

**THE ROLE OF STRATEGIC INVESTORS IN POLISH COMPANIES:
CATALYSTS FOR ORGANIZATIONAL CHANGE OR OPPORTUNISTS?**

Martyna Janowicz ^{a)} Dorota Piaskowska ^{b)} Grzegorz Trojanowski ^{c)}

Tilburg University

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ABSTRACT

The entry of large activist (or so-called ‘strategic’) investors has become a prevalent phenomenon in transforming economies, such as the Polish one. This paper investigates the relationship between firm performance and the likelihood of a strategic investor entry, as well as the changes firms undergo while controlled by activist investors. The theoretical predictions and empirical analyses of 211 Polish companies in the period of 1994 – 2000 allow us to conclude that strategic investors are more likely to buy stakes in firms of higher labor productivity, and that they tend to seize significant control over the target firms before committing resources to restructuring them.

Keywords: Strategic investors, transition economies, organizational change, corporate restructuring, shareholder activism, privatization.

JEL classification: G30, G32, G34, L33, P31

^{a)} Department of Organization and Strategy and CentER Graduate School. E-mail: martyna@uvt.nl

^{b)} Department of Organization and Strategy and CentER Graduate School. E-mail: dorota@uvt.nl.

^{c)} Corresponding author: Department of Finance and CentER Graduate School, P.O. Box 90153, 5000 LE Tilburg, The Netherlands. Tel.: +31 13 4662804. Fax: +31 13 4662875. E-mail: greg@uvt.nl.

1. Introduction

Upon the opening of Central and Eastern European markets, many Western investors embarked on a race to gain a stronghold in the region. In the 1990's, Polish economy, like many others in the region, underwent a fundamental transformation as the centrally planned economy yielded to free market. A rapid inflow of foreign capital ensued. For many investors, the strategy of acquisitions clearly presented an advantage compared to a venture start-up, as it granted a fast access to the market.

The pre-transition companies, mostly state-owned, shielded from competition, operating on soft budgets, and managed in a plan- or politics-oriented manner had to change fast or go out of business (Djankov and Murrell, 2002). Privatization was set in motion, with the majority of enterprises passing into the hands of insider owners (Aghion and Blanchard, 1998). Soon, however, it became apparent that, compared to insider owners, outsider investors, with their superior financial and managerial resources, were capable of carrying out much more profound organizational restructuring (Aghion and Blanchard, 1998), even more so when they were foreign. Many of the state-run enterprises, on the verge of bankruptcy, undertook an active search for a strategic investor. The expectation was that such an investor would actively engage in restructuring of the company the share of which it acquired in the effort to make it competitive in the new free market circumstances (cf. Aukutsionek, Filatotchev, Kapelyushnikov, and Zhukov, 1998).

The practice of granting a strategic investor status to a major outside owner is a typically Polish phenomenon. An investor can be granted such a status by the government (in case of privatization) or by the target firm's board of directors. Under Polish regulations, strategic investors are able to accumulate shares into blocks, which give them sufficient decision power to enforce organizational changes. In return for certain privileges (e.g., negotiable share price or the option to increase the stake in the target firm while issuing equity

by means of a private placement), strategic investors are obliged to restructure the target firm, by means of knowledge or technology transfer, investment in capacity, expansion of activities, etc. A formal 'statement of intent' is countersigned by the parties. The most common commitments concern future investments, equity capital increases, as well as license and technology transfers (Rojec, 2001; Uminski, 2001). Being more capable of fulfilling such commitments, foreign investors assumed the role of a strategic investor much more often than Polish companies. In the period between 1990 and 1998, 75% of the \$2 billion investment commitments made by all investors came from the foreign ones (Uminski, 2001).

In this paper, we investigate whether strategic investors' stated intent to bring about restructuring indeed translated into organizational change in transition economy firms. Some earlier reports show that investors do not always fulfill their initial commitments (Supreme Chamber of Control, 2002). Moreover, those commitments are often breached (Rojec, 2001, who calls on the findings of Korze and Simoneti, 1992), and the host countries may be too weak to enforce the fulfillment of the investors' obligations (Uminski, 2001). Many foreign investors acquire privatized firms at a discount, which is meant to compensate for the investments in restructuring they are expected to undertake subsequently. Thus, an interesting question arises what the role of strategic investors in Polish companies is.

Two perspectives on the issue of strategic investor phenomenon need to be considered: that of the investor and that of the target company. The corporate governance literature brings those two perspectives together and analyzes the conflict between the firm owners (the principal) and managers (the agent). The presence of a large shareholder changes the nature of the agency problem. Larger shareholders have the power to monitor the managers more closely, which mitigates the traditional agency conflict (Shleifer and Vishny, 1986). At the same time they may be tempted to pursue their own goals at the expense of more dispersed fellow shareholders (Djankov, 1999), especially when minority shareholders' rights are not

adequately protected (Filatotchev, Kapelyushnikov, Dyomina, and Aukutsionek, 2001). Hence, on the one hand, large activist investors may potentially create value by improving managerial efficiency and firm performance. On the other hand, the same power that enables change enforcement provides the entrant with opportunity to extract private benefits.

Regardless of the investor's commitment to introduce change, the issue of organizations' willingness to undergo restructuring needs to be considered. Structural inertia theory suggests that organizations are likely to resist change, as it may undermine their stability and/or the position of the current managers. Considering the potentially beneficial changes that strategic investors, we bring together the agency theory and structural inertia theory to analyze what sort of companies are likely to experience the entry of a strategic investor, and under what circumstances the changes are carried out.

