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**Secondary Privatization in Poland (Part I):
Evolution of Ownership Structure
and Company Performance in Firms
Privatized by Employee Buyouts**

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Piotr Kozarzewski has worked for the CASE Foundation since 1992. He obtained a PhD in political science in 1999 from the Institute for Political Studies of the Polish Academy of Sciences. He has participated in numerous research and advisory projects focusing on the systemic transformation of post-communist countries and especially on ownership transformation, in Poland and various post-Soviet countries (including Kyrgyzstan, Kazakhstan, Bulgaria and Belarus). His chief research interest to date has been in the area of employee ownership, and he is the author of numerous publications on the subject of employee-owned companies in Poland. Piotr Kozarzewski also works for the Institute of Political Studies of the Polish Academy of Sciences, where he is involved in a study of the effects of privatisation of the Polish enterprises.

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Preface

This volume contains the output of country research undertaken in Poland by Piotr Kozarzewski and Richard Woodward under the international comparative project "Secondary Privatization: the Evolution of Ownership Structures of Privatized Enterprises". The project was supported by the European Union's Phare ACE* Programme 1997 (project P97-8201 R) and was coordinated by Barbara Błaszczuk from the Center for Social and Economic Research (CASE) in Warsaw, Poland.

The support of the ACE Programme made it possible to organize the cooperation of an international group of scholars (from the Czech Republic, France, Poland, Slovenia and the U.K.). The entire project was devoted to the investigation of secondary ownership changes in enterprises privatized in special privatization schemes (i.e., mass privatization schemes and MEBOs**) in three Central European countries – the Czech Republic, Poland and Slovenia. Through a combination of different research methods, such as secondary analysis of previous research, analysis of legal and other regulatory instruments, original field research, statistical data

base research and econometric analysis of individual enterprise data, the project aimed to investigate the scope, pace and trends in secondary ownership changes, the factors and barriers affecting them and the degree of ownership concentration resulting from them.

The authors begin with a general discussion of MEBOs in Poland and go on to analyze ownership changes in a sample of such companies. First, they present the initial ownership structures created at the time of privatization and the evolution of those structures through 1999, and then go on to analyze the factors behind these changes and the relationships between the evolution of ownership structures on the one hand and economic performance and corporate governance on the other.

We hope that the results of this research will be of great interest for everyone interested in the little-researched question of what has happened to companies after privatization in transition countries.

Barbara Błaszczuk

* "Action for Cooperation in the Field of Economics".

** Management-Employee Buyouts.

I. Introduction: The Role of Employee Buyouts in the Polish Privatization Process¹

In the Polish literature and legislation relating to privatization, two general types of privatization of state enterprises are generally distinguished. The first, privatization by commercial methods such as trade sales and initial public offerings, is currently referred to as indirect privatization (previously as capital privatization). The second, with which we will be concerned in this paper, is currently referred to as direct privatization (previously, as liquidation privatization²). In direct privatization, the state enterprise is dissolved and its assets transferred (by one of three methods) to the private sector. The three methods of direct privatization are leasing of assets, sale of assets, and in-kind contribution of assets to a company. Leasing decidedly dominates as the preferred form of direct privatization, and it is leased firms that we are concerned with in this paper, as the vast majority of employee buyouts in the Polish privatization process have been generated via the leasing variant of direct privatization³. In fact, since these employee buyouts only become real buyouts after several years of leasing, in the remainder of this paper we will refer to the companies in question not as employee buyouts, but rather as employee-leased companies.

In the leasing variant of direct privatization, at least 50 percent of the employees of the state enterprise being liquidated must form a company to lease the assets of the

enterprise. Moreover, no corporate investors or foreigners were allowed to participate in the absence of special permission from the privatization ministry⁴. For this reason such companies are commonly referred to in Poland as "employee-owned companies" (*spółki pracownicze*). By 31 December, 1998, 2966 state enterprises had completed either privatization or "Article 19 liquidation" (see the first footnote), with 240 indirect privatizations, 512 firms transferred to the National Investment Funds, 1515 direct privatizations and 699 Article 19 liquidations. At this point, therefore, 51.1 percent of all privatizations were direct privatizations. Since about 66 percent of the direct privatizations were leasing cases⁵, by the end of 1998 lease-leveraged employee buyout represented about one third of the completed privatizations carried out under the supervision of the privatization ministry⁶, thus constituting the single most frequently used method (in terms of the numbers of enterprises privatized). It is important to note that this privatization method was intended by Polish legislators to be applied in the case of small and medium-sized enterprises, and for the most part this has been the case in practice. Most of the firms in this category are small- to medium-sized firms, usually with less than 500 employees. As of 1998, 78.2 percent of leased companies had up to 250 employees, 19.7 percent had 251–1000 employees, and 2.1 percent had over 1000⁷.

¹ This research was undertaken with support from the European Union's Phare ACE Program 1997, project P97-8201 R "Secondary Privatisation: The Evolution of Ownership Structure of Privatised Companies", coordinated by Professor Barbara Blaszczyk, CASE Foundation, Warsaw. The content of the publication is the sole responsibility of the authors and in no way represents the views of the Commission or its services. We would also like to thank Professor Maria Jarosz of the Polish Academy of Sciences for kindly allowing us to utilize the data bases created in research projects conducted under her direction.

² This is not to be confused with liquidation based on Article 19 of the 1981 Law on State Enterprises. Article 19 liquidation is applied to an insolvent state enterprise, entailing its dissolution and the sale of its assets, and means the end of the enterprise as an economic unit, in contrast to direct privatization, in which the economic activity of the state enterprise is continued.

³ Since 1995, we can also refer to the National Investment Fund program as a third type of privatization – Poland's version of voucher privatization. Reference is also often made to "small privatization." No separate law governed this process, which generally affected very small businesses in the areas of retail trade and consumer services (grocers' shops, restaurants, barber shops, etc.) and was largely carried out by local governments without supervision by the privatization ministry.

⁴ The new privatization act of 30 August, 1996, requires that – unless a special exemption is granted – at least 20% of the shares of companies privatized by leasing be held by outsiders.

⁵ See Central Statistical Office (1999), 31, Kozarzewski et al. (2000), 32–33.

⁶ If one considers employment, direct privatization does not outweigh capital privatization so strongly, as total employment in firms privatized by these two methods was – at least until recently – much closer to being equal. See Central Statistical Office (1995), 62–3.

⁷ See Kozarzewski et al. (2000), 50.

Several preferential conditions facilitate this form of privatization. First, the 1990 Law on Privatization essentially gave insiders precedence in privatizing their enterprises. Second, preferential interest rates are applied for the lease payments. The interest payment (referred to in Polish regulations as the "additional payment" [*opłata dodatkowa*]) was originally set by the Finance Ministry at 75 percent of the central bank refinancing rate. (Moreover, the interest payments could, to some extent, be postponed during the first two years of the leasing period.) Finally, the corporate income tax law allowed the firms to include the interest portion of the lease payments as costs in their accounts, thus reducing their tax liability. Later, it was determined that if the central bank refinance rate were to exceed 40 percent, the interest rate would be set at 30 percent (75 percent of 40 percent)⁸. In 1993, the interest rate was lowered again, to 50 percent of the refinance rate⁹. At the same time, further favorable conditions were created in order to stimulate investment in the employee-leased companies; these provisions, as well as the difficulties which leased firms continue to face in spite of these measures, will be discussed below. The new privatization act of 30 August, 1996, once again liberalized leasing conditions somewhat.

The data about employee-leased companies used in this paper were gathered directly in the companies during research conducted by the interdisciplinary team headed by Professor Maria Jarosz of the Polish Academy of Sciences: a three-year study (1993–1995) devoted to employee privatization (with a sample of 200 companies) and a four-year study (1997–2000) devoted to direct privatization (the sample for this study included about 160 employee-leased companies)¹⁰.

The samples were representative with respect to sector (manufacturing, construction, services, trade), size (mea-

sured by number of employees) and region. Data were collected using two methods: interviews with the main actors in the companies and collection of hard data by questionnaire (these included data from the balance sheets and financial statements, as well as information on ownership and corporate governance issues, employment, restructuring, investments, etc.). Most financial and ownership data were collected for several periods of time: immediately following privatization, year-end, and at the time of the research (usually the middle of a given year). Thus, we use two separate databases, each for three subsequent semi-panel polls: 1993–1996 (polls in 1993, 1994, and 1995) and 1997–2000 (polls in 1997, 1998, and 1999), which we refer to as Database 1 and Database 2, respectively.

The sample for Database 2, drawn on most frequently in this paper, consists of 110 firms privatized between 1990 and 1996¹¹.

This constitutes 12.9% of the total number of companies privatized by the leasing method through the end of 1996.

For the purposes of the paper, all source data were processed. Where we considered this useful, we also used data from the earlier study as an additional source of information. Some findings of other members of Maria Jarosz's team are also referred to¹². In discussing certain correlations, we refer to various variables referring to ownership structures using abbreviated labels. An explanation of these labels and the variables, as well as tables containing the correlations themselves, are found in the appendix¹³.

