COMPOSING THE SYNTHETIC DEFENSE INDEX. SOME METHODOLOGICAL NOTES ON CONSTRUCTING THE MEASURE FOR DETERMINING THE STRENGTH OF ANTITAKEOVER CHARTER PROVISIONS COMPOSITION

This paper presents some methodological problems with computing sole, synthetic measure of company’s safeguard against the hostile takeover. Such a measure could be useful in further researches concerning financial effects of introducing, removing or existing of antitakeover charter provisions. Commonly used measures suffer for inadequacy to other countries law systems and for disregarding some theoretical constraints. From these weaknesses the general proposals on how to design the “right” index results.

Key words: shark repellents; technical barriers to takeover; antitakeover charter provisions, synthetic defense index; hostile takeovers; publicly traded companies

1. Introduction. The basic corporate document – the charter – may contain regulations that make the takeover more difficult for any or some parties. These regulations are not made only for deterring hostile raiders. But even if they are created for other purposes, their side act is distorting the corporation as a target of hostile takeover. The hostile takeover is a process of gaining control over a company by purchasing enough its shares to decide on company’s general activity and key positions in board and management, which process is not welcome by the incumbent firm’s authority.

Antitakeover charter provisions can be a part of defending system. Their function is described best by a chapter’s title from Bruce Wasserstein’s Big deal: the battle for control of America’s leading – “Defense: Building the Battlements” [31, p. 684]. Antitakeover provisions are similar to battlements: they make defense easier and defer aggressors. It should be noted, that companies can be defended in many ways. The most often applied classification uses a time dimension. This classification divides all antitakeover measures into two categories: preventative and active measures. The measures from the first group are designed to discourage a potential acquirer, thus they are applied before any takeover attempt. The second group encompasses devices used against defined suitor.

Preventative measures act as a kind of barriers to takeovers and sometimes are called technical barriers. Other names often used are: antitakeover charter amendments, porcupine provisions and shark repellents. Some scientists also rate poison pills among preventative measures, but it seems that this kind of device is something between preventative and active measures. They are adopted before the takeover attempt occurs (just like preventative ones), but are triggered and activated after a specific event, that is in most cases a bid announcement or purchasing e.g. 30 percent of company’s shares by an aggressor (like active measures). What is important – poison pills can stay inactive if the board decides so.

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1 The second type of barriers is called structural barriers. They are effect of general structure of the economic and law conditions. Structural barriers encompass among other: the size of capital market, the dispersion of ownership, the significance of financial institution and so on. Although it seems the structural barriers differ countries, in fact companies within the confines of one country can differ as regards to some structural barriers – e.g. dispersion of ownership. See: Ferrarini [12, p. 5]. It has to be noted there is another understanding of those types of barriers, see Ferrell [13, pp. 2-6].

2 According to Dawson, Pence and Stone [8; p. 423] poison pills refer to various measures that are implemented through the issuance of a pro rata dividend to common stockholders of stock or rights to acquire stock and/or other securities of an issuer or, under certain circumstances, a person or group (“Acquiring Person”) involved in a business combination with an issuer. [...] The poison pill may exclude Acquiring Person from the exercise of such rights.
This paper focuses on possibility to create a mathematical formula that will replace the number of shark repellents commonly used in researches concerning financial effects of antitakeover protection. It must be noted that all analyses conducted in this paper and formulas deriving from them are prepared for Polish legal limitations so cannot be used to other countries conditions.

The paper is organized as follows. In section 2 I consider the acting of shark repellents as an antitakeover measure in charters of Polish publicly traded companies. Section 3 presents some findings of previous researches concerning consequences of technical barriers and measures used to esteem the level of company’s protection. In section 4 I present disadvantages of simple indices commonly used and requirements for useful synthetic defense index.

2. Antitakeover provisions in Polish public companies’ charters

A number of shark repellents have been listed in the American literature for few decades (see: 18; 15; 26, pp. 343–364; 14, pp. 162–172; 31, pp. 700–709; 32, pp. 236–240; 6, pp. 834–836). Such considerable literature creates the temptation to transfer literally one or another classification to the legal soil of another country, but this manner of acting is unacceptable. Some repellents existing in United States cannot be adopted for example in Poland, where there mustn’t be any limitation of right to call special shareholders meetings, while in USA that kind of restriction is recalled in the literature (18, p. 540; 15, p. 782). The Polish commerce code empowers a group of shareholders having at least 10 percent of emitted stock to call a special meeting, and the charter can only relax this condition.