In addressing the first question, we hypothesize two alternative specifications of the relationship between target firm performance and the likelihood of a strategic investor entry. Different theoretical perspectives provide arguments to expect either a positive or a negative relationship between target firm performance and strategic investor entry. While addressing the second question, we propose that more change will be introduced in firms with relatively poor performance, and that the relationship between the voting power of activist investors and the scope of change introduced by them will be positive. We test the first prediction on a panel of 211 Polish listed companies in the period from 1994 to 2000 with probit-type models. The latter two hypotheses are tested by means of cross-sectional ordered probit models and Poisson regressions estimated for a subsample of firms that had experienced a strategic investor entry during the period of analysis. We find that labor productivity of the target firm positively influences the likelihood of strategic entry, and that there is a negative relationship between the profitability of the focal firms and the scope of change being implemented. Voting power of the strategic investor does not correlate with the scope of

change.

We proceed with the discussion of theoretical background, formulation of the hypotheses, as well as the discussion of prior empirical findings. Next, we present our data, methodology, and the empirical analyses. Subsequently, we discuss our findings. The final section concludes the paper.

2. Theoretical background and hypotheses

The political and economic transformation that affected Central and Eastern European countries in the early 1990's has left many of the local enterprises impotent of competing under the free market circumstances. A widespread privatization campaign was initiated in order to foster adaptation of local firms to the transformed operating environment. Due to specific political conditions of the transformation, insider ownership became prevalent. However, implementation of organizational changes appeared costly both in terms of capital and human resources: deep restructuring of an organization requires finance as well as managerial expertise (Carlin and Aghion, 1996; Aghion and Blanchard, 1998). Insider owners were soon found to be incapable of generating sufficient managerial and financial resources to accomplish the transformation. Outsider ownership, in particular by active strategic investors, constituted a viable solution to the problem (cf. Frydman, Gray, Hessel, and Rapaczynski, 1999).

Consequently, the government undertook an active search for outside investors, who would be willing to and capable of carrying out deep restructuring in the companies it still controlled. The enterprises that have already been privatized to insiders, also embarked on an active search for a strategic investor. In most of the latter cases, the government also influenced the entry of outsider investors through its direct or indirect stakes in the target companies. From this perspective, poor performers are more likely than good performers to seek the entry of a strategic investor, as their need for financial and managerial resources is

more acute.

Prior research found that the Polish managers' primary objectives in searching for a foreign investor were to secure the firms long-term development, access to financing, management, marketing and technological skills, as well as to save the firm from bankruptcy (Rojec, 2001). Target company's evaluation of potential candidates for a strategic investor has appeared to be based mainly on the investors' intention to restructure and develop the company (Rojec, 2001). The structure of guarantees and promises given by the outside investors also reflects the target companies' concern for restructuring and further development. Many firms looked for investors of foreign origin as these have been found to be particularly effective in restructuring the underperforming companies (cf. Carlin and Aghion, 1996). Also, it has been argued that when managers see their expectations in terms of performance being met or exceeded, they are more risk averse. When, however, the firm's performance falls short of their goals, they become more risk seeking (Greve, 1998), and thus may be more willing to allow the entry of a strategic investor even though it might constitute a threat to their position.

Also financial literature provides much evidence that poor performers are more likely to attract investors than those that perform well. Many finance scholars argue that the worse the target firm performance, the higher the probability of an activist investor entry (e.g., Bethel, Liebeskind, and Opler, 1998; Hotchkiss and Mooradian, 1997; Morck, Shleifer, and Vishny, 1989). There may be a number of reasons why this would be the case. Firstly, poor performers or simply undervalued targets may be more affordable (Hotchkiss and Mooradian, 1997). Secondly, some investors may acquire controlling stakes in poorly performing targets to benefit from bringing the company down rather than reviving it. These would engage in asset stripping of the target companies, the so-called tunneling, expropriation of minority shareholders, fraud, self-dealing transaction, transfer pricing and the like (cf. Johnson, La

Porta, Lopez-de-Silanes, and Shleifer, 2000).

Also, investors holding large blocks of shares have the possibility to discipline managers who fail to create shareholder value (Hotchkiss and Mooradian, 1997; Morck et al., 1989). Such discipline can take a form of mounting a proxy contest, replacing management or even taking the firm over. Thus, it is to be expected that activists would target the companies that are performing poorly. Empirically, Bethel et al. (1998) find that activist investors are more likely to purchase large blocks of shares in highly diversified firms with poor profitability. Also Nesbitt (1994) in his investigation of the institutional investor entry into target companies identifies the latter as underperformers. Similarly, Morck et al. (1989) provide evidence that firms with poor performance have higher probability of attracting external bids for control.

All of the above seems to imply that companies with good performance are not only relatively less attractive for strategic investors, but also are less interested in having one. On the other hand, it can be argued, that although the poor performers' need for outside help is relatively more acute, their motivation to strive for it may be lesser. Some authors indicate that inertia may be as much a product of failure as it is of success, as managers may be inclined to vindicate themselves by increasing rather than decreasing their commitment to their failing strategies (Miller and Chen, 1994). Conversely, good performers may need a strategic investor to provide them with managerial, marketing or financial resources necessary to capitalize on their potentially superior market opportunities.

Also, if performance is taken as an indication of how capable the target company is of succeeding, well performing target firms are likely to be attractive for strategic investors. Arguably, when the motivation for acquiring a stake in a company is to achieve benefits from geographic or product diversification, economies of scale and scope, synergies, etc. (cf. Seth, 1990), the better performing targets are likely to be preferred. In other words, strategic

investors would favor those target companies where the enforced changes could potentially yield highest returns. By the same token, investors may deem the poorly performing companies to be less attractive, since restructuring them and improving their competitiveness and performance may prove very difficult, for instance due to internal resistance or objective circumstances. Therefore, investment in poor performers may be associated with high risk,¹ and thus deter some investors from acquiring stakes in them.