Table 1. Number of firms privatized, by year (%)

Year privatized	Number	%
1990	3	2.7
1991	41	36.9
1992	23	20.7
1993	14	12.6
1994	13	11.7
1995	8	7.2
1996	8	7.2

Source: own calculations using Database 2.

⁸ Zarządzenie Ministra Finansów z dnia 7 maja 1991 r.

⁹ Zarządzenie Ministra Finansów z dnia 13 maja 1993 r. (*Monitor Polski* 1993 nr 26, poz. 274).

¹⁰ For detailed discussions of the results of these studies, see Jarosz (ed.), 1994, 1995, 1996, 1999, 2000.

¹¹ The moment of privatization is identified with the year in which the company was registered; we include among the firms privatized in 1990 one which was actually registered in 1989, since the Polish privatization law was not adopted until 1990.

¹² Most importantly, Gardawski (2000) and Kozarzewski (1999).

¹³ The analysis presented here is indicative of linear correlations only. No tests have been made for non-linear relationships.

2. The Evolution of Ownership Structures

From the very beginning, employee leasing has been the most "employee-oriented" privatization path, in terms of ownership structure. Immediately following privatization, insiders possessed, on the average, 92 percent of the shares in the sample of employee-leased companies, and in 95 percent of those companies, insiders owned over 50 percent of the shares¹⁴.

In employee-leased companies, the share of non-managerial employees in ownership has steadily decreased, from 58.7 percent immediately after privatization to 31.5 percent in 1999. It is worth noting, however, that despite widespread selling of their shares by non-managerial employees, by 1999 only in 6 percent of firms had this group of owners vanished completely. In most companies, non-managerial employees retained at least minor blocks of shares. Very often those blocks were very small: in 17 percent of the firms they did not exceed 10 percent, and in almost half of the companies (43 percent) non-managerial employees did

not have blocking capabilities at shareholders' meetings (at least 25 percent of the votes). Because of the dispersed character of these blocks of shares, in practice the voting capacity of non-managerial employees is even weaker than these numbers indicate. If we assume that this group would need at least 50 percent of the shares in order to block certain decisions at a shareholders' meeting, then it is clear that in at least 76 percent of the companies under review, non-managerial employees lack decisive influence on the decision-making process as owners¹⁵.

While non-managerial employees were losing their shares, the number of shares in the hands of outsiders increased fivefold (from 7.6 percent to 38.5 percent). Almost all of them are domestic investors; only three firms have foreign investors (in two cases, strategic investors). A large portion of the outsider shares represent concentrated holdings: 44.4 percent of the outsider shares were held by owners whom respondents referred to as strategic

Table 2. Ownership structure in the average employee-leased company immediately after privatization (%)

Shareholder groups	Simple average (%)	Weighted average (%)
Outsiders	8.0	7.6
Managers	41.0	33.7
Non-managerial employees	51.0	58.7

Source: own calculations using Database 2.

Table 3. Percentage of employee-leased companies dominated by various owner groups immediately following privatization

Biggest shareholder group	Simple average (%)	Weighted average (%)
Strategic outside investors	8.9	4.9
Managers	32.7	37.3
Non-managerial employees	50.5	57.8

^a Domination by one of four main shareholder groups (strategic investors, other outside investors, managers, and non-managerial employees) is defined by the group with the largest holdings.

Source: own calculations using Database 2.

¹⁴ Where weighted, average ownership structure figures are weighted by end-of-year employment for the year preceding the given ownership structure observation.

¹⁵ Of course, they can influence decision-making in other ways, for example, through trade unions, workers' protests, etc. However, analysis shows that the situation in almost all employee-leased companies is largely free of conflicts, with trade unions passive and even – in many companies – ceasing to exist.

investors. There is also a large group of private firms and entrepreneurs (18.7 percent).

However, the second largest group of outsider owners consists of unidentified "others" (34 percent of outsider shares). One might hypothesize that this group consists mostly of former employees of the companies who lost their jobs due to layoffs, retired, or left for other reasons. Respondents were not asked in the survey to identify whether these "others" were in fact former employees, so we can only test this hypothesis indirectly. Initial calculations have not yielded clear results. There is negative correlation between growth in the shares of this group between the time of privatization and mid-1997 (GROO) and the change in the shares of non-managerial workers (GRWOR) – that is, the more the share of the workers fell, the more share of "other" outsiders grew – and there is a positive correlation between the change in employment from the time of privatization to mid-1997 (P.C. CH) and GRWOR (so that, for example, the more employment fell, the more the share of workers fell). However, there is no direct correlation between GROO and P.C. CH – between the drop in employment and the growth in the "other" outsiders' share. One might hypothesize that in cases in which employment drops were particularly drastic, these drops reflected a dramatic worsening of the companies' economic prospects and workers sold their shares (e.g., to management) in a des-

perate attempt to minimize their losses, in which case there would be a negative correlation between GROO and P.C. CH up to a certain threshold of employment reduction, beyond which this correlation would disappear and be replaced by a negative correlation between P.C. CH and the growth in the share of Executive Board members (GRMAN). And in fact, where employment reductions were over 50%, there is a negative correlation between GRMAN and P.C. CH. However, for other firms we observe no correlation between GROO and P.C. CH. It is, however, quite certain that we are not dealing with small portfolio investors here, because of the generally small size of the companies under review and the fact that less than two percent of them are listed on the Warsaw Stock Exchange.

Tables 4 and 5 show how the detailed ownership structure of employee-leased companies evolved over the course of time.

Interestingly, by comparing simple with weighted averages, we see that at the time of privatization, the role of strategic investors is lower, and that of non-managerial employees greater, in the case of weighted averages. This means that strategic owners were generally involved in the privatization of smaller than average companies, while the percentage of shares belonging to non-managerial employees at the time of privatization was generally higher in larger firms. By 1999 the situation has changed: while strategic

Table 4. Ownership structure of employee-leased companies (weighted averages; %)¹⁶

Shareholders	Immediately after privatization	1997	1998	1999
Outsiders				
1. Strategic investors (domestic and foreign)	1.4	9.1	15.2	17.1
2. Other domestic outside investors				
a. private firms	–	0.6	1.5	2.1
b. commercialized firms	–	0.4	0.4	0.0
c. private banks	–	–	–	–
d. state-owned banks	–	–	–	–
e. private businessmen	4.2	4.3	5.1	6.4
f. others	2.0	7.0	9.2	12.9
3. Other foreign investors	–	0.1	0.1	0.0
Insiders				
4. Supervisory board members employed in the company*	9.4	10.6	6.1	3.9
5. Executive board members	8.7	13.4	15.1	14.2
6. Other managers	15.7	13.7	15.4	11.1
7. Non-managerial employees	58.7	41.0	31.8	31.5
TOTAL	100.0	100.0	100.0	100.0

* Note: Supervisory Board members in 1999 are only those who were also employees; prior to 1999 there was no such restriction in this definition. Source: own calculations using Database 2.

¹⁶ In this and other tables "0" or "0.0" means that the frequency of occurrence of the given category is less than 0.5 or 0.05 respectively; a hyphen means that the category is absent, and "x" means lack of data.

Table 5. Ownership structure of employee-leased companies (simple averages; %)

Shareholders	Immediately after privatization	1997	1998	1999
Outsiders				
1. Strategic investors (domestic and foreign)	3.3	7.1	9.4	11.0
2. Other domestic outside investors				
a. private firms	–	0.6	2.1	2.7
b. commercialized firms	–	0.4	0.2	0.0
c. private banks	–	–	–	–
d. state-owned banks	–	–	–	–
e. private businessmen	2.5	2.3	2.0	4.5
f. others	2.2	6.4	8.5	12.2
3. Other foreign investors	–	0.2	0.7	0.6
Insiders				
4. Supervisory board members employed in the company*	11.5	12.0	8.1	6.4
5. Executive board members	16.0	18.8	18.9	19.3
6. Other managers	13.5	11.9	14.5	11.0
7. Non-managerial employees	51.0	40.3	36.2	32.3
TOTAL	100.0	100.0	100.0	100.0

* Note: Supervisory Board members in 1999 are only those who were also employees; prior to 1999 there was no such restriction in this definition. Source: own calculations using Database 2.

investor presence tended to be noted in smaller firms at the time of privatization, in 1999 they tended to be present in larger firms. Executive board members' shares are consistently smaller when averages are weighted, meaning that they tend to dominate in smaller firms. As mentioned above, the higher non-managerial employee holdings in the weighted averages at the time of privatization indicate that at that time the largest group of employees exercised the strongest ownership domination in the largest firms. By the late 1990s, however, this difference has disappeared, indicating that the holdings of this group are now relatively equal with respect to the size of the firm.

