancing when agency costs are low. The risk that managers will abuse the company's resources when the defenses are in place should be lower in companies whose agency costs can be constrained. Agency costs are difficult to measure directly, but can to some extent be expected to depend on firm characteristics.

Jensen (1986) argues that agency costs are higher in firms with large free cash flows, but Coates (2000) found no significant relation between the strength of takeover defenses at the IPO and the average annual free cash flow over the five years after the IPO. Free cash flow problems can be reduced with debt (Jensen, 1986). However, Coates (2000) found no significant relation between leverage and strength of defenses. Neither did Field and Karpoff (2002) find any relation between the presence of defenses and leverage in IPO firms.

Another important factor that can affect agency costs is the structure of the board of directors. According to Fama and Jensen (1983), outside directors have incentives to be more shareholder-oriented. Jensen (1993) also claim that oversized boards and boards where the CEO is also the chairman are likely to be less efficient.

In spite of this, when Field and Karpoff (2002) omitted reverse-LBOs, carve-outs and dual-class IPOs from their overall sample, they found a significantly negative relation between the presence of defenses and the fraction of inside board members. The relation was not significant in their overall sample. They also found a significantly positive relation between defenses and board size and whether the CEO also holds the position as chairman. Baranchuk et al (2004), on the other hand, found that board size does not affect the number of defenses at the IPO.

The empirical evidence does not seem to support the hypothesis that takeover defenses are adopted in firms where the increase in agency costs can be expected to be low. Further evidence,

not consistent with this hypothesis, is that Field and Karpoff (2002) found a significantly positive relation between executives' compensation and the presence of defenses at the IPO. This finding indicates that defenses are used at the IPO stage to protect managements' benefits of control and gives support for the managerial entrenchment hypothesis. In addition, (as Field and Karpoff point out) it is not consistent with the hypothesis that defenses are an implicit part of managements' compensation.

However, Daines and Klausner (2001) oppose this interpretation and argue that it is confounded by possible differences in market wages. They mean that the correct measure should be excess compensation over market wage rather than total compensation. Field and Karpoff (2002) did control for the number of years the CEO has been with the firm, the age of the CEO, leverage and firm size (book value of total assets). A variable that may influence both the use of defenses and managements' compensation is R&D intensity. R&D intensity has been found to have a significantly positively effect on managements CEO's compensation (Brick, Palmon and Wald, 2005). As we will discuss later, defenses can be expected to be more common among R&D intense firms if defenses are adopted to reduce managerial myopia. With this in mind, we think that one should be cautious about interpreting the result as evidence for the view that defenses are adopted with the motive to protect high benefits.

Indirect evidence on the managerial entrenchment hypothesis can be drawn from the effect of managements' ownership prior to the IPO. Field and Karpoff (2002) found a significantly negative relation between ownership by directors and officers and the presence of defenses at the IPO. Their interpretation of this finding is that takeover defenses are costly and managers adopt them when their personal costs are low.

Daines and Klausner (2001), on the other hand, found a small but significantly positive relation between strengths of defenses adopted at the IPO stage and executives' and directors' share ownership. We note, however, that Daines and Klausner did not control for the size of the firm. Firm size might be negatively related to inside ownership. Firm size might also be inversely related to the use of defenses if larger firms are less vulnerable because of financing constraints facing bidders (Coates, 1999). On the other hand, the smallest firms may not offer large enough

synergies to make hostile bids profitable (Coates, 1999). Nevertheless, given the facts we have, there is no consistent evidence on the relation between the use of defenses and insider ownership.

Another measurable indicator of agency costs is operating performance. If takeover defenses actually increase ex ante agency costs by removing the threat of hostile takeovers, lower operating performance can be expected in firms with defenses than in firms without. Field and Karpoff (2002) tested if this is the case by examining the change in return on assets (ROA) over the five years after the IPO. They do not find any significant difference in means between firms with defenses and firms without defenses, when the change in ROA is measured between the fifth year after the IPO and the first year after the IPO. At shorter time periods (changes in one and two years), the firms with defenses actually performed significantly better than firms without. This result also holds when they control for industry specific changes in operating performance. There is thus no evidence supporting the view that firms with takeover defenses are managed less efficiently.

3.4.2 Myopia and asymmetric information

Daines and Klausner (2001) tested whether companies use takeover defenses with the motive to reduce managerial myopia. Defenses should be more common in firms with investments in long-term projects that are hard for the market to evaluate, if defenses are used to reduce myopia. As a proxy for investments of this kind, Daines and Klausner used industry-average R&D intensity for each firm in the sample. The reason for why they used industry-average rather than firm specific R&D intensity is that they though that the former is a better predictor of future R&D intensity. When they regressed the strength of defenses on this proxy they found a significantly negative relation. Since firms with high R&D may be dependent on top management and hence have a natural defense against hostile takeovers, they also ran a regression where they excluded firms in the top 5% industries in terms of R&D intensity. Nevertheless, even in that regression they found a negative relation. These results led Daines and Klausner to conclude that takeover defenses were not used to reduce managerial myopia.