A number of empirical studies seem to support the above claims. Particularly in relation to foreign equity, performance is often considered a possible determinant of the ownership stake (Bishop, Filatotchev, and Mickiewicz, 2002). Dahlquist and Robertsson (2001) show that foreign investors have a preference for better performing firms. In particular foreign equity is more likely in firms with higher current ratios, as it reflects their ability to meet short-term payment requirements. Also, Kang and Stulz's (1997) study reveals that foreign investors hold disproportionately many shares of firms with good accounting performance as measured by return on assets. Bishop et al. (2002) find the relationship to be insignificant when the level of labor productivity rather than financial indicators is used as a proxy for firm quality. The issue of the proper proxy to the side, some empirical evidence seems to confirm that many – typically foreign – investors prefer better performing companies.

Therefore, considering all of the above, one could expect that better performance of the target company would be an indication of a higher need to acquire a strategic investor and simultaneously of a higher chance of finding one.

The above discussion clearly leads us to two alternative predictions concerning the probability of a strategic investor entry as a function of target firm performance. While

¹ For example, ABB in Poland, having acquired a number of underperforming firms with the purpose of restructuring them and making them competitive, found that goal to be unattainable (Frost and Weinstein, 1998).

agency theory and policy considerations would point to a negative relationship between performance and strategic investor entry, the organizational inertia and strategy arguments would suggest the opposite. We aim to empirically determine which of the two holds for our sample of Polish firms, and hypothesize therefore that:

H1a: The likelihood of a strategic investor entry decreases with the target firm performance.

H1b: The likelihood of a strategic investor entry increases with the target firm performance.

As the entry of a strategic investor is only the first step towards corporate restructuring for the target firms, it is crucial to investigate the drivers of potential change in these companies. Arguably, the target firm performance is one of the key determinants of organizational change. In the population ecology literature, it has been argued and shown that declining performance is an indicator that the current way of doing things is not efficient, and that a change may be necessary (Tushman and Romanelli, 1985). When faced with declining performance, managers are stimulated to take a counter action (Cyert and March, 1963; Boeker, 1997; Greve, 1998; Kiesler and Sproull, 1982; Miller and Chen, 1994), also because potential political resistance to change is then easier to overcome (Finkelstein and Hambrick, 1996). In other words, underperformance gives motivation to search for new solutions (cf. Cyert and March, 1963).

Yet, good performance may be more than just an indication of change being unnecessary; it can also imply that organizational inertia is at work (Hannan and Freeman, 1984). Additionally, the longer lasting the success is, the greater the inertia and the resulting resistance to change are likely to be (Boeker and Goodstein, 1991). In such circumstances, change would be resisted, as it could undermine organizational stability by setting back the liability-of-newness clock (Amburgey, Kelly, and Barnett, 1993), and diverting organizational resources from day-to-day operations; change is risky and potentially harmful to organizational performance and survival chances (Hannan and Freeman, 1984), unless

undertaken in response to dramatic shifts in environmental conditions (Haveman, 1992).

Financial literature also offers some suggestions about firm performance and the magnitude of implemented change. It not only suggests that shareholder activism is conducive to change but also that declining performance strengthens this relationship. A review of literature on the subject lead Karpoff, Malatesta, and Walkling (1996) to hypothesize and later find empirical support for a negative relationship between firm performance and the amount of larger shareholder-initiated governance proposals. Also Nesbitt (1994) documents how CalPERS, an American institutional investor, has been able to prevent further losses in the strongly underperforming firms it targeted. The above discussion leads to a conclusion that there will be a negative relationship between the target firm performance and the scope of introduced change. Thus, we hypothesize that:

H2: The scope of strategic change is negatively related to the target firm performance.

The question of the extent of restructuring introduced by the strategic investors in the target firms requires further attention. Corporate governance literature rooted in the agency theory addresses this issue. In particular, it has been found that diffuse ownership results in a disproportionately high power being concentrated in the hands of managers, whose interests do not necessarily coincide with those of the shareholders (Djankov, 1999). The presence of a large shareholder, such as a strategic investor, changes the nature of this agency problem. When entrenched managers fail to restructure their firms, large outside blockholders have the power to monitor the managers (Shleifer and Vishny, 1986), effectively counter-balance their opportunism (Filatotchev et al., 2001), and promote the necessary corporate renewal (Zahra and Stanton, 1988). Obviously, changes are only possible when the large blockholders accumulate sufficient amount of control (Banerjee, Leleux, and Vermaelen, 1997).

Conversely, the blockholders may be tempted to pursue their own goals at the expense of dispersed fellow shareholders (Filatotchev et al., 2001; Morck et al, 1989; Shleifer and

Vishny, 1997), especially where the rights of the latter are not adequately protected (La Porta, Lopez-de-Silanes, Shleifer, and Vishny, 2000). Notably, the blockholders' incentives to expropriate minority shareholders get weaker when the stakes controlled by those blockholders in the focal firms increase (Bennedsen and Wolfenzon, 2000). Blockholders who control a vast fraction of equity are strongly affected by the changes in the value of the target firm. Consequently, since they internalize most of the expropriation costs, it is less advantageous for them to engage in some benefit extraction. Hence, on the one hand, a large activist investor may potentially create value by improving managerial efficiency and firm performance. On the other hand, however, the power held in the focal companies provides activist investors with an opportunity to extract private benefits. Still, their incentives to do so weaken as their stakes in the target firms become larger.