We will analyze the structure of employee-leased companies along two axes: concentrated versus dispersed ownership, and insider versus outsider ownership. A combination of these two axes gives us four main groups of investors: (1) outsiders with small holdings, (2) strategic outside investors, (3) insider shareholders with large hold-

ings (members of managing and supervisory bodies), (4) insiders with small holdings (generally, non-managerial employees). Table 6 illustrates the dynamics of ownership structures with respect to these four groups.

We see that more and more shares are in the hands of both outsider groups, while fewer and fewer shares are held by non-managerial employees (although in 1999 the employee shareholdings seem to stabilize). The position of managerial staff is more stabilized, although recently they have also begun to lose ground. Although it is not evident from Table 6, earlier studies show that in the first half of the 1990s managers were actively buying shares from non-managerial employees and increasing their holdings¹⁷.

Moreover, managers are a far from monolithic group, consisting of three main subgroups: executive board members, supervisory board members employed in the companies, and lower level managers. Through 1997, executive and supervisory board members were actively increasing

Table 6. Ownership structure dynamics in employee-leased companies, by major shareholder groups (weighted averages; %)

Shareholder groups	Immediately after privatization	1997	1998	1999
Strategic outside investor	1.4	9.1	15.2	17.1
Other outsider investors	6.2	12.3	16.3	22.0
Managers	33.7	37.6	36.7	29.4
Non-managerial employees	58.7	41.0	31.8	31.5
TOTAL	100.0	100.0	100.0	100.0

Source: own calculations using Database 2.

¹⁷ For more, see Gardawski (1996), 96–98, and Kozarzewski (1999), 78–82.

Table 7. Blocks of shares held by executive and supervisory board members (%)

	Immediately after privatization	1997	1998	1999
Average block of shares:				
– executive board	8.7	13.4	15.2	14.2
– supervisory board	9.4	10.6	6.1	3.9
TOTAL	18.1	24.0	21.3	18.1
Percent of companies with ownership dominance of:				
– executive board	7	8	8	8
– supervisory board	3	6	2	1
– both boards together	25	23	29	25

Source: own calculations using Database 1 and Database 2.

their shares in the companies (Table 7). Later the situation among executive board members stabilized, but the share of the supervisory board members began to decrease rapidly. This is probably not due to their selling of shares, but rather to the rotation in supervisory board membership, which is much higher than in the executive boards. As a rule, former supervisory board members still have managerial posts, and for this reason the total share of management remains relatively stable.

The lower part of Table 7 shows that in order to effectively exercise their voting rights, members of both boards in question have to cooperate: thus, for example, in 1999 acting together they can control almost three times more companies than if they act separately. The Jarosz group's research confirms the large extent of synergy between executive and supervisory boards, with the dominant position of the executive board in the decision-making system, in employee-leased companies¹⁸.

The data presented here fail to confirm earlier predictions that the ownership structure of employee-leased companies

would tend towards steadily increasing management domination¹⁹, since in most companies the position of elites has stabilized. However, two trends are confirmed: the decrease in the shares of non-managerial employees and the increase of those of outsider investors, both strategic and non-strategic.

Another earlier prediction concerned the appearance of manager-outsider ownership coalitions²⁰. The fact that in 57 percent of employee-leased companies, more than 50 percent of the shares belong to managers and outsiders together, could be seen as supporting this view. On the other hand, only 9 percent of the companies have both an outside investor and an inside investor possessing at least 10 percent of shares.

In the remainder of this section, we will concentrate on changes in ownership structures in terms of shareholding by three groups of shareholders – strategic investors, top management (i.e., Executive Board members), and non-managerial employees – considering each group to have attained a dominant block of shares when it exceeds 20%. First, in Table 8, we look at how many firms had domination by each group at the time of privatization and in 1997, 1998 and 1999, and then, in

Table 8. Number of firms in which the given ownership groups had shares of at least 20%

	At time of privatization	1997	1998	1999
No data	8	9	13	14
Strategic investor (SI)	4	8	10	12
Executive board members (Managers)	5	10	10	8
Non-managerial employees	69	50	42	36
All three	1	1	0	2
SI and managers	0	0	1	0
Managers and employees	17	20	20	24
SI and employees	1	5	4	3
None	5	7	10	11
Total	110	110	110	110

Source: own calculations using Database 2.

¹⁸ See Kozarzewski (2000a, 2000b).

¹⁹ See Gardawski (1995); Kozarzewski (1999).

²⁰ See Gardawski (2000).

Table 9. Transformation matrix

Had over 20% at time of privatization	Had over 20% in 1997									Total at time of priv.
	No data	SI	M	Wor	SMW	SM	MW	SW	None	
No data	5	0	0	1	0	0	2	0	0	8
Strategic investor (S)	0	3	0	0	0	0	0	1	0	4
Exec. Bd. memb. (M)	0	0	4	0	0	0	1	0	0	5
Non-mg. workers (W)	3	4	2	48	0	0	5	3	4	69
All three	0	0	0	0	1	0	0	0	0	1
S & M	0	0	0	0	0	0	0	0	0	0
M & W	0	0	4	1	0	0	12	0	0	17
S & W	0	0	0	0	0	0	0	1	0	1
None	1	1	0	0	0	0	0	0	3	5
Total	9	8	10	50	1	0	20	5	7	110

Source: own calculations using Database 2.

Table 9, we present a transformation matrix. The latter shows the transformation trajectory of firms grouped with respect to dominant shareholders at the time of privatization: in the rightmost column, we see the number of firms in each group at the time of privatization, and looking leftward, we see where the firms in these groups ended up in 1997. The diagonal, in which the numbers are printed in boldface, shows firms that remained in the same group in which they started.

Again, all this confirms that in general non-managerial employees are slowly losing ground, while top management and strategic investors tend to consolidate and increase their holdings. We obtain an even sharper picture of the concentration that is going on if we look at the average shares of the single largest shareholder.

In Table 10 we see that in the average company, the single largest shareholder held over one quarter of all the company's shares by 1998. This indicates a large degree of concentration on the average.

Analysis of simple correlations between various ownership variables bears out the foregoing observations. The variables analyzed (presented in detail in the appendix) include the following: the percentage of shares held by strategic investors (SI), by Executive Board members (MAN), and by non-managerial employees (WOR), the percentage of the work force holding shares (OWN), dummy variables for the degree of equality of shareholding (EQ1, EQ2, EQ3, and EQ4, in ascending order of equality).

Relationships between various ownership variables tend to be pretty much as one would expect. Thus, for example, the size and growth of the shares of strategic investors and Executive Board members on the one hand and the size and growth of non-managerial employees' shares on the other. There is a positive correlation between WOR and EQ3, which is logical given that EQ3 is a dummy representing a relatively high degree of equality and WOR the percentage of company's shares held by non-managerial employees (discrepancies between these two measures can arise in cases in which a large number of employees have been laid off or left the firm for other reasons but kept their shares). There is a correlation between equality and the percentage of the work force holding shares (OWN), as evidenced in the negative correlations between EQ1 and OWN. Similarly, there is a positive relationship between equality and the percentage of shares held by non-managerial employees (WOR), as EQ3 is positively correlated with WOR and EQ1 negatively correlated with WOR for all three observations. Conversely, there is a positive correlation between MAN and EQ1. Generally, the size and growth of the shares of strategic investors and top management are positively correlated with the percentage of company shares held by the single largest shareholder (BIG). Again, as we would expect, we observe a positive correlation between the growth of non-managerial employees' shares (GRWOR) and the year of privatization (YRI) and a negative correlation between YRI and the growth of strategic investors' shares

Table 10. Holdings of the single largest shareholder (weighted averages)

	N	Minimum	Maximum	Mean	Standard Deviation
1997	88	0.1	86.3	22.896	20.592
1998	93	0.3	100.0	27.652	26.075
1999	108	2.0	100.0	27.364	25.507

Source: own calculations using Database 2.

(GRSI). This means that the earlier the firm was privatized, the more the worker share has fallen and the more the strategic investor share has grown.

We now turn to a more detailed analysis of the evolution of ownership structures in two groups of companies: those with large ownership shares of top management (i.e., Executive Board members) and those with strategic investors.

2.1. Companies Dominated by Top Management

Holdings of top management – i.e., Executive Board members – were over 20% in 23 firms, or less than a quarter of sample, at the time of privatization, in 31 (almost a third) in 1997 and 1998, and 34 in 1999.

A comparison with the sample as a whole (see Table 1) is not particularly enlightening. While among the firms dominated by top management a higher percentage was privatized in 1991, a higher percentage was also privatized in 1995 and 1996.

Next, we look at the average ownership structure in these firms, comparing those which already had top management domination at the time of privatization with the larger group of those that had such domination in mid-1997.

Both groups look very similar; in particular, in both we observe a decline in top management holdings from 1998 to 1999. The most significant difference between the two

groups appears to be the smaller average share held by top management in the larger group, where top management had not been in a dominant position from the very beginning. This is quite clearly an indication of inertia.