In contrast to Daines and Klausner (2001), Baranchuk et al (2004) found a significantly positive

correlation between the presence of takeover defenses and R&D expenditures/assets. They also found a significantly positive correlation between defenses and intangible assets/total assets. Intangible assets may also be a decent proxy for projects that are hard for the market to value. Coates (2000), on other hand, found no significant relation between average R&D expenses/assets over five years after the IPO and the strength of defenses at the time of the IPO. Nor did he found any significant relation between defenses and average capital expenditure/assets.

Another possible indicator of whether a firm is hard to value is whether the firm is in a development stage. However, contrary to what the myopia argument would suggest, Field and Karpoff (2002) found a significantly negative relation. On the contrary, Coates (2000) finds no significant relation between takeover defenses and whether a firm is in development stage.

3.4.3 Acquisition likelihood

Field and Karpoff (2002) have examined how takeover defenses affect acquisition likelihood after the IPO. They tested this using a logistic regression model in which the dependent variable was equal to one if the firm was acquired within five years after the IPO and a dependent variable equal to one if the firm had at least one takeover defense at the IPO. Since some firms had adopted takeover defenses after the IPO, they also included a variable equal to one if the firm had at least one takeover defense after the IPO. They also included other control variables that may affect the acquisition likelihood, such as leverage, size of total assets and stock return. The results from this regression showed a significantly negative effect of having takeover defenses (both at and after the IPO) on acquisition likelihood. It should be noted that the dependent variable was equal to one if the firm was actually acquired, i.e. unsuccessful takeover attempts was not included in the definition. However, Field and Karpoff claim that results were not materially affected when unsuccessful bids were included and the likelihood of receiving unsuccessful bids was not significantly related to the presence of takeover defenses.

The negative effect on acquisition likelihood found by Field and Karpoff is contradictory to previous research, not specifically focusing on IPO firms. For example, empirical research by

Ambrose and Megginson (1992) found no evidence of a reduced likelihood of receiving a bid (except for firms with blank check authorization) for firms with staggered boards, fair price provision, dual class capitalization or poison pills in a sample of exchange-listed firms in the US in the period 1981-1986. Neither did Comment and Schwert (1995) find any evidence of a reduced likelihood to be acquired for firms with poison pills in all exchange-listed firms in the US in the period 1977-1991.

Whatever reason for the conflicting results, the negative effect on acquisition likelihood found by Field and Karpoff clearly indicates that takeover defenses prevent shareholders from receiving premium bids. However, a reduced likelihood itself does not say anything about the average effect of takeover defenses on firm value. A reduced likelihood of being acquired is consistent with the theories for the view that defenses can increase firm value. Also, if takeover defenses in reality lead to higher premiums because of an increased bargaining power, this could fully offset the lower probability of being acquired.

3.4.4 Bargaining power

Daines and Klausner (2001) argue that takeover defenses, if they increase bargaining power, are most value enhancing when there is little competition among bidders. If several bidders are interested in acquiring the firm, they argue that competition will naturally lead to higher premiums without the need of defenses. As a proxy for competition they used the number of acquisition bids in a firm's industry in a five years period around the IPO. According to their view, defenses should be more common when competition is expected to be low. However, when they regressed the strength of defenses at the IPO stage on this proxy they found a significantly positive relation. This result leads them to reject the hypothesis that bargaining power explains the use of ATPs.

However, such a conclusion is not without problems. Coates (2000) points out that bid activity may not be a good proxy for the value of bargaining power, as it can shift dramatically over time. Coates also has an alternative interpretation of the results. His interpretation is that high levels of M&A activity should make IPO participants more aware of takeover risk, and hence make firms

more likely to adopt takeover defenses.

Field and Karpoff (2002) have tested whether acquired firms with takeover defenses in fact did receive higher premiums than acquired firms without defenses. The test was done using a regression model with takeover premium measured as cumulative market-adjusted abnormal return from 42 days before announcement through the earlier of the date of delisting or six months after announcement as dependent variable. As independent variables they had a dummy equal to one if the firm had takeover defenses at the IPO, a dummy equal to one if the firm had takeover defenses after the IPO.[5] When they regressed this model on the firms acquired within five years after the IPO, they found no significant relation between the presence of takeover defenses and takeover premiums. They also found no significant relation when they ran the regression on their whole sample of IPO firms, with the premium set to zero for firms not acquired. This last regression is interesting since it measures the net effect of a possible increase in premium and a possible decrease in acquisition likelihood (Comment and Schwert, 1995). For example, if premiums for firms with takeover defenses on average are twice as large as for other firms and firms with takeover defenses have a 50% lower probability of being acquired, then the estimated coefficient would be zero.