In the empirical research there is a lot of ambiguity concerning the impact of outside ownership on the extent of enterprise restructuring (Bishop et al., 2002). On the one hand, large blockholdings have been shown to be associated with substantial governance and operational changes (Bethel et al., 1998) as well as restructuring (Bethel and Liebeskind, 1993). In the context of Central and Eastern Europe, outside (often foreign) investors have been found to carry out the strategic restructuring (Aghion and Blanchard, 1998; Djankov and Pohl, 1998; Rojec, 2001), as demonstrated by changes in management strategy and significant investment increases (Dabrowski, 1996), and superior performance compared the domestically owned firms (Uminski, 2001; Megginson and Netter, 2001). Contradictory findings abound, however. There is little evidence on the difference between insider and outsider-dominated firms in terms of performance (Carlin, van Reenen, and Wolfe, 1995). Also, no robust relationship between type of ownership and organizational restructuring in Russian enterprises has been found (Linz and Krueger, 1998). There is evidence of successful corporate restructuring taking place even in the absence of large (foreign) investors (Djankov

and Pohl, 1998; Pohl, Anderson, Claessens, and Djankov, 1997). Moreover, some studies show a negative relationship between concentrated ownership and the subsequent restructuring (e.g., Filatotchev et al., 2001). Finally, there are a number of studies that show the effect to be neutral (e.g. Aukutsioneck et al., 1998) or non-existent (e.g. Brada, King, and Ma, 1997; Filatotchev, Hoskinsson, Buck, and Wright, 1996).

In case of Polish companies, some of the large outside investors are granted special benefits in return for their commitments to engage in deep restructuring of the target firms. These ‘strategic’ investors have the power and obligation to use their privileged position to introduce changes in the organizations they enter, yet reportedly they do not always do so. We focus therefore on the restructuring efforts that the strategic investors engage in, and argue that the scope of change the organizations experience will depend on the voting power exercisable by the strategic activist blockholder. Our theoretical discussion and the mixed empirical findings of prior studies indicate that scope of change resulting from strategic investor entry still remains an open empirical issue. The benefits that accrue to a blockholder from monitoring the management (and thus increasing the firm value) result in the alignment of interests between controlling blockholders and dispersed minority shareholders. This effect, however, can be partly offset by the extraction of the benefits of control at the expense of non-controlling shareholders, possibly even through collusion with the incumbent management (cf. Djankov, 1999). Yet, larger equity stakes decrease blockholders’ incentives to divert corporate resources from focal firms, and strengthen the alignment effect discussed above. Therefore, we predict a positive relationship between the share held by a strategic investor and the scope of change introduced in the organization:

H3: There is a positive relationship between the scope of strategic change implemented and the voting power of a strategic investor.

3. Data and methods

To test our hypotheses, we constructed a database of Polish listed firms for which shareholder data could be obtained by careful screening of *Parkiet* and *Gazeta Wyborcza* archives.² The initial sample consisted of 211 listed firms for which we were able to identify the ownership structure and its changes. Similarly, the choice of the observation period was determined by availability of data on ownership structure (in *Parkiet* database) and financial results of the potential target firms (as reported in *Notoria Serwis* files³). Alongside firms that survived the entire sample period, in our database we included both newly listed as well as delisted companies. In 49 out of the 211 sampled firms, the first or second largest shareholder had a status of a strategic investor.⁴ We carry out the empirical analyses in two steps, as explained below.

Step 1. In the first stage of our empirical analyses, that is in testing Hypothesis 1a vs. 1b on the relationship between target firm performance and the likelihood of a strategic investor entry, we use a panel of 211 firms over a 7-year period (1994-2000). The **dependent variable** is binary: it equals 1 whenever a strategic investor status is granted to one of a firm's blockholders in a given year, and 0 otherwise.

Theoretically, a fully fledged panel data binary choice model, such as fixed-effect logit or random-effect probit (Verbeek, 2000), would be an appropriate tool here. However,

² *Parkiet* is an official newspaper of the Warsaw Stock Exchange. *Gazeta Wyborcza* is the largest Polish daily. Additionally, in cases when information was not clear or not available, we used archives of another major daily, *Rzeczpospolita*.

³ *Notoria Serwis* collects official financial statements of Polish listed companies.

⁴ In some cases a strategic investor withdrew from a firm, and another one overtook her role. In 15 of the sample cases, an entry of a strategic investor (or the moment of gaining such a status) took place before the starting date of the sample period.

due to data limitations, it is not a viable alternative. Fixed effects logit specification would restrict model parameters to be defined through the within-group dimension of the data, i.e. to depend on the values of explanatory variables within the subsample of firms that gained a strategic investor during the sample period, only. On the other hand, we observe strategic investor entries in less than 4% of the sample observations (firm-years). This disproportion implies that the distribution of the random effects (in probit case) can hardly be estimated in a reliable way. Consequently, the applicability of a random-effect probit specification is also questionable. Therefore, we run a probit model on the pooled sample, and relax the assumption of independence of error terms across observations and allow clustering of observations corresponding to a given firm. In so doing, we assume error terms to be independent and identically distributed across firms, but not necessarily for different observations corresponding to the same firm. The reported t-statistics are based on robust covariance matrix estimate adjusted for clustering (StataCorp, 2001). This procedure enhances robustness of the findings and allows us to take the panel data structure of our sample explicitly into account.

Step 2. In order to test Hypotheses 2 and 3 on the determinants of the scope of strategic change, we first separate out a subsample of 45 firms that had a strategic investor during the observation period.⁵ Next, we employ two alternative estimation techniques on this subsample: ordered probit and Poisson regression models. Our choice of these methods is motivated by the nature of the **dependent variable**, the scope of strategic change, which we define as a count measure of several different types of strategic change as described below.

