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### The capital market in the process of corporate governance

#### Abstract

*The paper focuses on the efficiency of a capital market in the process of corporate governance. The efficiency is concerned in a context of the company's structure of ownership. It is stated that dispersed ownership is most favorable for takeovers than in of concentrated ownership. The paper provides a model of a takeover that analyses relationship between the company's ownership structure and the motives behind takeovers. A specific case of a toehold as a factor exerting a discipline on managers' activities is investigated. The paper ends up with some concluding remarks on the discussed issues.*

#### Introduction

An important element of each system of external control over corporate activities is a capital market. This market ensures continuous monitoring of corporate activities and its influence can particularly be noticed when companies need an external source of finance.

The efficiency of the capital market as a mechanism of corporate governance is dependent on how easy unsatisfied shareholders can sell their shares. This, in turn, is determined by the degree of ownership concentration. A high concentration of ownership implies strong relations with companies and, consequently, also a strong motivation to commit itself actively in control over their activities. Large shareholders cannot sell their shares and not to risk serious losses, as the sales of a larger number of shares most commonly result in a fall of their prices. Thus, a concern with the corporate results is necessary, irrespective of the fact that it is in their best interest as well.

However, when the shares are dispersed and there is no single dominating shareholder, the capital market is perceived to be an efficient mechanism of control of managers' activities. The dispersion of ownership allows shareholders „leg voting” through the sales of their shares. Small shareholders can sell their shares easily enough so as not to be concerned with internal control. Thereby unsatisfied shareholders face the choice between „voice” and „exit”. Therefore, they can strive for a more active internal control („voice”) or simply sell their shares („exit”)<sup>1</sup>. If dissatisfaction of shareholders was common, this could result in massive sales of shares and consequently in the decrease in their prices. The threat of a massive „exit” provides a strong motivation for the corporate management, since it can not only increase the cost of acquisition of a new capital but also make it possible for external stakeholders to buy a package of shares large enough to take control over the company.

In the literature of the subject it is assumed that mergers and takeovers of enterprises allow the transfer of control over the worse managed enterprises to their better counterparts<sup>2</sup>. This function of mergers (takeovers) described as "the market for corporate control" should enforce managers to take actions that would lead to the maximisation of the shareholders' property. Generally, takeovers are regarded as an instrument of governance that contributes to the convergence of managers' interests with shareholders' interests. Owing to takeovers of firms, investors do not need to actively commit themselves to the governance on their activities, because they make companies open for those who tender the highest price. The market for corporate control can be compared to a continuous auction of a firm's assets: if the value of these assets falls below a certain level, outsiders can overtake the company and make a profit on that. As a result, the threat of a takeover does not only mobilise the management for action in the shareholders' best interest, but also can this action be done without direct control from their side.

Morck, Shleifer and Vishny distinguish between two types of takeovers:

- synergy takeover;
- disciplination takeover<sup>3</sup>.

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<sup>1</sup> A.O. Hirschman, *Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States*, Harvard University Press, Cambridge, MA, 1970, p. 72.

<sup>2</sup> T. Jenkinson, C. Mayer, *Wrogię przejęcia na rynku kapitałowym: Obrona, atak i rynek kontroli*, Wydawnictwo K. E. Liber, Warszawa 1998, p. 15–20.

<sup>3</sup> R. Morck, A. Shleifer and R.W. Vishny, *Characteristics of targets of Hostile and Friendly Takeovers*, in: A.J. Auerbach (ed.), *Corporate Takeovers Causes and Consequences*, University of Chicago Press, 1998.

Synergy takeovers are usually of a friendly nature. Their cause is a high likelihood of additional benefits for merging companies to take place. Synergy effects can arise, for instance, as a result of gaining access to new production factors or improving the market situation of the merged enterprises. Friendly takeovers constitute one of the basic ways that enable an entrance into new fields of activity. On the other hand, disciplinarian takeovers are most often of a hostile nature. The participating companies play the role of a raider and a target and aim at fighting and not arriving at a consensus. The essence of these takeovers is the assistance to a company to make profits again through overtaking a control package of shares and most commonly the exchange of the existing management.