Field and Karpoff's (2002) non-finding of a higher premium for firms with takeover defenses is contradictory to previous research on seasoned firms. Comment and Schwert (1995) found a significantly positive correlation between the presence of poison pills and premiums. The positive correlation was found both in a sample of only successful takeovers and in a sample of all exchange-listed firms, with the premium set to zero for firms not acquired a specific year. For firms with pills, the premium was on average 16% higher.

We think that a possible explanation for the inconsistence between Field and Karpoff's results and Comment and Schwert's results is that ownership is still fairly concentrated even five years after the IPO. Mikkelson et al (1997) found that the median ownership by officers and directors is 29 percent five years after the IPO. The bargaining power provided by takeover defenses is

[5] They also include some control variables like earlier stock return, growth, size of assets etcetera.

probably higher when ownership is dispersed. Therefore, even though Field and Karpoff did not find any evidence of increased bargaining power, we think that it is fully possible that takeover defenses can create some bargaining power in a firm's future, when ownership is more dispersed.

3.4.5 IPO pricing

Baranchuk et al (2004) examined the effect of takeover defenses on market valuation. When they regressed the offer price on the number of takeover defenses and some control variables[6], they found significantly positive relations between equity valuation and takeover defenses. To the extent that this test is reliable, the result indicates that takeover defenses increase value.

3.4.6 Conclusion

The empirical evidence on the view that takeover defenses are adopted because they increase value is mixed. Takeover defenses are not more common in firms where agency costs can be assumed to be constrained. On the contrary, some findings indicate that defenses are more common in companies where monitoring by shareholders is weaker. On the other hand, there are no signs indicating that firms with defenses should be managed less efficiently.

Regarding the view that defenses are more common in firms where myopia and asymmetric information can be expected to be a larger problem, the empirical evidence is inconsistent between studies. Consequently, no conclusions can be drawn on this issue.

Acquisition likelihood has been found to be lower for firms with defenses. However, this is not enough to conclude that defenses are harmful. Lower acquisition likelihood should be expected for firms with powerful defenses, otherwise they would not be useful. On the contrary, takeover premiums have not been found to be higher for firms with defenses. However, the premium was

[6] Net sales, industry q ratio, growth in sales relative to industry growth prior to the IPO, absolute change in the proportion of stock held by the CEO, leverage and a dummy equal to one if the firm was backed by a venture capitalist.

measured for firms acquired relatively soon after the IPO, when the increased bargaining power of defenses can be expected to be small. Therefore we hesitate to conclude that takeover defenses can increase bargaining power in the future.

Finally, despite the findings that takeover defenses are not more common in firms where there is most potential for takeover defenses to increase value, the results of a regression on equity valuation on takeover defenses suggests that takeover defenses might be positively priced at the IPO.

In sum – the empirical evidence is not strong enough to conclude that takeover defenses are adopted because they increase value. On the other hand, there is not enough evidence to reject this view either.

3.5 Evidence from venture capitalists

Further insights into whether takeover defenses generally decrease value can be drawn from evidence on venture capitalists decisions to adopt defenses. Many IPO firms are funded by venture capital or LBO funds. If takeover defenses really are detrimental to shareholders' wealth, one would expect that takeover defenses are less common among firms backed by venture capital or LBO funds. Venture capitalists are active and monitoring investors (Lerner, 1995). Empirical evidence has also shown that venture capitalists implement effective corporate governance structures. Baker and Gompers (1999 and 2003) have found that venture capitalists implement more effective compensation and board monitoring structures. Roosenboom and van der Goot (2004) have also found evidence suggesting that venture capitalists are effective in reducing agency costs. Considering the incentives for private equity investors to maximize the value of a firm in the IPO, it is unlikely that they would allow value decreasing measures.

It is also unlikely that private equity investors would adopt takeover defenses motivated by the enjoyment of private benefits of control. As active owners, but not managers, it is not likely that they are able to extract any substantial private benefits. Secondly, they are not long term owners

after the IPO and the value of eventual future private benefits should therefore be small (Schwienbacher (2002) found that the average time stayed in the venture after the IPO is 14 months in the US).