Ordered probit specification allows us to account for the ordinal nature of the data, specifically to estimate the probability of an increasing number of organizational changes to

⁵ Due to missing data, we cannot use all 49 cases identified above in the subsequent analyses.

be introduced by a strategic investor. The advantage of the ordered probit approach is that there is no a priori assumption concerning the relative conditional likelihood of each of the alternatives. This is the case for Poisson regression, where zero is the most likely outcome, while each subsequent number of changes would have a lower a priori probability.⁶ Such an assumption does not necessarily hold for our data; the frequencies of different outcomes do not decrease monotonically. Ordered probit specification requires however that we estimate a number of additional parameters, the so-called cut-off points that define the limits within which a certain outcome of the dependent variable is predicted. This is somewhat problematic given the small size of our sample. Poisson regression, on the other hand, does not require any additional parameters to be estimated. Since the application of either of the specifications to our data brings about both advantages and disadvantages, we report the results of both approaches in order to investigate the sensitivity of our results to the model assumptions imposed. As discussed below, both types of models render virtually identical conclusions.

Both ordered probit and Poisson regression models are estimated on the basis of relatively small subsample of firms in which a strategic investor is present. Therefore in order to ensure that the results are not due to few influential observations, we employ a bootstrapping procedure (with 1000 repetitions) to compute standard errors and the resulting t-statistics. This approach should mitigate potential small sample biases.

The dependent variable – the scope of change – comprises eight major categories of change, which we deduced from the extant literature and press releases we studied while collecting the data. The first category reflects changes in the structure of target organization

⁶ For instance, it is possible that for some values of the regressors, an ordered probit model predicts two as the most likely outcome of the dependent variable. Conditional on different values of the regressors, the same model may predict one as the outcome that is most likely to occur. A Poisson model always predicts zero to be a more probable outcome than one, one – more probable than two, etc.

(Bethel et al., 1998). It encompasses, among others, mergers, creation of holdings, and divestments (Uminski, 2001). We define the second category based on financial literature and include in it changes in financing, such as debt repayments or equity increases. The third category points to the problem of workforce and includes primarily employee layoffs (Del Guercio and Hawkins, 1999; Djankov and Pohl, 1998). Classes four and five concern shifts in the organization's management team. The former captures CEO successions (Karpoff et al., 1996; Bethel et al., 1998, Boeker, 1997), while the latter reflects management and/or board turnover (Djankov and Pohl, 1998; Uminski, 2001), which were documented to relate to firm performance, presence of an activist investor, and other changes within the target organizations (Carlin and Aghion, 1996). As the sixth category, we distinguish technology-related changes that are closely associated with target firm restructuring (Uminski, 2001). We also identify a group of marketing-mix changes, which we assume to encompass major product line shifts, price changes and/or extensions of distribution, introducing new products and accessing new markets (Djankov and Pohl, 1998). Finally, the last class comprises changes that do not fall under any of the above categories, yet are of potential relevance for the target firm performance.

In our sample, the observed scope of change varies from 0 to 6. Tables 1 and 2 describe the frequencies of changes introduced in the sample target firms and the average voting power of their activist investors.

[Insert Tables 1 and 2 about here]

Similarly to prior research (Rojec, 2001), we find that strategic investors are most eager to implement change in various aspects of marketing: they frequently offer the target firms access to their own markets, distribution networks, and brand names (see Table 1). Attempts to rationalize the product portfolio and further develop the distribution networks are also quite common. Additionally, we observe that the structure of the target firm is quite often

modified (in about a third of the target firms): strategic investors frequently create holdings after separating out various units from the target firm or, conversely, after merging several co-existing units into an integrated organization. Moreover, some unit closures and divestments take place, as well as mergers, which are widespread especially in the financial sector. This is again in line with prior findings (e.g., Rojec, 2001), which document that in about 14% of the Polish companies, the investors engage in selling off parts of the firms subsequent to the acquisition.

One third of strategic investors provides Polish firms with new technologies and technological expertise, modernizes existing production facilities, etc. More than a quarter of the firms benefit from changes in financing, such as debt restructuring, advantageous loans (underwritten by a strategic investor), equity increases, and others. Contrary to the common belief, relatively few companies (20%) suffer from major employee layoffs. In our sample, 12% of the strategic investors were obliged not to lay off any of the employees for at least two years after their entry, which may partly explain this result.

Few strategic investors alter the composition of the boards of directors and/or the management team: it took place in only 20% of the sample companies. A new CEO is appointed rather infrequently (only in about 11% of the target firms). Here our observations are again similar to those made by Rojec (2001), who finds that in Polish companies surveyed, the foreign partner, having acquired the firm, reduced employment and replaced members of the management team in 21.4% of the cases.

In some cases strategic investors seemingly use their status to go around certain regulations, delist, and take over the targets.⁷ In 20% of companies, contrary to earlier promises, no significant changes were carried out, while majority of the target firms (62%)

⁷ In almost 9% of the cases, strategic investor forced a delisting of the target firms already during the sample period, while in some other cases they revealed their willingness to do so in the future.

experienced significant changes in no more than two dimensions (cf. Table 2).

Explanatory variables. We hypothesized target firm performance to be the key determinant of both the entry of a strategic investors and the scope of strategic change. Consistent with prior research, a number of alternative performance measures were used. First, in line with prior research on the transition economies (Bishop et al., 2002), we used labor productivity (defined as sales⁸ divided by number of employees) as the main measure of performance. The labor productivity measure avoids potential unreliability problems with the accounting and stock market performance measures that relate to market underdevelopment, changes in regulations, volatile political setting, etc.⁹ Additionally, we used two traditional accounting-based measures of financial performance: return on equity and return on assets. All three measures of the target firm performance were calculated on an annual basis and lagged one period. Conceptually, this allowed us to capture the effect of past information available to the investors at the point of making their decisions to enter target firms, as well as to avoid simultaneity problems when testing the relationship between scope of change and target firm performance.¹⁰

Strategic investor voting power, an explanatory variable used to test Hypothesis 3, is measured as the percentage of votes the investors held at the moment of the purchase of block of shares that were associated with granting them a strategic investor status.