Shark repellents can deter hostile raiders by signaling that the takeover attempt could face some problems during two stages of the process: (A) the purchasing of shares and (B) gaining control over company.

First, charter provisions can make the purchase of a desirable number of shares more difficult by raising the quantity of stock that can give a shareholder the majority of votes during shareholders meeting, or by limiting “free market” for company’s shares. In Polish publicly traded companies’ charters three general types of shark repellents from this group are noted: Unequal voting power. Polish law admits the existing of shares with superior voting power only if they have no more than 2 votes. But there is one exception – shares issued before 2001 are still valid even though they have up to 5 voices per share. A person or a company trying to take another company over is forced to buy more than 50% of all shares to be sure that in shareholders’ meeting will have a majority of votes. An acquiring part can buy preference shares but it may be more costly and more difficult.

1. Shares transfer restrictions. Inscribed stocks (including the ones with superior voting rights) can be excluded from regular trading. A company charter can define some conditions under which this kind of stock could be purchased. The most common are:

- Approval of transfer concerning inscribed stock. This right is typically given to company’s authorities or other owners of inscribed stock. Without this permission a transaction could be illegal or could cause a deprivation of privileges. Sometimes an entitled entity has power to determine the buyer.
- Pre-emption right for defined shareholders or other entities (e.g. employees).
- Strict deprivation of privileges after transaction involving inscribed stock.
- Determined price of transaction (for example the price sometimes is defined at the level of issue price, which can keep owners from selling).

2. Limited voting power. This kind of charter provision can prohibit a shareholder from realizing voting power from all owned shares. Typically, there is a specific percentage (e.g. 20%) of all votes that cannot be exceeded (not in the term of possessing, but exercising) by single shareholder. Under the Polish law this kind of provision can be applied only for a shareholder having more than 20% of all shares. Theoretically, gaining over 50% of votes at shareholders meeting is not impossible because of some shareholders’ absence or the possibility to purchase amount of shares big enough to leave other owner with less than percentage defined in the charter (that means for example more than 80% if the voting power is limited to 20% of maximum votes at the meeting). A charter can exclude from restriction some owners, e.g. company’s founders.

Controlling majority of votes at shareholders meeting means that a controlling party can pass many important resolutions, but it does not mean the company is taken over. The second stage of a takeover process consists in turning the capital control into the real control. The real control refers to having majority in company’s authorities or leading to a combination with acquirer. In two-tier boards system – like in Poland or Germany – shareholders at the meeting elect mem-
bers of the supervisory board. The board represents the shareholders, monitors the board of managing directors, delegates managing directors, and has the power to decide in cases of extraordinary matters. The second group of shark repellents makes the replacing the incumbent supervisory board (and controlling the managing board) with acquirer’s delegates more difficult.

There are six general types of antitakeover provisions in this group:

1. Supermajority. According to Polish law merger between two or more public companies requires supermajority of 2/3 votes of each engaged corporations’ shareholders meetings. A charter amendment can require more strict conditions. These conditions encompass strict supermajority and raised quorum as well.

2. Heterogeneous board. A charter can exclude a number of board’s seats from shareholder meeting election. In practice in means that some members of supervisory board can be elected by specified shareholder or group of shareholders, by employees, by outside institution (e.g. a scientific institute) or by a shareholder who as first exceeded a specific share in firm’s capital (regardless of subsequent decrease). Such provision limits the power of a majority shareholder of electing a majority of board’s members.

3. Electing the board by a “groups’ voting”. Groups’ voting in its principle is similar to American cumulative voting. In this mode of election shareholders form as many groups (equal by votes power) as many board’s members have to be elected and each group delegate one person to the board. Some authors among shark repellents rate not cumulative voting but elimination of it (e.g. 16, p.39), arguing that elimination of cumulative voting may introduce a threat that unwellcome investor having less than 50% of votes could be completely separated from control. It is important to note, that a raider planning a corporate takeover can’t think about one or two seats in nine–member board, but rather at least five seats. It means that cumulative voting as well as “groups’ voting” should be regarded as a shark repellent. Polish commerce code empowers group of shareholders controlling at least 20% of capital to demand this way of election. A charter can only lessen this threshold.