Next, we compare firms in which top management gained control between the time of privatization and mid-1997 with those in which it neither had such control at the outset nor gained it later. We do this by looking at the initial ownership structure of the five firms in which top management held less than 20% at the time of privatization but at least 20% in 1997, comparing it with that of the 68 firms in which top management held less than 20% as of mid-1997 and for which we have the appropriate data.

Table 11. Firms with top management domination in 1999, by year of privatization

	Number	Percent
1990	1	2.9
1991	16	47.1
1992	3	8.8
1993	4	11.8
1994	3	8.8
1995	3	8.8
1996	4	11.8
Total	31	100.0

Source: own calculations using Database 2.

Table 12. Firms with top management shares > 20% at time of privatization (weighted averages)

	time of privatization	1997	1998	1999
Strategic investor	0.00	0.29	-	1.09
State Treasury	-	-	-	5.32
Individual entrepreneurs	1.23	0.77	0.56	0.74
Other outside investors	1.49	1.03	2.49	3.51
Supervisory Board members*	5.95	11.37	5.92	3.15
Executive Board members	32.23	38.33	44.00	39.71
Other managerial employees	20.47	19.29	20.37	11.12
non-managerial employees	38.64	28.92	26.66	35.36

* Note: Supervisory Board members in 1999 are only those who were also employees; prior to 1999 there was no such restriction in this definition. Source: own calculations using Database 2.

Table 13. Firms with top management shares > 20% in mid-1997 (weighted averages)

	time of privatization	1997	1998	1999
strategic investor	0.00	0.19	3.06	4.50
private firms	-	-	-	0.91
state-owned companies	-	-	0.43	-
State Treasury	-	-	-	3.16
individual entrepreneurs	0.81	0.51	0.35	0.44
other outside investors	1.06	5.85	6.01	7.29
Supervisory Board members*	6.51	10.06	6.34	4.15
Executive Board members	24.64	34.53	37.53	34.09
other managerial employees	20.54	18.00	21.13	15.85
non-managerial employees	46.44	30.87	25.16	29.61

* Note: Supervisory Board members in 1999 are only those who were also employees; prior to 1999 there was no such restriction in this definition. Source: own calculations using Database 2.

Table 14. Firms in which top management gained domination: Initial ownership structure

	Minimum	Maximum	Mean	Standard Deviation
strategic investor	0	0	0.00	0.00
individual entrepreneurs	0	0	0.00	0.00
other outside investors	0	1	0.27	0.44
Supervisory Board members	0	22	8.50	8.69
Executive Board members	4	17	8.75	4.97
other managerial employees	7	31	19.41	8.72
non-managerial employees	49	74	63.08	10.15

Source: own calculations using Database 2.

Table 15. Firms in which top management does not dominate: Initial ownership structure

	Minimum	Maximum	Mean	Standard Deviation
strategic investor	0	66	1.78	9.72
individual entrepreneurs	0	80	5.32	12.60
other outside investors	0	20	1.65	4.19
Supervisory Board members	0	54	10.02	12.40
Executive Board members	0	18	6.20	4.69
other managerial employees	0	42	13.09	9.24
non-managerial employees	0	93	61.95	25.90

Source: own calculations using Database 2.

Examination of the two above tables shows that there is very little difference between the two groups with respect to their average initial ownership structure. The most significant difference seems to be that in the group in which top management later attained domination, lower levels of management had larger holdings than in those firms in which top management had not gained a share of over 20% by mid-1997.

2.2. Companies with Strategic Investors

As of mid-1997, 13 companies had such investors; 17 companies had them in mid-1998. No new strategic investors appeared in 1999.

Comparing with the privatization dates of firms in the sample as a whole, it seems that companies privatized earlier may have a slight advantage in finding strategic outside investors (over 70% of them were privatized before 1993, whereas slightly over 60% of the sample as a whole was privatized in that time).

Foreign investors were present in only two firms in the sample by mid-1998 (one of which had gained its foreign investor in the year since the previous survey, in 1997). Both companies were privatized in 1991.

As in the case of firms dominated by top management, we look at the average ownership structure in these firms, comparing those which already had strategic investors at the time of privatization with the larger group of those that had them in mid-1997.

For the last group (of which only five firms provided data on their ownership structure), the absence of data from even a single firm in one year can create large fluctuations in the mean values (and in fact we observe such fluctuations), so we should exercise great caution in interpreting the patterns in the Table 18.

Next, we compare the initial ownership structure of the eight firms that had no strategic investors at the time of privatization but found them by mid-1997 with that of the 84 firms that had no strategic investor as of mid-1997 and for which we have the appropriate data.

It is interesting to note that in companies that found strategic investors after privatization, top management owned much fewer shares at the time of privatization than in the case of those that did not find strategic investors later. This is borne out by analysis of correlations between various ownership variables, which shows, for example, negative correlations between the shares of strategic investors (SI) and those of Executive Board members (MAN) in 1997 and 1999.

Table 16. Number of companies with strategic investors in 1998, by year of privatization

	Number	Percent
1990	1	5.9
1991	9	52.9
1992	2	11.8
1993	2	11.8
1994	1	5.9
1996	2	11.8
Total	17	100.0

Source: own calculations using Database 2.

Table 17. Firms with strategic investors in mid-1997: ownership structure (weighted averages)

	time of privatization	1997	1998	1999
strategic investor	6.37	44.31	55.612	56.34
private firms	-	-	0.686	3.19
state-owned companies	-	-	0.954	-
individual entrepreneurs	0.38	0.20	2.321	-
other outside investors	-	8.43	8.640	14.23
Supervisory Board members*	5.71	7.72	0.798	0.69
Executive Board members	3.39	4.82	2.141	5.35
other managerial employees	20.37	11.58	6.190	3.48
non-managerial employees	63.77	22.93	22.659	16.23

* Note: Supervisory Board members in 1999 are only those who were also employees; prior to 1999 there was no such restriction in this definition. Source: own calculations using Database 2.

Table 18. Firms with strategic investors at time of privatization: ownership structure (weighted averages)

	time of privatization	1997	1998	1999
strategic investor	53.28	38.57	55.079	55.40
private firms	-	-	-	10.67
individual entrepreneurs	2.86	1.16	-	-
other outside investors	-	7.49	25.704	10.05
Supervisory Board members*	7.56	28.35	0.227	1.32
Executive Board members	3.50	2.83	-	11.67
other managerial employees	26.30	10.97	1.716	1.73
non-managerial employees	6.51	10.63	17.274	6.24

* Note: Supervisory Board members in 1999 are only those who were also employees; prior to 1999 there was no such restriction in this definition. Source: own calculations using Database 2.

Table 19. Firms that gained strategic investors: initial ownership structure (weighted averages)

	Minimum	Maximum	Mean	Standard Deviation
strategic investor	0	0	0.00	0.00
individual entrepreneurs	0	0	0.00	0.00
other outside investors	0	15	4.34	6.44
Supervisory Board members	1	69	10.47	19.03
Executive Board members	2	15	4.91	3.39
other managerial employees	0	41	21.65	13.23
non-managerial employees	10	88	58.63	26.30

Source: own calculations using Database 2.

Table 20. Firms without strategic investors: initial ownership structure (weighted averages)

	Minimum	Maximum	Mean	Standard Deviation
strategic investor	0	0	0.00	0.00
individual entrepreneurs	0	80	5.39	12.98
other outside investors	0	30	1.56	4.68
Supervisory Board members	0	54	10.72	12.98
Executive Board members	0	100	11.85	12.61
other managerial employees	0	37	13.67	9.93
non-managerial employees	0	99	56.81	25.56

Source: own calculations using Database 2.

3. Factors in the Post-Privatization Evolution of Ownership Structure

3.1. Motivations for Choice of the EBO Privatization Method and Subsequent Changes in Ownership Structure

Employee privatization is a privatization method used only when it is chosen by insider actors. What are those actors' goals in employing this method of privatization in the enterprises where they work? Members of company elites were asked about this issue in interviews carried out by the Jarosz research team.

In their responses, managers of the companies declared purely material goals aimed at the survival of their enterprises. Contrary to what might have been expected, such issues as independence of the firm, propertization and mobilization of employees, etc., were mentioned very rarely. But even if the main actors in state-owned enterprises were not advocates of employee ownership, the employee leasing path was attractive for them because, on the one hand, it was a relatively easy privatization method (especially for small and medium-sized enterprises), and on the other hand, it eliminated the threat posed by outsiders, thus minimizing the impact of privatization on existing interests and power structures. This path was also attractive for non-managerial employees because it gave them a chance to acquire a title to part of the enterprise's property and opened up the prospect of material profits from dividends and capital gains.

It took some time, however, for managers to become aware of the links between share ownership and authority in a capitalist system. Once this became clear to them, they began to concentrate shares in their hands more actively. By the mid-1990s, this process of "economization of mentality" was more or less complete.