In the spite of these arguments, the empirical evidence does not support the hypothesis that private equity backed firms are less likely to adopt takeover defenses. Field and Karpoff (2002) found no significant relation between the likelihood of having takeover defenses and being venture capital backed. Neither did Daines and Klausner (2001) find any significant relation between the strength of takeover defenses and venture capital financing. Coates (2000) even found a significantly positive relation between the strength of takeover defenses and venture capital financing.

One possible explanation for these findings is that takeover defenses are not generally inefficient, and that private equity investors allow or maybe even force adoption of takeover defenses whenever they are value enhancing. Empirical support for this view is given by a study of Hochberg (2003). She found that venture capital financed firms adopting poison pills within three years after the IPO experienced significantly positive abnormal returns upon the announcement.

Klausner (2003) offers another explanation that is able to explain the results even if takeover defenses are assumed to reduce firm value. The logic in his reasoning is that private equity funds compete in two markets; one market for funding and one market for businesses in which to invest. In order to maintain a good reputation in the market for investments, Klausner argues that it might be rational for the private equity funds to allow takeover defenses. If the benefit of not having takeover defenses is lower than the cost of reputational damage and lost investment opportunities, it is optimal for private equity funds to allow defenses. However, this hypothesis has yet to be tested empirically.

Klausner's hypothesis is similar to a theory by Black and Gilson (1998). Black and Gilson propose that the venture capitalist and the entrepreneur have an implicit contract to return control of the company to a successful entrepreneur by allowing the company to go public instead of being acquired. If the transfer of control to a successful entrepreneur is crucial for the long run

success of venture capitalists, adopting takeover defenses could be used as a method to further secure the entrepreneur's control after the IPO.

4. Explanations assuming takeover defenses reduce value

As we discuss in the previous section, there is no strong empirical evidence supporting the view that takeover defenses are used because they are value enhancing. Researchers have therefore come up with other possible explanations for the presence of defenses in IPO firms. These explanations accept the view that defenses reduce value, but challenge the view that firms go public in value maximizing forms.

Bebchuk (2003) presents six possible explanations for the implementation of takeover defenses, assuming that they are negative for shareholder value. Field and Karpoff (2002) and Daines and Klausner (2001) have also provided some explanations to why firms would adopt takeover defenses, even if they have a negative impact on firm value. Those explanations are included in Bebchuk's six explanations and we have therefore chosen to base this section on Bebchuk's explanations.

4.1 Agency problems among pre-IPO shareholders

Bebchuk (2003) offers an explanation based on agency problems among pre-IPO shareholders.[7] He suggests that when a firm goes public its investor base can consist of different types of investors. Some of these owners might have an active role in running the firms (i.e. shareholders-managers), while other are more passive. The interest of the shareholder-managers may be different from the other shareholders; a shareholder-manager may in particular be more positive to takeover defenses being implemented, Bebchuk argues.

The reason for this is that a shareholder-manager is able to capture one hundred percent of the

[7] This explanation has also been suggested by Field and Karpoff (2002).

private benefits, but only bear a part of costs. The costs will be born by all the pre-IPO shareholders. Consequently, the shareholder-manager may prefer to adopt takeover defenses even though it will decrease the overall wealth. Adoption of value reducing defenses is obviously not in the interest of the other shareholders, but Bebchuk suggests that they may not prevent the adoption if they are uninformed and/or passive in monitoring the manager.

As empirical support for this explanation, Bebchuk refers to the negative relation between management's ownership before the IPO and likelihood of having takeover defenses found by Field and Karpoff (2002). However, as we have mentioned earlier, Daines and Klausner (2001) found a small, but significantly positive relation between insider ownership and the strength of takeover defenses. Given the inconsistency between these studies, it is certainly not evident that agency problems among pre-IPO shareholders can explain the wide use of takeover defenses at the IPO stage. Further critique against this explanation is that it fails to explain why takeover defenses are no less common in venture capital financed firms (Klausner, 2003). As we have discussed in *Section 3.5*, venture capitalists are neither uninformed nor passive owners.

In addition, it seems implausible that agency problems can explain the increasing use of takeover defenses.[8] If anything, pre-IPO investors should have become more, not less, aware of the effects of takeover defenses.