## 1. Information asymmetry and the market for takeovers

Grossman and Hart constructed the model of a takeover, which is based on dependencies between the enterprise's ownership structure and the motives behind the decisions taken by bidders. The presented model is based on a belief that managers do not act in the best interest of shareholders<sup>4</sup>. It is assumed that a strong dispersion of shares does not allow a single shareholder to influence the decisions taken by the corporate board of directors. Grossman and Hart suggest that the existence of so called "raiders" is a factor that limits the freedom of action of managers. They buy enterprises, implement new management methods and then sell them at a higher price.

In this model, it was assumed that the profit function of a typical enterprise is given by:

$$g = f(a) \quad (1)$$

where:

$g$  – profit identified in this model with market value of company,  $a$  – variable describing "activity" generated in enterprise, e.g. investment decisions or efforts of managers.

$A$  denotes the set of all possible activities of the enterprise. Provided the managers choose activity  $a_0 \in A$ , the profits of the firm are given by

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The adoption of this division is the result of the character of the work. In the topical literature various classifications of takeovers exist.

<sup>4</sup> S. J. Grossman, O. D. Hart, *Takeover bids, the free-rider problem, and theory of the corporation*, "The Bell Journal of Economics" 11, Spring 1980, p. 42–64.

$g = f(a_0)$ <sup>5</sup>. In the next step of considerations it was assumed that the above enterprise becomes the target of the „raider” attack. The „raider” (firm or investor who wants to overtake control) issuing the announcement concerning the takeover bid at a price equal to  $p$ , is obliged to buy all shares offered to him. The gains of the enterprise after overtaking the control is given by the following formula:

$$v = \max f(a) + E \quad (2)$$

where:

$v$  – gain (value) of enterprise after overtaking control,

$\max f(a)$  – maximum gain which can be achieved with existing management,

$E$  – variable denoting the difference in management effectiveness between existing managers and raider.

Enterprise will be overtaken if more than 50% of its shares go to the raider. In fact, the package of shares can be significantly lower depending on the corporate ownership structure. In the model it was assumed that the shareholders and the raider know the values denoted in equation 2. If the tendering price is  $p$ , each shareholder who is thinking the attack be successful will not accept it in the situation when the tendering price is lower than the maximum value of the enterprise which can be achieved with the new management ( $p < v$ ). Thus, the raider should offer a price that fulfils the following condition:

$$p \geq v \quad (3)$$

where:

$p$  – price offered for company by „raider”,

$v$  – gain (value) of enterprise after overtaking control.

However, the fulfilment of condition 3 means that the raider will make financial gains equal to zero or negative (losses). Therefore, given the existing assumptions of the model the takeover will not take place.

Thus, it should be assumed that the „market for control” will fulfil its functions if the shareholders and the raider share different beliefs as to the value of the enterprise resulting from differences in preferences about risk and information asymmetry. With regard to the above and assuming that the raider values the enterprise at  $v$ , and the shareholders at  $v_s$ , for the bid equal to  $v_s$ , it may be expected that all shares will be overtaken by the raider and its gain will be as follows:

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<sup>5</sup> In their model, Grossman and Hart do not distinguish the notions of *gain* and *value of enterprise*.

$$V_N = v - v_S - c \quad (4)$$

where:

$V_N$  – gain of bidder from operation of overtaking control.

$v_S$  – value of enterprise perceived by shareholders,

$c$  – cost born by raider in connection with realisation of takeover operation,

There is a possibility that a part of shareholders will nevertheless not accept the raider's bid. Such a situation can take place if between the above mentioned shareholders and the raider are no discrepancies in the assessment of the enterprise's value.

## 2. The corporate ownership structure and the market for takeovers

When the shares are dispersed and there is no single dominating shareholder, the capital market is perceived to be an efficient mechanism of control of managers' activities. If the targeted enterprise is characterised by a big dispersion of shares (atomistic structure of shareholders), it seems quite unlikely that shareholders know the maximum possible value of the enterprise. In this case the influence of the decision taken by a single shareholder on the success of the takeover transaction is limited. The dispersion of ownership allows shareholders "leg voting" – through the sales of their shares. Small shareholders can sell their shares easily enough so as not to be concerned with internal control. Thereby unsatisfied shareholders face the choice between „voice" and „exit". Therefore, they can strive for a more active internal control („voice") or simply sell their shares („exit")<sup>6</sup>. If dissatisfaction of shareholders was common, this could result in massive sales of shares and consequently in the decrease in their prices. The threat of a massive „exit" constitutes a strong motivation for the corporate management, since it can not only increase the cost of acquisition of a new capital but also make it possible for external stakeholders to buy a package of shares large enough to take control over the company. Takeover can take place when there is a common belief that a low price of shares is the result of bad management of corporate assets, and not the expression of their real value. If it comes to a takeover of a company, the existing management team is in most cases replaced by a new one, that is such to be able to use the firm's potential properly.