In addition to the incentive for management to acquire shares in order to consolidate its power, there are various factors that can contribute, alternatively, to the perpetuation of the initial (rather dispersed) ownership structure or to particular types of changes, while others can have ambivalent impacts on ownership changes. One variable we will look at as having a possible effect on both ownership changes and other types of activity in the firm is unionization. This is due to the fact that unionization can be seen as a measure of employee power which may compound the effects of the power that employees exercise as owners in the companies of this sample. As we see from table 21, a large number of the companies – almost half – lack unions altogether.

In Table 22, we categorize a number of psychological and behavioral factors, as well as factors related to the legal environment, with respect to their impact on the evolution of the ownership structures of employee-leased companies. We believe that the patterns of ownership structure evolution observed in employee-leased companies are to a large extent determined by those factors.

Nevertheless, the analyzed group of companies is quite heterogeneous. It varies with respect to size, sectoral affiliation, financial condition and many other specific factors. In Sections 3.2 to 3.4, therefore, we analyze the impact of those factors, as well as unionization, to find reasons for particular deviations from the most common pattern of evolution (presented at the beginning of the previous section). In Section 3.5 we look at methods for ownership transformations (including trade in shares and issues of new shares), and in Sections 3.6 and 3.7 we attempt to investigate the factors behind transitions to management domination and strategic owner presence in particular.

Table 21. Firms with no unions, by year

	Number	Percent	N
At time of privatization	24	30.8	78
1997	21	26.9	78
1998	47	43.5	108
1999	24	38.7	62

Source: own calculations using Database 2.

Table 22. Chief factors behind perpetuation and change of the initial ownership structure of employee-leased companies

Factors	Perpetuation	Change
Mentality and behavior		
“Legacy” of state-owned enterprise	<ul style="list-style-type: none"> - organizational structure - structures of power and influence - old mentality of insiders 	
Changes in the position of various insider groups	<ul style="list-style-type: none"> - fear of outsiders 	<ul style="list-style-type: none"> - property factor: ownership = power - reconfiguration of functions and tasks - insiders have to adapt to new conditions - perception of outsiders as representing an opportunity for new investments, management techniques, etc.
Legal environment		
Privatization law	<ul style="list-style-type: none"> - employee leasing is insider-dominated - corporate partners and foreigners barred from participation in privatization - lower leasing fees (since 1997) - faster transfer of title to assets to employee-leased company (since 1997) 	<ul style="list-style-type: none"> - outsiders should hold at least 20 percent of shares (since 1997) - faster transfer of title to assets to employee-leased company (since 1997)
Commercial Code	<ul style="list-style-type: none"> - companies' charters can contain restrictions on circulation of shares 	<ul style="list-style-type: none"> - new organizational structure - system of property rights - mechanisms of raising capital, share issues and share trading

3.2. Initial Ownership Structure

We begin our analysis with an investigation of the question of path dependency: how does the initial ownership structure at the moment of privatization (in terms of dominance of a certain group of owners) influence the further evolution of ownership structures? Our analysis began with a presentation of the transition matrix in Table 9, which showed that outside strategic investors and top management are steadily gaining ground (although the position of the latter seems to have stabilized and may even be beginning to decline), and non-managerial employees are steadily losing it. In Table 23, we take a closer look at the evolution of the ownership structure in the companies, grouping them with respect to the type of owner dominant at the time of privatization.

Companies with a concentrated insider pattern of initial ownership also seem to tend towards the average ownership structure for the whole sample, although in manager-dominated companies the share of managers fell more rapidly than elsewhere in the period 1997–1999. Interestingly, it is in these companies that outside strategic investors had the least opportunities to acquire shares.

The direction of some processes in these two groups of companies differs from that in the group of initial strategic investors' dominance, where insider shareholders have practically disappeared and almost two thirds of the shares are now concentrated in the strategic investor's hands.

Changes in the shares of managers and outside investors have, as experience shows, two opposite vectors: on one hand, recently more and more strategic outsiders, especially in small firms, have become strategic insiders by acquiring top managerial posts in the companies. This can be seen when analyzing the unweighted ownership structure data: comparing to the previous year, in 1999 the unweighted share of strategic investors fell almost two times from 63.4 to 38.1 percent. On the other hand, newly nominated members of the Executive Board are often formally not employees of the companies for taxation reasons. In initially outsider-dominated companies, managers could attempt to buy shares from strategic outsiders in order to regain control, while some strategic outsider investors could have become disillusioned with the companies and begun to sell their shares. Finally, changes in proportions between managers and non-managerial employees could be caused by – among other things – rotation of managerial posts among insiders.

3.3. Sector, Company Size, and Unionization

The next table shows the trends in ownership changes by sector. We see that construction companies are the most "outsiderized" in the whole sample, while in services firms were not able to find a strategic external investor. In manufacturing and trade we see some increase in outsider share-

Table 23. Evolution of ownership structure, by initial ownership structure of the companies (weighted averages; %)

	Strategic investor	Other outsiders	Managers	Non-managerial employees
Initial strategic investors' dominance				
Initial	53.3	2.9	37.4	6.5
1997	33.8	9.9	47.2	9.1
1998	48.9	33.9	0.3	16.9
1999	70.6	16.8	3.4	5.6
Initial managerial dominance				
Initial	0.0	13.4	59.2	27.4
1997	1.9	14.5	65.4	18.2
1998	0.1	25.3	51.3	23.3
1999	3.6	26.0	45.5	25.0
Initial non-managerial employee dominance				
Initial	0.0	3.9	25.4	70.7
1997	7.0	12.4	28.1	52.6
1998	16.2	12.0	32.7	39.1
1999	12.8	21.0	27.3	38.9

Source: own calculations using Database 2.

Table 24. Evolution of ownership structure, by branch (weighted averages; %)

	Strategic investor	Other outsiders	Managers	Non-managerial employees
Manufacturing				
Initial	0.7	9.5	33.0	56.9
1997	1.8	12.4	39.2	46.6
1998	4.5	21.3	38.3	35.9
1999	7.5	25.6	31.5	35.4
Construction				
Initial	2.8	4.9	31.7	60.7
1997	23.3	17.5	31.5	27.8
1998	28.6	17.6	24.2	29.6
1999	32.4	21.1	22.0	24.0
Trade				
Initial	1.3	1.8	46.0	51.0
1997	0.1	9.9	57.2	31.9
1998	7.0	12.4	53.6	27.0
1999	8.1	22.8	44.2	24.9
Services				
Initial	0.0	1.7	29.3	69.1
1997	0.0	11.8	28.1	60.1
1998	0.0	10.6	42.9	46.5
1999	0.0	16.1	33.3	50.6

Source: own calculations using Database 2.

holdings, especially non-strategic, but still the biggest share of property remains in the hands of insiders.

Company size is often regarded as very strong factor determining various characteristics of enterprise behavior. We therefore looked at the relationship between the degree of concentration and firm size (measured by employment). The only consistent correlation is the positive one between EQ3 and size at the time of privatization and in 1997, which is easily explained: Given low levels of personal savings at the beginning of the

transformation, it was more difficult for an individual or small group of individuals to buy a large block of shares in a large company than in a small firm. It is also clear (see Section 4.3) that management ownership on the average appears in relatively small companies, while strategic investors appear in companies whose average employment is above the sample average.

Is there a relationship between the direction of ownership structure changes and size? In table 25, we show the ownership structure evolution in three groups of companies

Table 25. Evolution of ownership structure, by size of companies (%)

	Strategic investor	Other outsiders	Managers	Non-managerial employees
Small				
Initial	2.7	5.6	36.6	55.2
1997	2.1	5.7	40.8	51.4
1998	2.6	9.3	45.1	43.0
1999	4.7	10.8	40.1	44.4
Medium-sized				
Initial	1.8	6.4	38.4	53.4
1997	2.0	13.9	45.1	39.0
1998	2.4	10.0	46.8	40.8
1999	4.4	19.3	40.6	35.7
Large				
Initial	1.2	6.1	32.6	60.1
1997	7.7	13.4	36.6	42.1
1998	15.7	20.0	33.0	31.3
1999	17.6	24.7	27.3	30.2

Source: own calculations using Database 2.

– small, medium-sized, and large²¹. As it turns out, the differences between the first two groups are not very great. In small and medium-sized companies, we observe an extended period of accelerated propertization of managers in 1997–1998. Large companies seem to have undergone a more dynamic evolution, with a much larger share going to strategic investors, and the managerial share falling in 1997–1998.

It is very hard to explain differences in ownership changes with respect to sector and size, although these variables undoubtedly affect the processes observed. In the course of the study conducted by the Jarosz team, a hypothesis was formulated that different patterns of ownership transformations are determined primarily by sector and

number of employees. The hypothesized relationships are illustrated in Table 26²². The author of this hypothesis, Juliusz Gardawski, assumes that "there is a certain optimum ownership structure for small and medium-sized firms established as a result of privatization of state-owned enterprises"²³ and that this optimal structure is determined primarily by social relationships within the firm²⁴.