An interesting question is whether agency problems prior to the IPO imply that takeover defenses are adopted at the expense of the other shareholders. Field and Karpoff (2002) suggest that pre-IPO investors pay prices that reflect the expected costs of agency problems. If the takeover defenses are already adopted when the pre-IPO investors invest in the company, we are back in a situation where the entrepreneur (who presumably is the manager) still has to bear the full cost of having takeover defenses. However, the situation is different if the takeover defenses are not already in place when pre-IPO investors invest in the company. The cost that the entrepreneur has to bear should only the investors' expected cost of defenses. If investors assign a probability of takeover defenses being implemented that is less than 100 percent, the entrepreneur does not have

[8] See *Section 2.2*.

to bear the full cost. An implication of this reasoning is that the entrepreneur has to bear some cost of having takeover defenses whenever investors assign a probability larger than zero. However the entrepreneur has incentives to implement takeover defenses whenever he is able to. A rational pre-IPO investor should recognize this incentive and never pay a price that does not fully reflect the cost of future takeover defenses. The equilibrium is thus a situation in which the entrepreneur always implements takeover defenses whenever he is able to, but in which he also has to bear the full cost of them. This implies that agency problems do not mean that takeover defenses are adopted at the expense of non-manager shareholders.

4.2 Agency problems between lawyers and pre-IPO shareholders

Bebchuk also offer an explanation that is based on agency problems between lawyers and pre-IPO shareholders. An IPO firm may adopt takeover defenses because they get that advice from their lawyers. Bebchuk argues that lawyers could be biased towards implementing takeover defenses in the IPO firm for two reasons, even though it is not optimal from the owners' perspective. The first reason is that a lawyer's cost of not implementing a takeover defense probably is higher than the benefit of adopting one, Bebchuk argues. With no takeover defenses, the probability that the firm will be taken over is higher and the lawyer will have an increased probability of losing a client. Bebchuk also suggests that the lawyer could lose in reputation if the IPO firm he worked for later was taken over very easily. On the other hand, Bebchuk argues that the benefit of not having takeover defenses, a higher IPO price, would most probably not benefit the lawyer at all. According to this view, firms adopt takeover defenses because of bad advices from their lawyers.

As we discuss in *Section 5.1*, Coates (2000) has found that the IPO firm's legal advisor has significant influence on the strength of takeover defenses a firms adopts. This finding clearly suggests that there exists some form of agency problems between lawyers and pre-IPO owners. However, Coates (2000) also found that when controlling for law firm effects, venture capital financed firms were more likely to adopt defenses. Since venture capitalists can be assumed to be

better informed regarding the effects of defenses than an average owner, it seems unlikely that venture capital financed firms should be more likely to adopt defenses based on bad advice from their lawyers.

4.3 De-concentration of ownership

Bebchuk's next explanations for the adoption of takeover defenses are efficiency based. Under the first explanation, Bebchuk suggests that takeover defenses can be efficient because they encourage managers to raise capital and thereby move to dispersed ownership. The reason for this is that a firm with a controlling shareholder may be unenthusiastic to go after a profitable investment opportunity if it includes raising capital. This is because raising outside capital would de-concentrate the controlling shareholders ownership, which would reduce their private benefits of control. However, pursuing a profitable investment opportunity would of course be value enhancing for all shareholders. Having takeover defenses would thus increase the value of the company in the IPO, even though the takeover defense itself has a negative effect.

Obviously, this explanation fails to explain the presence of takeover defenses in IPO firms where the ownership already is dispersed. Moreover, Klausner (2003) points out that this explanation fails to explain the presence of takeover defenses in private equity funded firms. In private equity funded firms the manager usually does not have a controlling block before the IPO (Daines and Klausner, 2001).

No empirical research has tested this theory. A possible method could be to examine changes in the ownership structure at the time of the IPO and after the IPO, in firms with and without takeover defenses respectively. Daines and Klausner (2001) show data on average share ownership by CEO and top managers before and after the IPO. However, they do not show how the average share ownership differs between firms with takeover defenses and firms without.

4.4 Efficient rent protection

Bebchuk next offers an explanation that he calls efficient rent protection. Under this explanation, the value of the firm will be lower at the time of the IPO if the firm has takeover defenses. However, the controlling shareholder is willing to bear this cost if the private benefits are larger than the reduction in share value. The difference between this explanation and the explanation presented earlier about agency problems among pre-IPO shareholders is that under this explanation, the private benefits are larger than the total reduction in share price, not just the reduction in the controlling shareholder's stake.

Klausner (2003) points out that Bebchuk is unclear regarding what sort of private benefits that can outweigh the cost of defenses. Above market level compensation can not satisfy this condition, since every dollar gained by the manager is a loss for the shareholders (Klausner, 2003.). Klausner suggests that psychic private benefits of control are what Bebchuk had in mind. These kinds of benefits are by definition difficult to measure. However, Coates (2000) suggests that CEO's tenure, whether the CEO founded the company, whether the company is family owned and whether the company is named after the CEO as possible empirical proxies. Coates found a significantly positive relation between the strength of defenses at the IPO stage and whether the CEO was also the founder, but he found no significant relation with the other of his suggested proxies. Neither did Field and Karpoff (2002) find a significant relation between the presence of takeover defenses at the IPO and the number of years the CEO has been with the firm. Inconsistent with Coates finding, Daines and Klausner (2001) did not find any significant relation between the strength of defenses at the IPO stage and whether the CEO was also the founder. Accordingly, there exists no empirical evidence supporting the view that takeover defenses are adopted to protect psychic private benefits of control. Coates (2000) have, however, found that high psychic benefits of control lead to dual class capital structures.