4. Staggered board. In staggered board its members are divided into some groups and during the annual meeting shareholders can replace one of these groups. Probably the most common number of group is three, so every group is elected every third year. This mode of election prevents the board from being replaced immediately after the capital control over a company is taken by the raider. Even with over 50 percent of votes at shareholder meeting the acquirer can replace at the next meeting only 1/3 of board members with his own nominees. Taking whole control may take two or three years. Staggered board creates two kinds of threats for a raider. First, the planned, positive effects of takeover can be postponed, thus the target looks like risky business. Second, the target authorities may take some actions that could harm the acquirer, e.g. buy or sell assets, increase debt or (in the United States) adopt poison pills [3, part III]. In Polish publicly traded corporations, except staggered boards, there is similar mechanism to make a part of board entrenched – it consists in a specified tenure for every board member thus, in fact, it can make a board staggered.

5. Board changes restrictions. Heterogeneous or staggered board may not to be strong antitakeover measure if there is the way to evade these provisions. It can be made by packing the board or shorten the tenure of board. The general rule empowers shareholder meeting to do it, but sometimes charters make it difficult or impossible. Charter provisions can limit shareholders’ discretion in shaping the board by:
   - Supermajority rules for dismissing board members (including quorum rules).
   - Special requirements for at least a part of board members. The most common requirements are: Polish citizenship and independence (defined in various ways). Although some kinds of these requirements are easy to be evaded, they sometimes can be a good reason for litigation.
   - Strict procedures for replacing incumbent board members. Such kinds of procedures can, for instance, require a shareholder to have specific share at previous meeting to set a candidate for board member at current meeting (note that such provision is similar to staggered board), or a minority shareholders’ (e.g. 20 percent of votes made up of entities having separately no more than 3 percent) proposal for independent board member dismissal, or simple prohibition on dismissal of board members without any cause.
   - Preventing the raider from packing the board. Acquirers can try to add some members to the board without dismissing incumbents. If the operation has “big enough size”, a raider can gain the control over the board in accordance with the rules… unless ad-
ditional rules work. A charter can precisely state the number of board members, or limit this number. If a maximum number of board members is stated and there is no vacating, packing the board becomes impossible.

• Nominating a board member’s replacement. Shareholders can simultaneously nominate board members and their substitutes, thus, if any member is dismissed or have resigned, a successor can’t be elected, because a replacement becomes a successor. To prevent substitutes from being dismissed, some provisions like supermajority can be applied as well.

6. Difficulties with replacing managing directors. Even if the acquirer controls the supervisory board (having a slight majority) it can be unable to control current company’s operations that require controlling managing directors. It is also important, because possible merger plan has to be created by managing directors. Thus managing directors who cannot be fired means limited control of acquirer. Provisions that prevent managing directors from being fired are as follows:

• A charter may empower employees or other third party to nominate one or more managing directors; these nominees are excluded from shareholders and board power.

• Supermajority rule for dismissing managing directors (including quorum provisions)

Provisions noted above can have different intensities. For instance a company with inscribed stock with five votes giving 40 percent of all votes at shareholders meeting is protected better than a similar company with such shares giving only 10 percent of votes, managing directors who can be dismissed by supervisory board in presence of at least ¾ members are better protected than managers who can be hired by decision of half a board. Nevertheless the level of shark repellents’ antitakeover force is generally omitted in researches.

3. The effects of shark repellents

Existence of shark repellents is blamed for many disadvantages. By protecting firm’s authorities from removing by hostile bidder as well as by insurgent shareholders, they can harm shareholders by [1, pp.8–9]:

• Motivating directors to act in their own interest. Protected directors prefer building empires and extracting private benefits rather than serving company in shareholders’ interest. On the other hand, the protections can raise directors’ incentives to run long-term projects what could be better for owners of the corporation.