⁸ Sales are expressed in constant prices in order to eliminate the impact of inflation on our performance measure. We use 1994 as a base year and construct deflators accordingly on the basis of Consumer Price Index downloaded from *Datastream*.

⁹ Due to data limitations we could not use the total factor productivity (Nickell, Nicolitsas, and Dryden, 1997; Pohl, Anderson, Classens, and Djankov, 1997).

¹⁰ Due to data limitations we could not average the performance measures over more years prior to strategic investor entry, as has been done in other studies (e.g., Bishop et al., 2002; Demsetz and Villalonga, 2001).

Control variables. We control for firm size both while testing Hypotheses 1a vs. 1b and while testing Hypotheses 2 and 3 (steps 1 and 2). Size of a firm may be related to organizational inertia and resistance to change (Hannan and Freeman, 1984; Kelly and Amburgey, 1991), as well as to their affordability to strategic investors. We defined firm size as the one-period lagged natural logarithm of the number of employees. Next, since our sample includes both financial institutions as well as manufacturing and service firms, in our panel analyses (step 1) we used a dummy variable to control for the potential impact the differences between these types of organizations may have on the likelihood of a strategic investor entry.¹¹ Similarly, in the panel analyses (step 1) we included a control binary variable equal to 1 if a firm already had a strategic investor, as this would likely discourage other activists from entry attempts. Table 3 summarizes the main characteristics of the sample.

[Insert Table 3 about here]

4. Results and discussion

Results of step 1. Results of the panel probit estimations (Table 4) render partial support for our Hypothesis 1b on the likelihood of a strategic investor entry. From among the three measures of target firm performance, only one – labor productivity – appears to be a statistically positive determinant of the likelihood of a strategic investor entry (Models 1 and 4). Neither of the accounting performance measures (ROE or ROA) seem to be related to the probability of an activist gaining a status of a strategic investor. There are two possible explanations for this finding. Either strategic investors care more about productivity than about accounting profitability measures when entering the focal companies, or accounting performance measures do not provide relevant information about companies in transforming

¹¹ Small subsample size precluded the use of this control variable in testing Hypotheses 2 and 3 (step 2).

economies, and thus fail to explain the phenomena studied. The latter claim is also consistent with the findings of Bishop et al. (2002).

[Insert Table 4 about here]

The finding that the better performing firms are more likely to attract strategic investors suggests that the investors, when committing to implement changes, prefer to ‘play it safe.’ If they are to provide the target firm with capital, technology, and managerial expertise, they wish the firm’s workforce be productive, i.e. that the value of sales per employee be relatively high. This may also be a side effect of the fact that some strategic investors (12% in our sample) are obliged not to fire any employees for 2 or 3 years after entering the firm, and thus prefer these employees to be productive. Still, the partial support for Hypothesis 1b as opposed to 1a suggests that the better, rather than poorly, performing Polish companies are passed on, at least partially, into the hands of strategic investors. This result may be interpreted in different ways: either these firms have a particularly strong need for the support of such investors in order to be able to exercise their superior market opportunities, or that Polish authorities’ goal is to capitalize on sales rather than to help the firms to adapt in the new market economy. The latter was also found to be the case for Czech privatization (Gupta, Ham, and Svejnar, 2001).

It may also be the case that during the sample years, strategic investors were still relatively reluctant to take large stakes in Polish companies and to commit to particular corporate policies in privatized companies. In order to induce potential strategic investors to take part in privatizations, the State may have to acknowledge ‘cherry-picking’ strategies pursued by those investors and sell stakes in relatively less successful firms via other privatization channels. Due to data limitations we are however not able to validate any one of those explanations empirically.

Table 4 shows that larger firms are more likely to experience one of their blockholders

gaining the status of strategic investor. It is more likely to be granted in cases where the target firm is a financial institution. The presence of a strategic investor in a company does not strongly deter other investors from applying for such a status. The corresponding coefficient is negative, but statistically insignificant.

We also investigate whether other firm-specific characteristics (such as organizational slack measured by free cash flow or financial leverage indicators) impact the probability of strategic investors entry. None of the additional analyses appears to explain the dependent variable, other results remaining unchanged. Finally, we examined the possibility of non-monotonic relationship between target firm performance and the likelihood of strategic investor entry. We find no evidence to support such a claim: quadratic and cubic polynomials of performance measures were found to be insignificant in the probit models analyzed, while the findings discussed above remained unchanged.

Results of step 2. The second part of our empirical analysis has been aimed at identifying factors that determine the scope of change introduced by the strategic investors. While results presented in Table 5 render partial support for Hypothesis 2, Hypothesis 3 could not be confirmed. For the sake of robustness, we report both ordered probit and Poisson regression models. Notably, the patterns observed are consistent across those two types of models for any of the target firm performance measures.

[Insert Table 5 about here]

Hypothesis 2 predicted that the scope of change implemented would be negatively related to the target firm performance. Consistently with this claim, the coefficients corresponding to return on equity are significantly negative (Models 6a and 6b). Also coefficients for ROA in Models 7a and 7b are expectedly negative, yet insignificant. Surprisingly, the coefficients of the labor productivity indicator are positive (in Models 5a and

5b), but the corresponding bootstrapped t-statistics are insignificantly different from zero. Apparently, strategic investors do search for the firms where labor force is the most productive, but once they enter, it is the poor profitability that motivates them to engage in restructuring of the target firm.

Hypothesis 3 predicted that the relationship between the decision (voting) power of a strategic investor and the scope of change would be positive. We were not able to confirm this prediction for the initial voting power (enjoyed at the moment when a blockholder obtained a strategic investor status; see Table 5). We also examined several model specifications stipulating non-linear (or even non-monotonic) relationship between investor's voting power and the scope of the implemented change. None of the models tried provides any evidence indicating a statistically significant relationship between those two variables. Neither logarithmic functional form, nor the inclusion of polynomial terms (quadratic and/or cubic) rendered significant estimates of the corresponding coefficients.¹² Therefore, we conclude that our data do not support Hypothesis 3.