Bebchuk do not offer any suggestion on how the other pre-IPO shareholders should be compensated. The requirement in this explanation, that private benefits should be higher than the total cost of having defenses, is not necessary if the controlling shareholder/manager is able to adopt takeover defenses without compensating other shareholders. Bebchuk suggests that

"bribing" the other shareholders is not realistic as it can be "regarded is a violation of fiduciary duties" (Bebchuk, 2003, p. 734). We suggest that one possible method to compensate the other shareholders is that pre-IPO investors pay a price reflecting the cost of defenses for their shares. Another possible way to compensate other shareholders could be by letting the manager bear the cost of IPO underpricing, i.e. the usual discount on the offer price in an IPO.

4.5 Asymmetric information

Bebchuk next offers an explanation based on asymmetric information. Under this explanation public investors are assumed to have imperfect information about the value of a company's assets. However, they have perfect information about the effect of takeover defenses. If one assumes that higher asset value leads to higher expected benefits from rent protection for the founders, Bebchuk shows that they will have an incentive to adopt takeover defenses in order to signal a high asset value. Antitakeover arrangements are assumed to destroy shareholder value and thereby reduce the price of the IPO, but the benefit of conveying information about the high asset value outweighs the negative share value effect for the shareholders.

An objection against this explanation is that the existence of asymmetric information problems is an argument for the view that takeover defenses could be beneficial to shareholders. If the market price does not reflect the fundamental value of the firm, but the managers know the true value, shareholders can be better of by letting the managers decide on whether a takeover bid should be accepted.

4.6 Bounded attention

Bebchuk finally suggests that takeover defenses are not priced at the IPO. He argues that investors at the IPO stage may not have unlimited informational and computational capacities.
IPO investors may therefore focus on the most important parts of the company and ignore the presence of takeover defenses.

Additionally, Bebchuk suggests that shareholders may not focus that much on takeover defenses at the IPO stage because the effects may not be relevant until later, when ownership is fully dispersed. If the manager owns a sufficiently large block after the IPO, he could effectively block a takeover bid without the need of takeover defenses.

If it is correct that defenses are not priced at the IPO, the controlling shareholders should have an incentive to implement them. The reason for this would be that they would still get the same price at the IPO, but at the same time they would be able to keep their private benefits of control.

As Klausner (2003) points out, Bebchuck's explanation is not without problems. The argument, that investors might not focus on takeover defenses because they are not relevant until ownership is dispersed, implies that defenses are not priced in the secondary market either. If defenses are priced in the secondary market and the founder keeps a large block of shares after the IPO, then the founder would not be able to avoid the costs of having defenses. However, it seems unreasonable that the pricing failure should persist forever (Klausner, 2003). The argument that defenses are not priced because investors lack informational and computational capacities also loses reliability after the IPO. Moreover, as Daines and Klausner (2001) point out – if takeover defenses are not priced, why do not all firms go public with defenses?

The explanation that defenses are not priced at the IPO would maybe be plausible if a vast majority of the shares in the IPO are bought by individual investors, as opposed to institutional investors. Individual investors can not reasonably be assumed to have "unlimited informational and computational capacities". Nor can individual investors be assumed to fully understand the effects of takeover defenses. However, empirical research has shown that about 65% of shares in an IPO are bought by institutional investors (Wilhelm and Ljungqvist, 2002). Institutional investors generally have a negative view on takeover defenses and regularly vote against proposals to adopt defenses in seasoned companies (Klausner, 2003). Therefore, it seems unlikely that takeover defenses would pass by unnoticed at the IPO.

Additionally, empirical research indicates that corporate governance structures, including

takeover defenses, are priced at the IPO. Hartzell et al. (2004) found significant relations between Tobin's Q and various corporate governance measures at the IPO in sample of 107 REITs[9] during the period 1991-1998. Furthermore, Roosenboom and van der Goot (2004) found a positive relation between the market-to-book ratio of equity and the proportion of independent supervisory directors, management stock ownership and monitoring by non-management large shareholders and negative relation with the number of takeover defenses in a sample of 111 Dutch IPOs during the period 1984-1999. The takeover defenses used in the Netherlands are somewhat different to the used in the US. Therefore, we hesitate to draw any strong conclusions upon whether this finding applies to takeover defenses in the US. However, we think that the results at least indicate that takeover defenses are priced at the IPO.