• Lowering the probability of acquisition. The strong antitakeover protection repel potential bidder and insolate shareholders from takeover premia. On the other hand, loyal directors can reject an acquisition offer when the price is inadequate and serve shareholder by this action.

• Lowering the premia. The takeover process costs, thus, even if an acquirer decides to set a bid for some target’s shares, the price will be probably lower because successful purchasing not always means taking control. As we have seen above, postponing positive effects of takeover can cause the value of acquisition to be negative, and the best way to avoid this situation is setting the lower price.

All three possible mechanisms can limit market valuation of protected firms. This point of view is called managerial entrenchment hypothesis.

On the contrary – there is also shareholders interest hypothesis, considering shark repellents as a set of mechanisms that allows management focus on long-term goals and as a result increases financial performances of a company and its valuation. Additionally protected incumbents can bargain the higher premia from an acquirer.

Several studies investigated the influence of shark repellents and similar mechanisms (like poison pills and antitakeover state statues) on financial features of companies. There have been two main approaches used for this purpose. First is the event study that shows differences between the dependent variable (e.g. stock price) before and after the examined event. Frequently used example of this approach is cumulative average abnormal return (CAAR). The methodology of CAAR was described e.g. by Eckbo [10, pp. 152–154]. He [10, pp. 176–182] as well as Coates [7, pp. 330–339], discusses some studies on shark repellents. This method consists in examining objects at different moments that have the common feature – adoption of an antitakeover amendment. In the second approach differences between companies with different protection level are examined. All research objects have to be at the same time point, but they differ with regard to an examined factor.

Johnson and Rao [21] didn’t find antitakeover amendments to have an impact on firm’s financial performance. Meulbroek et. al. [25] found that firms after adopting antitakeover amendments decrease industry–adjusted R&D/sales ratio by 5.99 percent during two years surrounding the year of adoption (−1,1), by 11.46 percent during three years window (−1,2) and by 12.04 percent during four year window
This suggests that entrenched directors can be more myopic than directors threatened by takeover. Mahoney, Sundaramurthy, and Mahoney [24] found weak proof for decreasing of long-term investment following the adoption of antitakeover amendments. They also searched for impact of absolute protection on investment. Coefficient described as “number previously adopted” turned out to be negative, but insignificant. On the other hand, the number of concurrently adopted was significant. It suggests that number of all adopted antitakeover measures can be as important as adoption of every one of them. Rose [27] found that Danish firms effectively protected by charters provisions had higher investment/total assets ratio than other firms, but coefficient was not statistically different from zero.

Bebchuck, Coates, and Subramanian [3] found that firms protected by staggered board are less likely to be taken over, but there were no statistically significant differences in returns observed. However, the key factor turned out to be the probability of being taken over, thus the staggered board costs the shareholders 9.2% less in returns.

DeAngelo and Rice [9] didn’t find the price changes around date of antitakeover amendments announcement as statistically significant. Linn and McConnell [23] did more research focusing on different dates, e.g. announcement day, board approval date and shareholders meeting date. They also investigated changes of charters that decreased antitakeover protection. Their main conclusion was that “antitakeover amendments are proposed by managers who seek to increase the value of the firm and are approved by shareholders who share that objective”. Jarrel and Poulsen [19] examined cumulative abnormal returns around the announcements of shark repellents proxy date. They found negative average CAR for these announcements. Comparing effects of different types of repellents, they found insignificant negative influence of fair price amendment and statistically significant negative influence of other provisions. Kabir, Cantrijn, and Jeunink [22], using similar method, found that announcement of issuing new preferred stock by Dutch listed companies had a negative effect on shareholders wealth, but there were significant differences between subsamples based on the three steps followed in the issuing process. Gompers, Ishii, and Metrick [16] found out that investing in firms with strong antitakeover technical barriers brought in 1990s lower rate than investing in firms with weaker protection. They also discovered that increase of antitakeover provision by one was associated with the Tobin’s Q factor lowering by 2.4 (8.9 in the end of last decade of 20th century) percentage point. Bebchuk and Cohen [2] focused on wealth effects of staggered boards and other antitakeover charter provisions listed by Gompers and others. They discovered that both staggered board and other provisions are effective ways to lower the market valuation of firm (measured by Tobin’s Q factor).