<sup>6</sup> A.O. Hirschman, *Exit, Voice and Loyalty...*

The threat of such replacement provides a very strong motivation for managers. This threat may appear only when the capital market is sufficiently well developed and in connection with that plays an important role in exerting a discipline on managers' activities. Owing to takeovers, the capital market makes it possible for investors to maintain a permanent control over a firm's assets, which could possibly increase in value under another management team.

### 3. „Dilution factor” as a factor exerting a discipline on managers' activities

Grossman and Hart assume that the situation when the bidder owns a part of shares (so called dilution factor) in the company being taken over performs the key role in exerting a discipline on managers<sup>7</sup>. The bigger dilution factor, the bigger benefits from increasing the value of the enterprise that the „raider” is able to gain.

With consideration to the above, the offer addressed to shareholders should fulfil the following condition:

$$p \geq v - \phi, \quad (5)$$

where:

$p$  – price offered for company by "raider",

$v$  – gain (value) of enterprise after overtaking control,

$\phi$  – value of dilution factor, which is the value of shares which are owned by the bidder before making an offer.

Taking into consideration the value of dilution factor  $\phi$ , Grossman and Hart determine the lowest price which can be offered by the "raider" to original shareholders of the overtaken company:

$$p = \max (v - \phi, q) \quad (6)$$

where:

$q$  – current value of enterprise.

On the basis of equations 6.4 and 6.5 the gain of the raider is given by:

$$V = v - p - c = v - \max (v - \phi, q) - c \quad (7)$$

or equivalently:

$$V = \min (\phi, v - q) - c \quad (8)$$

<sup>7</sup> S. J. Grossman, O. D. Hart, *op. cit.*, p. 42–64.

The raider will achieve the gain if the values  $\phi$  and  $(v-q)$  will be higher than the takeover costs  $c$ .

Let's assume that shareholders are able to determine the value of dilution factor at which the expected turnover of the enterprise is as large as possible. The expected turnover of the enterprise is given by the equation below (making an assumption that the market is neutral against risk concerning the activities of the enterprise):

$$r(\phi) = q(1 - \pi(\phi, q)) + E(\max(\bar{v} - \phi, q) | \min(\phi, \bar{v} - q) > \bar{c}) \pi(\phi, q), \quad (9)$$

where:

$\pi$  - likelihood of takeover

$\min(\phi, \bar{v} - q) - \bar{c}$  - expected gain value for bidder.

If  $\min(\phi, \bar{v} - q) \leq \bar{c}$  the market value of the enterprise equals to  $q$ , since the likelihood of a takeover is equal to zero. For  $\min(\phi, \bar{v} - q) > \bar{c}$  the value of the enterprise is equal to the price offered by the raider.

On the basis of equation 9 we can say that the larger is dilution factor  $\phi$ , the lower is the price given in the takeover offer and, at the same time, the likelihood of a takeover increases. Thus, the growth of  $\phi$  forces managers to take actions that increase current gains, since it makes it more likely that takeover takes place. From the viewpoint of shareholders, establishing a dilution factor can affect the value of their property in a positive way. If shareholders do know takeover costs  $c$ , they will choose such  $\phi$  to make the inequality below true:

$$\phi > c \quad (10)$$

#### 4. The effectiveness of the market for takeovers as the market for managers' control

The deliberations on the influence of hostile takeovers on managers' activities do not provide a clear answer to the question how strong the discussed transactions determine their activities. Yet it is unquestionable that the existence of a real threat of a hostile merger (takeover) motivates managers to maximise the assets of shareholders. As it seems, an indispensable element of the effectiveness of the so called market for control is the developed capital market.

The effectiveness of the capital market as a mechanism of governance on corporate activities depends on how easy unsatisfied shareholders can sell their shares. This, in turn, is determined by the degree of ownership concentration.