[9] Real Estate Investment Trusts

5. Explanations for the variation in takeover defenses

Some researchers have focused on explaining the variation in the use of takeover defenses at the IPO stage, rather than explaining why it can be optimal for some firms to adopt defenses. In other words, these explanations simply assume that there exist reasons for firms to adopt defenses.

5.1 Law firm hypothesis

Coates (2000) presents a hypothesis focusing on explaining the variation in the use of defenses at the IPO stage. Coates assumes that it is an optimal strategy for all firms to adopt defenses before going public. Defenses can be optimal for pre-IPO owners for several reasons. One possibility is that defenses increase firm value (for example by increasing bargaining power), another is that private benefits of control outweighs a possible reduction in firm value, and a third is that defenses are not priced at IPO. Coates, however, only assumes that at least one of these reasons is valid.

Coates' hypothesis is that the variation in the use of takeover defenses is caused by a failure in the market for legal services. He suggests that even though defenses are optimal, not all firms receive that advice from their lawyers. In order to test the hypothesis, Coates (2000) constructs a number of variables measuring the M&A expertise of the IPO firms' legal advisors.[10] When he regressed the strength of takeover defenses in IPO firms on these variables he found significantly positive correlations. Stronger defenses are adopted if the IPO firm's advisor has more takeover

[10] The measures he constructs is the number of M&A-related lawsuits involving a company's IPO counsel, the number of M&A transactions that involved the IPO firm's counsel as counsel to either to acquirer or the target and the total number of lawyers in the law firm serving as the counsel to the IPO firm. However, since these variables are highly correlated, he only tests one of them at a time.

experience.

According to Coates (2000), this result indicates that takeover defenses are generally optimal. In our opinion, the evidence is far too indirect to allow the conclusion that defenses are optimal for all firms. Nevertheless, the results clearly indicate that choice of lawyer plays an important role in explaining the variation in the adoption of takeover defenses.

5.2 Demand-side theory

Hannes (2004) presents a theory that can explain why some, but not all, firms adopt takeover defenses. Hannes denotes the traditional theories on takeover defenses as supply-side theories, e.g. bargaining power, agency costs, private benefits. When considering only the traditional theories, one would expect that all firms in which the benefits (e.g. bargaining power or private benefits) outweigh the costs (e.g. agency costs) adopt defenses. However, as we discuss in *Section 3.4*, the empirical evidence does not support this view.

Hannes suggests that this is because traditional research has missed what he denotes demand-side considerations. With demand-side considerations, he means that the potential value of takeover defenses is dependent on other firms' decisions regarding defenses. The more firms there are with defenses, the lower is the value of having defenses, he argues. The reason for why this is the case is that takeover defenses divert takeover activity from potential targets with defenses to potential targets without defenses. An increase in acquisition likelihood should increase the value of the target. Therefore, even though a takeover defense may be beneficial for a firm when the firm is analyzed in isolation from other similar firms, the optimal strategy may be to not adopt takeover defenses if other similar firms have protections. When the market is in equilibrium, Hannes' theory suggests that the marginal firm should be indifferent between adopting and not adopting takeover defenses.

The demand-side theory is appealing since it recognizes the heterogeneity among firms, while it also offers an insight to why persistent significant correlations between firm characteristics and the use of defenses have not been found. However, the theory has yet to be tested empirically.

6. Summary and conclusions

A common view among academics has been that takeover defenses reduce firm value. In addition, it has been assumed that pre-IPO owners establish structures that maximize the value of the firm in an IPO. Together, these two views suggest that IPO firms do not have takeover defenses. However, empirical studies have shown that takeover defenses are very common in IPO firms. Moreover, defenses have been adopted at an increasing rate. For example, in a sample of IPOs during 2001 to 2003, 71 percent of the firms had classified boards (Baranchuk et al, 2004).

One suggested explanation for why some firms adopt defenses while others do not, is that defenses increase value in some firms, but reduce value in others. However, the empirical evidence does not support this explanation. Takeover defenses are not more common in firms where classic theories suggest that they are most likely to increase value. Moreover, some evidence suggests that defenses are value increasing, while other evidence do not. On the other hand, there is no conclusive evidence that takeover defenses are very harmful either.

Other explanations to why firms adopt takeover defenses accept the view that defenses reduce value. Instead, these explanations confront the view that firms go public in a value maximizing form. However, most of them are not without problems and none of them are strongly supported by empirical evidence.