Generally, we can observe diverse findings concerning the effect of antitakeover charter provisions and the dispute between proponents of both hypotheses is far from being settled. Even studies conducted by the same scholars on comparable sample with the same method in different moments can bring different results [29, pp. 127–132; 30].

For this paper the key problem is how to measure the strength of protection given by specific set of shark repellents. It is important for both research strategies: event studies and differences approach.

4. Measuring the protection

The most common approach to compute the protection index is a simple adding one to another existing provision and the number of provisions treat as protection index. This method was used by Babchuk et al [3] or Gompers et al [16]. The composition of such indices can differ in terms of the number of shark repellents provision used by authors. For example Bebchuk et al used 6-element list of antitakeover charter provisions while Gompers et al constructed Governance Index based on 24 charters provision that strengthen and weaken directors’ position and – consequently – the threat of takeovers. Such an approach is easy and simple in use, so frequently met (28; 4; 11; 20; 5; 17; 29; 30). However indices built on this way of thinking (let’s name them simple indices) have some weaknesses: (I) omits the nature of a provision, (IIa) equally values all provisions, (IIb) disregards the law of diminishing marginal utility, and (III) omits potential synergies between provisions.

First of all (I) simple indices regard all provisions taken into consideration as discrete, one–null factors that could be observed or not observed in a company’s charter. However some of antitakeover provisions can have more than 2 values (especially shark repellents from first group presented in section 2) and thus can be graded.
Within the simple index all factors are equal valued and this creates two other disadvantages of such approach. Primarily (Ia) a company with inscribed stocks giving 60% of votes in shareholders meeting is better protected than a company with special requirements concerning one (of seven or nine) board member. In a simple index both companies’ protection level could be graded at the same level. The second (Ib) problem coming from equal valuation is disregarding the law of diminishing marginal utility. Even if two or more antitakeover provisions with the same strength are introduced in the charter, the overall protection of a company doesn’t have to be simply the number of used provisions, because marginal utilities of additional repellents could be decreasing.

The third problem (III) is opposite to the weakness (Ib) – between selected factors there could be the synergy observed. For example – as mentioned in section 2, heterogeneous board can strengthen the power of group voting provision. Separately considered such provision could be assessed as weak, but it gain some power when the board member (or members) nominated by non-shareholders became the key voter(s) in the board.

The good and useful synthetic defense index thus must:

1. Take into account the legal system of the country of origin – the commerce code and other laws should be the basis of the analysis.
2. Use different weights for listed factors – provisions with strong antitakeover potential should be highly weighted. Identification of such factors is uneasy, but possible.
3. Take into account the characters of factors – some factors are discrete (e.g. board can be staggered or not), some could be easily graded (e.g. percentage of limited voting power), and some are composed of a set of possible mechanisms (e.g. board changes restrictions).
4. Include the synergy and the law of diminishing marginal utility.

Such an index seems to be the better measure for further research on financial effects of shark repellents.

References

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СОСТАВЛЕНИЕ СИНТЕТИЧЕСКОГО ЗАЩИТНОГО ИНДЕКСА.
НЕКОТОРЫЕ МЕТОДОЛОГИЧЕСКИЕ ЗАМЕЧАНИЯ ПО ПОСТРОЕНИЮ МЕРЫ ОПРЕДЕЛЕНИЯ ПРОЧНОСТИ ПРЕВЕНТИВНЫХ ПОЛОЖЕНИЙ УСТАВА

В статье рассмотрены некоторые методологические проблемы, связанные с вычислительной основой синтетического метода измерения защищенности компании от неодружественного поглощения. Такой метод может быть полезным для дальнейших исследований, касающихся финансовых последствий введения, удаления или изменения противопоглощательных мер в Уставе компании. Традиционно используемые методы не учитывают особенности систем права стран и не учитывают некоторые теоретические ограничения. С учетом этих недостатков приводятся предложения с целью достичь «правильных» значений показателей.

Ключевые слова: методологические проблемы, финансовые последствия, Устав компании, синтетический индекс защиты, поглощение.