A high concentration of ownership implies strong relations with companies and, consequently, also a strong motivation to commit itself actively in control over their activities. Large shareholders cannot sell their shares and not to risk serious losses, since the sales of a larger number of shares most commonly result in a decrease in their prices. Thus, a concern with the corporate results is necessary, irrespective of the fact that it is in their best interest as well. If single shareholders own several tens percent of shares of one company, then the „free rider problem<sup>8</sup>” does not exist, since they have appropriate incentives to assume active control over managers’ activities. Then, a problem reverse to the „free rider problem” can arise, because the dominating owners can strive to reinforce their position at the expense of the minority interests. In such a situation, control remains within the company (exercised by its board), and the capital market (and other external mechanisms of governance) is of relatively little importance<sup>9</sup>.

A number of empirical studies were carried out which tried to determine a real effectiveness of the market for takeovers as an external mechanism exerting a discipline on managers’ activities. Many researchers concentrated their attention on the issue of gains which are obtained by shareholders of the overtaking and the overtaken company<sup>10</sup>. Their findings show that a certain pattern was established according to which, in the opinion of researchers, gains are distributed between the owners of overtaking and overtaken firms. The shareholders of overtaken companies obtain significant gains as a result of being a target of the takeover while overtaking other companies has not a big influence on wealth of owners of the overtaking firms. According to Jarrell, Brickley and Netter, shareholders of the overtaken companies increased their earnings on average by 19% in the 1960s, 35% in the 1970s and 30% in the 1980s as a result of takeovers. While shareholders of the overtaking firms earned on this undertaking not much above 4% in the 1960s, 1% in the 1970s and somewhat more than 1% in the 1980s<sup>11</sup>. Nevertheless, both sides gain benefits

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<sup>8</sup> In the economic theory, this term is used to describe small shareholders who individually do not have a motivation to use the corporate ownership rights, which results from a significant dispersion of shares. In consequence, in the process of corporate control each shareholder attempts to take benefits of other people’s efforts, which makes him become a „free riders”.

<sup>9</sup> M. Hessel, *op. cit.*, p. 75.

<sup>10</sup> G.A. Jarrell, J.A. Brickley, J.M. Netter, *The market for corporate control: The empirical evidence since 1980*, „Journal of Economic Perspectives” 1988, No. 2, p. 49–68; M.C. Jensen, R.S. Ruback, *The market for corporate control: The scientific evidence*, „Journal of Financial Economics” 1983, No. 2, p 5–50.

<sup>11</sup> See: G.A. Jarrell, J.A. Brickley, J.M. Netter, *op. cit.*, p. 63.



as a result of the takeover transaction, which is often given as an example of advantages that corporate takeovers bring to economy<sup>12</sup>.

A few sources of gains being the result of activity of the market for takeovers are most often mentioned. The synergy effects which can manifest themselves, among others, in the reduction of production and distribution costs, can take place thanks to the takeover-related economies of scale, a vertical integration, an adoption of new production technologies or a better use of the potential of managers of the overtaking company. Direct financial benefits result, among others, from savings connected with the taxation of corporate activities or the avoidance of the costs connected with a potential bankruptcy of the overtaken company. Moreover, transfers of earnings from employees of the overtaken company are frequently perceived to be the main source of gains for shareholders generated through activities of firms on the market for takeovers. However, the conducted empirical studies do not provide a confirmation of that. According to the researchers, lay-offs of employees as a consequence of a corporate takeover are not the cause of considerable increases in wealth of owners. E.g. Yago and Stevenson analysing the activity of the market for takeovers in the New Jersey and New York states throughout 1978–1985 noticed that less than 2% of the total number of employees' dismissals over that period can be explained by the activity of the market for takeovers<sup>13</sup>.

As it seems, the biggest benefit for the overtaken company and the most obvious consequence of the activity of the market for takeovers is lay-offs of ineffective managers. Walsh proved that the management turnover in overtaken firms is significantly higher than in the same firms in „normal” times, i.e. when they are not a target of the market for takeovers<sup>14</sup>. Martin and McConnell noticed that those companies, in which the managers' turnover being the result of a takeover was high, were characterised by bad financial results prior to the takeover. Thus, the results of those studies support a hypothesis that an effective system of external control over corporate activities brings about changes in the composition of the management. The usefulness of the results of these studies is, however, somewhat limited, since the researchers did not analyse similar dependencies in the „control” group of companies, that is such,

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<sup>12</sup> M.C. Jensen, *Takeovers: Their causes and consequences*, “Journal of Economic Perspectives” 1988, No. 2, p. 21–48.