There may be two possible explanations for the apparent lack of relationship between the investor's stake and the scope of change. Either different effects discussed in the theory section simply cancel out and we do not observe any impact of voting power on the scope of restructuring, or the initial stakes are still not large enough to stimulate strategic investor to implement deep changes in the target firms. At least two arguments can be invoked to support the latter claim. First, we observed that strategic investors tend to increase their voting power subsequent to their entry. While an average initial stake obtained by strategic investors equals 45% (see Table 3), the average final stake exceeds 60% and provides them with effective

¹² These models are available upon the request.

control over the target companies.¹³ This trend towards ownership concentration is in line with the findings of Berglof and Pajuste (2003). Second, the claim is consistent with anecdotal evidence we came across while scanning the financial press. For example, one of the strategic investors in our sample, Michelin, refused to initiate the previously intended changes before accumulating shares that would grant it 75% of votes at the general assembly of shareholders. In fact, even when that condition was met, no action was taken to improve the target firm's performance, and Michelin tried to accumulate even more power in their hands. Some other strategic investors were found to act in a similar manner. Thus, it appears that strategic investors not only tend to avoid excessive risks by entering relatively well-performing firms, but also do not commit their resources to restructuring unless they gain sufficient control over the target firms. In extreme cases, not only are the investments postponed, but also the target firm's resources become expropriated. In Stomil Olsztyn, where Michelin had a controlling stake, the previously promised investment project has never been implemented during the sample period, while at the same time, large parts of target firm's profits have been transferred away to Michelin's headquarters (estimated by some analysts to amount to USD 50 million; Tamowicz and Dzierzanowski, 2002), mostly by means of high licensing fees.¹⁴

As an extension of this study, we ran a number of additional analyses. First we investigated whether organizational slack or investment cash flows were related to the scope of change. This appeared not to be the case, while other results remained qualitatively

¹³ Initial stake is the stake held by the strategic investors while gaining their status. Final stake is computed for the moment of delisting, strategic investor exit, or for the last sample year (i.e. 2000), if the strategic investor kept the status until the end of our sample period.

¹⁴ Some examples of similar practices in the privatized automotive firms are documented in the report of the Supreme Chamber of Control (2002). Still the overall picture should not be all gloomy as many strategic investors did fulfill a vast majority of their commitments (Supreme Chamber of Control, 1999).

unchanged. Next, for a small number of firms for which post-investor-entry data were available, we checked whether the implemented changes led to performance improvements. Perhaps due to short post-event time-series available (2 years at most), we were not able to detect any effect of changes and restructuring on performance, as such an effect is likely to occur in the medium to long run rather than directly after change implementation. We also conducted somewhat more detailed analyses in search for the determinants of individual types of change in the eight categories summarized earlier in Table 1, but no systematic patterns were found. The results of these additional analyses are available upon request.

5. Conclusions

Many firms in the transition economies are actively searching for resources and expertise they need to successfully restructure and adapt to the free market conditions. For outside investors (especially foreign), they usually constitute very attractive acquisition targets, as they are relatively cheap, and offer access to large and fast-growing markets. Moreover these companies tend to become dependent on the capabilities of the outside investors, who gain considerable power to manage them according to their own preferences. Additionally, the Polish authorities make efforts to attract strategic investors, in hope that as catalysts for change they would help to revive the Polish companies.

Based on the extant literature, this paper argued that the target firm performance would be a key determinant of the likelihood of a strategic investor entry, and found companies characterized by high labor productivity to be particularly attractive targets. Consequently, poor performers, i.e. those in more need of restructuring, had a lower chance of obtaining a strategic investor at least during the sample period. This would suggest that they were either not put on sale or not attractive enough for potential investors. Those investors managed to pursue successfully the strategy of picking the most productive companies and

avoiding the risks associated with restructuring of considerably underperforming targets.

Undeniably strategic investors catalyzed a number of crucial changes in the target firms. We find some evidence supporting the claim that the scope of changes implemented depends negatively on the target firm performance. Still, this result is not fully corroborated by the data, as the relationship between some performance indicators (e.g. labor productivity) and the scope of restructuring proves insignificant. This may imply that strategic investors do not always engage in restructuring where it is really needed and, in this sense, they appear to behave somewhat opportunistically. Moreover, our results seem to point to the fact that the governmental incentive system for strategic investors leaves room for the moral hazard problem, as the strategic investors apparently do not invest in change unless they gain control over the target firms (possibly fearing expropriation). Accordingly, the enforcement of contracts with the strategic investors (i.e., the ‘statement of intent’ that accompanies the granting of the strategic investor status) seems poor. This points to the need for a closer governmental monitoring of the strategic investors to assure the timely fulfillment of their commitments, and the creation of value for the Polish firm, and not the outside owner only. Moreover, there are also good reasons to be more selective in the choice of strategic investors, as illustrated by the Michelin case.

Our study has a number of limitations. Firstly, due to the restricted data availability and short observation window, we were unable to test our hypotheses with theoretically more relevant indicators of longer-run performance. Secondly, we have analyzed only two factors potentially determining the strategic investors decisions. Apart from target firm performance and the investor’s decision power, other determinants may be of importance as well. Location of the target firm, its competitive position, growth potential of its core market, its investment opportunities - to name just a few - call for investigation.