In Table 27, we present an analysis of ownership changes with respect to sector and size. This table shows that the situation is far more complex and not always consistent with the relationships hypothesized by Gardawski. Our results are different for all of manufacturing and for most construction and trade firms. Additionally, it must be noted that several subgroups are too small to be representative; some are

Table 26. Ownership patterns in employee-leased companies in 1999 (Juliusz Gardawski)

Sector	Size of employment	Form of ownership
Manufacturing	Small Medium-sized Large	Investor companies ^a Manager companies Manager-investor companies
Construction	Small Medium-sized Large	Manager-employee companies
Trade	Small Medium-sized Large	Manager companies Manager-investor companies Investor companies

^a By "investors" we understand external investors (outsiders).

Source: Gardawski (2000), 163.

²¹ We define small companies as having up to 100 employees, medium-sized companies as having 101–200 employees, and large companies as having more than 200 employees.

²² Gardawski (2000), 163.

²³ Ibid., 158. Here Gardawski assumes that almost all directly privatized companies are small or medium-sized.

²⁴ Ibid., 151–158.

Table 27. Ownership structure in employee-leased companies, by sector and number of employees, in 1999 (%)

Number of employees	Strategic investor	Other outsiders	Managers	Non-managerial employees
Industry				
Up to 100 employees	–	4.3	57.7	38.0
101-200 employees	21.4	38.6	27.1	12.9
More than 200 employees	6.6	25.9	29.8	37.7
Construction				
Up to 100 employees	10.1	15.2	28.3	46.4
101-200 employees	27.6	3.1	44.9	24.4
More than 200 employees	38.4	27.2	14.5	19.1
Trade				
Up to 100 employees	7.8	20.9	36.5	34.9
101-200 employees	15.5	31.4	35.8	17.3
More than 200 employees	–	13.9	56.2	29.9
Services				
Up to 100 employees	–	23.8	26.6	49.6
101-200 employees	–	15.1	28.3	56.6
More than 200 employees	–	13.0	41.2	45.8

Two biggest shareholder groups in each category of companies are marked bold-italic.

Source: own calculations using Database 2.

made up of only a single firm. In fact, only two groups of companies bear out Gardawski's hypothesis: small construction and medium-sized trade firms.

Moreover, there is significant correlation between size and sector themselves. By the end of 1998, the average company in manufacturing employed 337 persons, in construction 194, in trade 157, and in services 101 persons (the average for the whole sample was 203 persons).

Finally, unionization is negatively correlated with the top management share at the time of privatization and in mid-1997, and negatively correlated with the non-managerial employee share in 1999. It is, however, not clear whether employee power resulting from unionization directly prevents management from accumulating employee shares, or whether the ownership effect is not due indirectly to union power, by virtue of unions' preventing layoffs (unionization is also negatively correlated with employment changes between the time of privatization and the end of 1996), and thus preventing worker shareholders from becoming outsider shareholders. Interestingly, unionization is not correlated with TRSI, indicating that unions do not constitute a barrier to the entry of strategic investors.

3.4. Profitability

There are also strong correlations between size and sector on one hand and the financial situation in the com-

panies on the other, reflecting the external conditions in which companies in various groups were operating. The simplest and most rigorous measure of financial performance is net profit (after payment of all liabilities except leasing obligations). If we divide the companies into two groups, those with net profits and those with net losses, we see that by the end of 1998, the best situation was found in services, where there were no loss-making companies at all. In construction, 12 percent of the firms had losses, in trade – 27 percent, and in manufacturing – 31 percent. Bigger companies more often had losses than the smaller ones: among large firms 23 percent were loss-making, medium-sized – 17 percent, and among small firms – 15 percent. These figures confirm the existence of cross-correlations between the three variables (size, sector, and financial performance).

Table 28 shows the evolution of ownership structures in companies grouped according to net profits or losses in 1993. This year was chosen as a starting point for comparison because it is the earliest year for which economic data in Database 2 is available. Selection of the earliest possible data allows us to minimize the impact of subsequent ownership changes on the financial situation of the firms.

In this table we see that initially in loss-bearing companies there were no outside investors at all, although these companies were undoubtedly in great need of financial resources; outsiders were probably not interested in acquiring such enterprises. In 1997–1998, 7 to 9 percent of

Table 28. Evolution of ownership structure, by net loss vs. net profit (weighted averages; %)

	Strategic Investor	Other outsiders	Managers	Non-managerial employees
Net losses in 1993				
Initial	–	–	49.9	50.1
1997	7.4	8.1	55.9	28.6
1998	9.0	24.6	50.8	15.6
1999	50.0	17.0	17.9	15.1
Net profit in 1993				
Initial	0.2	5.8	31.0	63.0
1997	5.8	13.2	35.2	45.9
1998	13.9	16.8	34.1	35.2
1999	11.8	22.9	31.7	33.6

Source: own calculations using Database 2.

these companies already had strategic investors, and by 1999 as many as 50 percent did – mostly at the cost of managers which were selling their shares. The very quick growth of the share of non-strategic outsiders before 1999 is most likely due to large-scale layoffs in those companies. At the same time, the shares of managers and non-managerial employees decreased very significantly: by 1999, the former group lost almost two thirds of their initial amount of shares, and the latter group lost more than two thirds of initially possessed shares.

In the group of profitable companies, slow growth of shares of outside strategic investors is striking. It seems that the need for such investors is usually only felt when the situation in the company is very poor.

We conclude, therefore, that the most powerful factor determining the dynamics of ownership changes in the companies is their economic condition. When a company is doing well, the internal relations in the company are stable, and none of the main actors has an incentive to undermine this stability. When a company encounters severe economic problems, the actors begin to look around for solutions. The most obvious one is to find an external investor who brings an injection of fresh capital. When major inside shareholders and stakeholders have to choose between survival of the company and preservation of their shares, they tend to choose survival, at the same time trying to keep some shares for themselves. In such conditions, moreover, non-managerial employees lose every possible motivation for them to hold on to their shares: the shares never allowed them to participate in management, and now they don't even bring dividends. In earlier studies, a strong positive correlation was discovered between lack of dividends and selling of shares by non-managerial employees²⁵.

3.5. Methods for Ownership Transformation: Share Sales and New Issues

In most cases trade in shares was not a completely spontaneous process. The main actors behind the privatization of the companies took care to minimize the risk of unwanted changes in the ownership structure in their firms. The charters of the great majority of companies (87 percent) contained restrictions on such trade. They were aimed at three main goals: (1) not to allow shares to "leak" outside the firm; (2) to facilitate ownership concentration in the hands of management elites, and (3) to prevent the emergence of new large shareholders within the firm who could undermine the position of governing groups. Several methods were used to this end: right of first refusal by current owners; requiring share owners selling their shares to receive prior permission at the shareholders' meeting, or from the supervisory board (sometimes even the executive board); prohibition of share sales to outsiders, etc. Nevertheless, the processes of ownership redistribution often proved to be stronger than the restrictions, even in the companies where all trade in shares had been prohibited. Those restrictions only delayed changes (especially sales of shares to outsiders), but could not stop them completely²⁶.

Post-privatization ownership transformations, moreover, were achieved not only by trade in existing shares but also by issues of new ones. Nineteen firms had carried out new share issues by mid-1997. Of these, 11 were closed and 3 were public (we have no information on the character of five of the new issues). Of the 11 closed issues, recipients of new shares in all eight firms that we have information about were limited to persons already holding shares.

²⁵ See Kozarzewski (1999), 85–86.

²⁶ For more, see *ibid.*, 87.

Table 29. Management-owned companies and entire sample, by population of headquarter location

	Management-owned companies	Whole sample
POP1	3 (9.7%)	9 (8.3%)
POP2	5 (16.1%)	16 (14.7%)
POP3	11 (35.5%)	28 (25.7%)
POP4	3 (9.7%)	23 (21.1%)
POP5	9 (29.0%)	33 (30.3%)

Source: own calculations using Database 2.

Table 30. Management-owned companies and entire sample, by branch

	Management-owned companies		Whole sample	
	Number	Percent	Number	Percent
Food processing	1	3.2	8	7.3
Other manufacturing	7	22.6	21	19.0
Construction	5	16.1	33	30.0
Transport	1	3.2	3	2.7
Trade	12	38.7	26	23.6
Services	2	6.5	8	7.3
Consulting and design	3	9.7	11	10.0
Total	31		110	

Source: own calculations using Database 2.

Most frequently, new share issues serve to promote concentration of shares (especially in the hands of management and strategic investors), as evidenced by the positive correlations between new issues (the dummy variable NEW) and variables such as TRCON, TRSI, GRSI, and TRM. Correlation analysis also shows a positive correlation between new issues and company size, a negative correlation between new issues and the size of top management's share at the time of privatization, a negative correlation between NEW and YRI (meaning that the earlier the privatization took place, the greater the likelihood that a new issue has occurred in the meantime), and a positive correlation between new issues and a transition to domination by a strategic investor (the dummy variable TRSI).