Some researchers have focused on the variation among firms in the use of takeover defenses rather than the underlying reasons for why firms adopt them. Coates (2000) has found that the firms' legal advisors have significant influence on whether takeover defenses are adopted or not.

Hannes (2004) have presented a theory that suggests that a firm's decision to adopt takeover defenses can not be analyzed without considering the decisions of other firms. The logic in his theory is that the benefit of adopting defenses is lower the more defenses similar firms have adopted, since more firms with defenses should divert takeover activity to firms without defenses. In market equilibrium, his theory suggests that the marginal firm should be indifferent to takeover

defenses. To the extent that his theory is valid, it explains why no reliable relation between firm characteristics and the use of takeover defenses have been found.

Our main conclusion is that there exists no convincing explanation to why IPO firms adopt takeover defenses. However, since some of the theories have not yet been tested empirically, it is possible that some of the explanations we have presented in this thesis will be given more support in the future.

7. Appendix: Overview of takeover defenses

Poison pill

Poison pills are securities, possible for the board of directors to implement, that give their holders special rights if the issuing firm becomes the subject of a takeover bid. Typically a triggered pill gives the shareholders the right to buy shares of the target (so-called "flip-over" poison pills), the acquirer (so-called "flip-in" poison pills), or both at some fraction of the current market price of the common stock. The poison pill is usually triggered if a single shareholder, or allied group of shareholders, acquires more than a specified percentage of the company's shares, against the wishes of the board of directors. The effect of the triggered pill is a dilution of the potential acquirers share in the target or a share in the acquirer for the targets shareholders. In both cases, a hostile takeover becomes significantly more expensive.

Poison put

Poison put refers to bonds or preferred stock with an investor put option in the event of an unfriendly takeover. This gives the bondholder the right to put the debentures to the issuer at par, plus accrued interest, if both a) a change in control occurs when any person becomes the beneficial owner of a stated minimum percentage, e.g., 20% or more of the total voting stock of the issuer; and b) a change in rating of at least one full rating category downgrade by either Moody's or S&P occurs within a specific time frame determined by the terms of the covenant.

Classified (or staggered) board

The classified board usually segments the board into three classes of directors with each class serving consecutive and overlapping three-year terms. Therefore, each year only one-third of the board is re-elected. This makes it impossible to gain control of the whole board instantly. The potency of the classified board lies in the costly delay they create.

Strengthened board

Actions to strengthen the board would include; fixing minimum/maximum number of directors, allowing vacancies to be filled only by the vote of other directors or limiting the ability of shareholders to call special meetings or propose resolutions.

Anti-greenmail provisions

The anti-greenmail provision prohibits the practice of accumulating a sizeable block of stock in a company and then selling the stock back to the company at an above-market price, often in exchange for a stand-still agreement. This amendment is accomplished either through a charter provision which requires a shareholder vote or a resolution of the board of directors. The anti-greenmail provision may be effective in discouraging raiders from accumulating stock, but can also limit the options of the board of directors.

Blank check preferred stock

Un-issued preference shares whose terms and conditions can be determined by the board of directors. Companies often authorize a number of preferred shares equal to at least 20% to 25% of the number of common shares outstanding. These shares can be issued to parties friendly to the board of directors to block hostile bids or used as a vehicle to implement a poison pill.

Fair price provisions

A fair price provision requires a bidder to pay all shareholders a "fair price". The fair price is usually defined as the highest price the bidder paid for any of the shares acquired in the first stage of a two-tier acquisition. If the takeover is friendly or if the bidder obtains a specified supermajority level of approval for the merger by the target's shareholders, the fair price provision usually do not apply.

Stakeholder clause

A stakeholder clause gives the board of directors' permission to consider the effects of their decisions on stakeholders other than shareholders (e.g. employees, suppliers, community). This provides the board with a legal basis to reject takeover propositions, even though they are attractive to shareholders.

Shareholder meeting requirements

Different type of rules that make the corporate decision making process more complicated. These requirements include rules requiring a supermajority of shareholders to call a special meeting, rules that prohibits shareholders other than directors to call a shareholder meeting and rules imposing minimum advances notice of stockholder proposals.

Supermajority vote requirement

A supermajority vote rule requires that specific corporate actions are approved by a larger proportion of the outstanding shares than a majority. These requirements often exceed the normal level of shareholder participation in shareholder meetings. Consequently, actions requiring supermajority approval could be time-consuming and expensive.

Unequal voting rights

Unequal voting rights are when common shares have different voting rights. For example, two types of stocks can exist, where one has voting rights that are superior to the other. The shareholders owning the shares with the higher voting rights are able to maintain control with a small equity investment and can prevent a hostile takeover.

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