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TABLE 1

Categories of strategic changes in companies with strategic investors

Type of change	Percentage of companies where a change is (being) introduced	Average percent of votes held by strategic investors in companies where a change was introduced	
		Initial	Final
Organizational structure change	28.89%	33.47%	49.21%
Change in financing	26.67%	48.04%	59.76%
Layoffs	20.00%	47.39%	59.13%
CEO change	11.11%	46.63%	57.30%
Board and/or management turnover	20.00%	49.83%	61.66%
Technology transfer	33.33%	47.70%	60.13%
Marketing mix change	51.11%	45.07%	58.31%
Other changes	31.11%	50.94%	59.59%
No changes reported	20.00%	41.63%	67.25%
Total number of companies		45	

TABLE 2

Number of strategic changes in companies with strategic investors

Number of changes reported	Percentage of companies
No changes reported	20.00%
1 change reported	15.56%
2 changes reported	26.67%
3 changes reported	13.33%
4 changes reported	15.56%
More than 4 changes reported	8.89%
Total number of companies	45

TABLE 3
Sample characteristics

Panel A: Descriptive statistics for panel probit models

		No. of observations	Mean	Std. Dev.	Min	Max	Correlation coefficients				
							1	2	3	4	5
1	Labor productivity	936	236.85	580.42	8.90	8806.68					
2	ROE	1031	0.15	0.30	-3.46	4.04	0.06				
3	ROA	1035	0.07	0.11	-0.85	0.71	0.03	0.71			
4	Firm size	936	6.44	1.26	0.69	11.23	-0.28	-0.15	-0.13		
5	Financial institution	1323	0.08	0.28	0.00	1.00	-0.06	-0.01	-0.14	0.17	
6	Presence of strategic investor	1323	0.12	0.32	0.00	1.00	-0.07	-0.13	-0.15	0.18	0.19

Panel B: Descriptive statistics for cross-section models

		No. of observations	Mean	Std. Dev.	Min	Max	Correlation coefficients			
							1	2	3	4
1	Strategic investor's voting power (initial)	40	45.68	18.43	11.53	89.03				
2	Labor productivity	38	357.38	704.15	23.86	3474.62	-0.20			
3	ROE	40	0.14	0.14	-0.40	0.48	-0.39	-0.34		
4	ROA	40	0.06	0.07	-0.21	0.24	-0.12	-0.39	0.75	
5	Firm size	38	6.83	1.13	4.83	8.77	-0.04	-0.30	0.35	0.26

TABLE 4
Likelihood of strategic investor entry: Probit model results

	Model 1		Model 2		Model 3		Model 4	
	Estimate	T-statistic	Estimate	T-statistic	Estimate	T-statistic	Estimate	T-statistic
Labor productivity	0.0002	1.72 [†]					0.0002	1.77 [†]
ROE			-0.0802	-0.46			0.1216	0.63
ROA					-0.6181	-1.12	-0.9370	-1.30
Firm size	0.1567	2.65 **	0.1245	2.12 *	0.1228	2.10 *	0.1556	2.62 **
Financial institution	0.4278	1.79 [†]	0.4028	1.70 [†]	0.3899	1.65 [†]	0.3899	1.65 [†]
Presence of strategic investor	-0.3345	-1.20	-0.3502	-1.28	-0.3667	-1.36	-0.3303	-1.20
Constant and year dummies (not reported)	Yes		Yes		Yes		Yes	
Wald χ^2	$\chi^2(9) = 25.97$ **		$\chi^2(9) = 21.26$ *		$\chi^2(9) = 22.52$ **		$\chi^2(11) = 27.58$ **	
Log likelihood	-143.507		-144.625		-144.443		-142.478	
Pseudo-R ²	0.096		0.085		0.087		0.098	
Number of observations	930		913		917		913	

Note: In calculation of t-statistics, robust standard errors adjusted for within-firm clustering are used. [†], *, and ** denote significance at the 10, 5, and 1% level, respectively.

TABLE 5
Scope of change: Ordered probit and Poisson regression results

<i>Panel A: Ordered probit</i>						
	Model 5a		Model 6a		Model 7a	
	Estimate	T-statistic	Estimate	T-statistic	Estimate	T-statistic
Labor productivity	0.0010	0.82				
ROE			-2.9761	-1.86 [†]		
ROA					-3.7944	-1.18
Firm size	0.5621	2.98 **	0.5687	2.76 **	0.4766	2.57 **
Strategic investor’s voting power (initial)	0.0062	0.46	-0.0072	-0.62	-0.0002	-0.02
LR χ^2 statistic	$\chi^2(3) = 9.86$ *		$\chi^2(3) = 9.40$ *		$\chi^2(3) = 7.37$ [†]	
Log likelihood	-59.196		-59.428		-60.442	
Pseudo-R ²	0.077		0.073		0.058	
Number of observations	35		35		35	
<i>Panel B: Poisson regression</i>						
	Model 5b		Model 6b		Model 7b	
	Estimate	T-statistic	Estimate	T-statistic	Estimate	T-statistic
Labor productivity	0.0006	0.54				
ROE			-1.9962	-2.43 *		
ROA					-2.4961	-1.25
Firm size	0.3570	3.57 ***	0.3878	3.15 **	0.3075	2.92 **
Strategic investor’s voting power (initial)	0.0029	0.35	-0.0059	-0.77	-0.0008	-0.10
Constant	-1.9895	-2.10 *	-1.4044	-1.61	-1.1992	-1.44
LR χ^2 statistic	$\chi^2(3) = 11.26$ **		$\chi^2(3) = 11.65$ **		$\chi^2(3) = 8.81$ *	
Log likelihood	-62.056		-61.863		-63.282	
Pseudo-R ²	0.083		0.086		0.065	
Number of observations	35		35		35	

Note: In calculation of t-statistics, bootstrapped standard errors are used. Bootstrapping procedure involves 1000 repetitions. [†], *, **, and *** denote significance at the 10, 5, 1, and 0.1% level, respectively.