Looking more closely at the latter relationship, we see that of the 13 companies with strategic investors as of mid-1997, six had carried out new issues, and seven had not. We have information on the character of four of them, and all four were closed. Of the three firms that declared having had a public listing, none had a strategic investor. It appears, therefore, that strategic investors appear in employee-owned companies through new share issues as often as through buying out the employee shareholders, and that employee-owned companies listing publicly are not looking for, and/or not finding, strategic investors.

3.6. Top Management Domination

Geography does not appear to be a factor in the transition to management domination. If we look at the size of

the cities in which the companies in which Executive Board members held at least 20% of the shares in 1997 are headquartered, we see that there seems to be virtually no difference between the firms dominated by management and the sample as a whole.

With respect to branch, the only apparently significant difference between the firms dominated by management and the sample as a whole is the larger number of trade companies and smaller number of construction companies among the former.

In almost all of the firms in which top management held a share of over 20% in mid-1997, respondents said that the firm was operating on a competitive market (24 such responses). Only one respondent claimed to be a monopolist, and four claimed to be oligopolists.

In conclusion, management ownership does not seem to be related to geographic factors or such economic factors as branch or market share. As we shall see, the situation with respect to companies in which strategic investors have appeared is somewhat different.

3.7. Companies with Strategic Investors

As in the case of management-owned companies, location seems to constitute no special advantage in finding an investor (Table 31).

By contrast, as we see in table 32, there are significant differences between companies with strategic investors and the sample as a whole with respect to branch. Manufactur-

Table 31. Companies with strategic owners and entire sample, by population of headquarter location

	Companies with strategic investors	Whole sample
POP1	2 (11.8%)	9 (8.3%)
POP2	2 (11.8%)	16 (14.7%)
POP3	3 (17.6%)	28 (25.7%)
POP4	5 (29.4%)	23 (21.1%)
POP5	5 (29.4%)	33 (30.3%)

Source: own calculations using Database 2.

Table 32. Companies with strategic owners and entire sample, by branch

	Companies with strategic investors		Whole sample	
	Number	Percent	Number	Percent
Food processing	3	17.6	8	7.3
Other manufacturing	4	23.5	21	19.0
Construction	7	41.2	33	30.0
Transport	-	-	3	2.7
Trade	3	17.6	26	23.6
Services	-	-	8	7.3
Consulting and design	-	-	11	10.0

Source: own calculations using Database 2.

ing and construction are more strongly represented among the group with strategic investors than in the sample as a whole. Trade is represented more weakly, and services are not represented at all.

Market share does not seem to differentiate companies with strategic investors from those dominated by Executive Board members. Of the 13 companies with strategic investors as of mid-1997, one claimed to be a monopolist, three claimed to be oligopolists, and nine said they were operating on highly competitive markets. Correlation analysis yields no evidence of a relationship between market share and the presence of strategic investors.

There appears to be evidence that size (employment) is a factor in attracting strategic investors (positive correlations between TRSI and end-of-year employment in 1996 and 1998), but there is also evidence that strategic investors have a positive effect on employment (no correlation

between 1996 end-of-year employment and SI, but a positive correlation between end-of-year employment in 1998 and SI; also, a positive correlation between SI at the time of privatization and employment changes between the year before privatization and the end of 1996). The direction of causality therefore seems very difficult to ascertain, and we cannot say whether larger companies attract investors, or whether investors increase employment (or both).

Respondents from companies with strategic investors were asked whether they had had trade relationships with the strategic investor previous to the latter's acquisition of shares. Of the 17 firms, we obtained no answer to this question from nine, and the remaining eight were evenly divided between those that had and those that had not maintained such contacts prior to the investor's acquisition. These data are clearly insufficient to allow us to draw any conclusions.

4. The Economic Performance of Employee-Leased Companies

In this section we will review both previous studies of employee-leased companies in Poland and our own research results in order to evaluate the economic performance of the companies and assess, at least tentatively, the relationships between this performance and various factors, including ownership structure and ownership changes.

4.1. Profitability

The financial results of employee-owned companies seem to be generally fairly sound in spite of the burden of lease payments and the restructuring needs facing all firms emerging from Poland's former state-owned sector. The data in Table 33 allow one to compare the financial situation in employee-owned companies and state enterprises preparing for privatization by the leasing method with that in companies that have undergone capital privatization and companies participating in the National Investment Fund program.

These data show that profitability indices for the average Polish employee-leased company have been close to – and

sometimes even better than – the average indices for firms privatized by the capital method. In addition, they are much higher than those of state enterprises and firms participating in the NIF program²⁷.

It is, however, worth noting that this profitability index has been consistently falling from year to year, and that profitability was best for those types of enterprises which were least typical among the group of employee-leased companies; i.e., among large industrial enterprises employing over 300 persons²⁸.

4.2. Investment Activity

High interest rates and considerable imperfections in the Polish banking sector rendered access to funds for the financing of investments difficult for practically all Polish enterprises, and especially small businesses, throughout the first half of the 1990s²⁹. During this period, it was often claimed that leased companies in Poland were characterized by *exceptionally* low levels of investment activity. One group

Table 33. Gross profitability (ratio of gross profit or loss to total revenues)

	1994	1995	1996	1997	1998
Employee-leased companies	6.4	6.3	6.0	4.9	4.5
State enterprises currently undergoing direct privatization	3.1	0.3	1.6	1.0	0.5
Capital-privatized companies	4.9	6.5	4.4	6.3	4.9
Companies designated for participation in NIF program	4.2	2.5	0.23	1.6	-0.5

Source: Kozarzewski et al. (2000), 49.

²⁷ See Ministry of Ownership Transformation (1995), 3. The vast difference between reported financial results for firms preparing for liquidation privatization and those preparing for capital privatization may reflect the use of "creative accounting" due to the different incentives facing the two types of firms: while the managers of the former type of firms are, for the most part, preparing to purchase the firm themselves, they have an incentive to underreport the financial results and value of the assets of the firm with a view toward negotiating as low a price as possible with the Ministry of Ownership Transformation; the managers of firms being prepared for capital privatization, however, are looking for outsiders to purchase the firm and therefore wish to make the firm as attractive as possible.

²⁸ See Pietrewicz (1995), 54.

²⁹ See "Eyeing up the risk".

of researchers found a tendency to low investment and decapitalization in employee-owned companies compared with the national economy as a whole³⁰.

However, as their name implies, leased companies must make regular – and sometimes very burdensome – lease payments, to which a large portion of profits must be dedicated, thus limiting the possibilities for using retained earnings to finance investment; additionally, these firms have exceptional difficulty (in comparison with other privately-owned firms) in obtaining bank credits, since (at least in the early phase of their operation) they do not own, but only lease, their physical capital and thus possess inadequate collateral³¹. Some of the consequences of the debt burden incurred as a result of the leasing construction of most employee-leased companies are investigated in the Jarosz group's research, which includes analysis of the liquidity indices for their sample of firms in comparison with national averages. The current ratio (i.e., the ratio of current assets to current liabilities) was, on the average, not particularly good, but better than the national average in 1993; in addition, the national average was falling at that time, while the index for the sample of leased companies was rising. (It should, however, be noted that the average current ratio in employee-leased companies in the trade and services sectors was much lower than the sample average; the index for these firms was on the threshold of becoming threateningly low and was, moreover, below the national average.) The same situation was observed with regard to the quick ratio (i.e., the ratio of current assets minus average reserves to current liabilities). Similarly, the ratio of long-term debt to equity was found to be quite high, averaging 2.47 for the entire sample for 1993 (7.52 in firms employing 100 persons or fewer)³².

Various governments have made some attempts to alleviate this problem. The reductions of the interest rate paid on the leases have been discussed above (in Section 1). In addition, a measure to stimulate investment was included in

the 1993 regulatory changes. According to these provisions, a leased company can apply to its founding organ for a reduction of the interest payments owed by the company as a result of postponements during the first two years of the leasing period if its investment expenditures out of profits amount to at least 50 percent of its net profit. The new privatization act of 30 August, 1996, also included a provision intended to enhance the creditworthiness of employee-leased firms when applying for bank loans. According to Article 52, the title to the assets being leased may be transferred to the leased firm after it has paid only one third of the obligations resulting from the leasing contract if two years have passed since the signing of the leasing contract; this term may even be shortened to one year if the firm has paid at least one half of those obligations.

In addition to the difficulties arising from the lack of collateral, it is worth noting that the leasing method of privatization is explicitly intended for firms which are considered to require little investment³³.