<sup>13</sup> G. Yago, G. Stevenson, *Mergers and acquisitions in the New Jersey economy*, New York: Securities Industry Associations 1986.

<sup>14</sup> J.P. Walsh, *Top management turnover following mergers and acquisitions*, “Strategic Management Journal” 1988, No. 9, p. 173–183; J.P. Walsh, *Doing a deal: Merger and acquisition negotiations and their impact upon target company top management turnover*, “Strategic Management Journal” 1989, No. 10, p. 307–322.

which were not the target of takeovers. Moreover, they assumed that the management turnover results wholly from the activity of the market for takeovers, excluding other reasons, e.g. voluntary changes in management positions<sup>15</sup>. On the other hand, Walsh and Ellwood analysed the relationships between the corporate financial results and the management turnover on the sample including overtaken, overtaking and control companies not involved in activities of the market for takeovers. Although the research findings show that the management turnover may be explained by a corporate bad financial situation as far as the overtaking and control companies are concerned, the expected relationship between the financial results of overtaken companies and the dismissals of their managers does not exist in the opinion of the researchers. They claim that the observed cases of the top management turnover in overtaken companies are voluntary in most cases. Managers leave even if new owners do not intend to fire them, because they do not want to be persecuted by them anyhow. They leave since in many cases they simply found new job offers in other companies, whose owners do not hold them responsible for failures of firms, which were managed by them, because they believe, for instance, that it was environment conditions which largely contributed to their failures. However, since Walsh and Ellwood did not provide evidence to what extent the top management turnover in overtaken companies was actually voluntary, the hypothesis put forward by them should be treated with big caution<sup>16</sup>.

However, critics of the market for takeovers performing the role of an external mechanism of control over corporate activities consider it to be a very costly means of replacement of incompetent managers<sup>17</sup>. Takeovers are costly both for the overtaking and the overtaken firms, which results from the existence of transaction costs connected with a purchase of shares and changes in top management positions. In order to make the market for corporate control operate effectively, it is also necessary to know the firm's market value. Yet due to the shortage of precise information concerning the current and the future situation of the company, as well as due to the activities of speculators who manipulate the share prices at the stock exchange, the corporate value measured as the price per share does not reflect its actual market value. Moreover, the threat of becoming the market for corporate control more active encourages managers

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<sup>15</sup> K.J. Martin, J.J. McConnell, *Corporate performance, corporate takeovers and management turnover*, University of Iowa: Ames 1989.

<sup>16</sup> J.P. Walsh, J.W. Ellwood, *Mergers, acquisitions and the pruning of managerial deadwood*, Dartmouth College, Amos Tuck School Of Business Administration, Hanover 1989.

<sup>17</sup> S.O. Collin, *The Institutional Control of the Corporation – extending the debate on the separation of ownership from control*, "Corporate Governance Research Papers" 1995, Vol. 3, No. 3, p. 18–127.

to take short-run actions and discourages to make long-run investments, which is the result of fear of the decrease in the current value of shares. In addition, the critics claim that takeovers reflect only the shareholders' interests and often destroy the relationships with suppliers, customers, employees and other shareholders, since they disrupt informal relations between them.

## Conclusions

1. Expectations concerning the benefits of combining activities of enterprises should be treated with some flexibility. It should be stressed that a merger (takeover) process does not boil down to the conclusion of transaction, but it leads to an effective integration of enterprises that enables to use possibly many sources of the value generation that are characteristic for this phenomenon.
2. The uncertainty connected with the size of the actually achieved rate of return results in investments in shares being burdened with a certain risk that is dependent on the likelihood of achievement of the expected rate of return in the future.
3. In case of some mergers (takeovers) there is a belief that managers who turned out to be successful in one industry are also capable to succeed in other industries. It seems, however, that the ability of effective corporate management on one market will not necessarily be transferred effectively to another market.
4. Mergers and takeovers bring about numerous effects. Their identification is not simple. It seems unquestionable that economic implications of this phenomenon, whether positive or negative, cannot be absolutely determined. The processes of corporate mergers and takeovers can be currently regarded as the symptom of seeking a new equilibrium in the global market. The characteristics of these processes have a specific importance for a theoretical analysis of many aspects of the functioning of economy. In particular, this may concern the position of enterprises towards financial institutions of different types, the role of the capital market in economy, or transformations in the ownership structure.

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