Bearing all of the foregoing in mind, it is difficult to conduct research on, or make conclusive statements about the level of investment in leased companies – or, for that matter, any Polish companies (except in the case of foreign-owned companies where the level of investment is generally so high in comparison with other privatized companies that it cannot fail to escape notice) – due to the fact that regulation of depreciation allowances (not reformed until the passage of the 1999 corporate income tax act) made it unprofitable for companies to show investment expenditures as such on their income statements (tax liabilities were decreased by including such expenditures on the cost side instead). However, already in the early 1990s there was some evidence that an "elite" of leased companies was investing on a scale comparable with that observed in enterprises privatized by the capital method but without foreign investors³⁴. Moreover, anecdotal evidence indicates that as more and more employee-owned companies pay off their

Table 34. Average value of investment projects, per employee (in PLN)

	Mean	Minimum	Maximum	Standard Deviation	N
Sum 1992-1997	6.43	0.00	128.62	13.4625	110
1998	4.66	0.00	128.44	13.6108	106

Source: own calculations using Database 2.

³⁰ See Pietrewicz (1995), 39–40.

³¹ See Jarosz (ed.) (1995), 16.

³² See Pietrewicz (1995), 43–48.

³³ See Supreme Control Chamber (1993), 9, Uchwała Sejmu Rzeczypospolitej Polskiej z dnia 12 lutego 1993 r. w sprawie podstawowych kierunków prywatyzacji w 1993 r., and Kierunki prywatyzacji majątku państwowego w 1995 r.

³⁴ See Szomburg et al. (1994), 39, 54. Investment spending in capital-privatized firms with foreign investors was vastly greater than that in capital-privatized firms without foreign investors.

Table 35. Number of firms that obtained investment credit

	Number	Percent	N
1992-1996	31	33.3	93
1998	21	24.4	86

Source: own calculations using Database 2.

Table 36. Average investment spending, 1993-1996 (in millions of pre-1995 zlotys) ³⁵

	Mean	Minimum	Maximum	Standard Deviation	N
1993	303.51	0	5200	864.87	70
1994	476.91	0	10840	1517.96	88
1995	379.72	0	10989	1227.71	110
1996	601.74	0	17874	2253.85	110

Source: own calculations using Database 2.

leases, acquiring legal titles to the property which they had been leased and thereby gaining the ability to secure loans with collateral, their access to commercial credit has grown considerably, thus considerably increasing the level of investment.

We try to investigate some of these questions using the data in Database 2.

Table 34 provides evidence that a considerable acceleration of investment had occurred by the late 1990s. The mean investment project underway in 1998 had a per-employee value of about two thirds the per-employee value for all such projects in the years 1992-1996. Table 35 shows a similar trend with respect to the number of firms in the sample that had obtained credit.

Of 108 firms that answered the appropriate question, 26 firms had paid off their leases by mid-1998 (24.1% of valid responses). Did this increase their access to credit? Perhaps too little time has elapsed since the payoff of the leases for statistical relationships to emerge from the data. At any rate, there is no correlation between the fact that a company has paid off its lease on the one hand and either 1998 per-employee investment spending or financing of such investment by credit on the other.

The question of dividend payments is a difficult one. On one hand, the failure to make dividend payments may represent an abuse of shareholder rights by management (via use of "creative accounting" to "artificially" increase the level of costs, thus reducing profits and thereby tax liability and the pool of

funds to which shareholders could exercise a claim). On the other hand, the opportunity cost of dividend payments is decreased funds available for investment, and therefore "asceticism" in the area of dividend payments may represent a pro-investment orientation of the shareholders and a consensus on their part to favor investment over the immediate gratification of dividends. As table 37 indicates, such asceticism is widespread among employee-owned companies.

However, the data yield no statistical evidence that this asceticism leads to greater investment. There is no correlation between the dividend payments in either 1998 or 1999 and per-employee investment spending in 1998, and there is actually a positive correlation between 1995 and 1996 dividends and 1996 investment spending. (Similarly, there is a positive correlation in 1999 between the dummy indicating whether a dividend was paid and the variable measuring expansion into new markets.)

Does ownership make a difference with regard to the payment of dividends (i.e., do different types of owners have different preferences with regard to tradeoff between investment and immediate gratification in the form of dividends)? There is a negative correlation between the dummy indicating whether a dividend was paid in 1997 on the one hand and the share belonging to non-managerial employees at the time of privatization and in 1997, and a positive correlation between the 1997 dividend dummy and the 1997 shares of strategic investors. On the other hand, there is negative correlation between the ratio of the dividend payment to the net profit

Table 37. Number of firms that made, and did not make, dividend payments, 1997-1998

	1997		1998		1999	
	Number	Percent	Number	Percent	Number	Percent
Not paid	55	50.0	57	52.8	74	67.3
Paid	55	50.0	51	47.2	36	32.7

Source: own calculations using Database 2.

³⁵ This table is based on figures from the companies' income statements for the relevant years. Unfortunately, for the years 1997 and 1998, we do not have such figures, but rather the total value of current investment projects.

and the strategic investor share, and a positive correlation between this ratio and the worker share. We can therefore conclude that in 1997 companies dominated by workers were less likely to pay dividends than those dominated by strategic investors, but if they did pay them, they tended to pay out a higher percentage of the profits in the form of dividends. In contrast, there is a positive correlation between the dividend dummy for 1999 and both the percentage of the workforce owning shares (OWN) and the percentage of the workforce belonging to a trade union (UNI) in 1999. So overall, these relations are rather ambiguous.

Less ambiguous, and very surprising, is the complete absence of any correlation between various measures of strategic investor shares and their growth on the one hand and investment variables or paying off the lease on the other. In other words, there is no statistical evidence that the presence of a strategic investor actually leads to more investment! In contrast, for 1999 (but not for 1997), there is a positive correlation between concentration in the hands of management (TRM, but not GRMAN) and investment spending. Interestingly, per-employee investment spending for the period 1992–1996 is positively correlated with EQ3³⁶ – the least concentrated ownership structure – whereas in 1999 it is negatively correlated with OWN. Evidence concerning the relationship between the degree of non-managerial employees' participation in ownership and investment is therefore rather ambiguous.

There is consistently a positive correlation between the value of investment projects and the use of credit as a means of financing them, which would tend to support the claims that lack of access to credit is one of the main explanatory factors for the low rate of investment in employee-owned companies in Poland. Interestingly, use of credit is not correlated with size. In 1999, it was negatively correlated with the number of layoffs between the year of privatization and

the end of 1996 (positive correlation with P.C. CH)³⁷, and positively correlated with the acquisition by Executive Board members of ownership shares exceeding 20% during the same period (TRM).

Finally, investment spending in 1992–1996 and in 1996 was positively correlated with the size of the firm (employment), and investment spending in the period 1992–1996 was positively correlated with the dummy indicating whether a new share issue had occurred during the same period (NEW).

Summarizing the results of this analysis, we conclude that size and access to credit do seem to be key variables in the determination of the level of investment spending, but neither the propensity to pay dividends nor the ownership structure seem to be related in any consistent and significant way to investment activity.

4.3. Restructuring and Adjustment Activity

Restructuring and adjustment activity in employee-leased firms tended in the first half of the 1990s to be concentrated in increased promotional activity and adjustments of a simple, cost-reducing nature (e.g., employment reductions), involving little in the way of introduction of new products or significant improvement in the level of technology³⁸. Later, however, an increase in investments of an innovative nature was found³⁹.

Employee-owned companies have shown a great deal of elasticity in their employment policies, often engaging in significant layoffs (in firms that are on the average relatively small to begin with). Overall, employment in the sample consistently fell from year to year, as the table below shows. On the average, employment fell between

Table 38. Average end-of-year employment, by year

	Mean	Minimum	Maximum	Standard Deviation	N
1992	262.14	6	1749	294.72	76
1993	226.58	6	1882	275.65	90
1994	219.74	5	2002	276.77	99
1995	211.97	3	1942	268.69	104
1996	206.50	3	1919	262.79	110
1997	201.32	3	1713	246.79	106
1998	192.37	2	1693	240.90	110

Source: own calculations using Database 2.

³⁶ It is also positively correlated with the size of the workforce and the oligopoly dummy.

³⁷ It is also negatively correlated with the growth in the ownership share of "other" outsiders (GROO), which may further suggest a positive relationship between the growth of their share and the number of layoffs (see the discussion in Section 2).

³⁸ See Pietrewicz (1995), 51–52.

³⁹ See Krajewski (1998), 108–109, Krajewski (2000), 123–124.

Table 39. Average end-of-year employment in companies owned by top management and strategic investors, by year

	Companies with top management domination				Companies with strategic investors			
	N	Mean	Minimum	Maximum	Mean	Minimum	Maximum	N
1992	22	184.32	6	723	374.46	21	990	13
1993	28	163.54	6	643	362.00	21	964	12
1994	30	151.07	5	606	342.80	21	864	15
1995	33	144.48	3	624	323.00	21	821	16
1996	34	151.06	3	629	299.29	31	751	17
1997	33	158.12	3	638	296.82	34	805	17
1998	34	139.06	2	627	281.59	34	778	17

Source: own calculations using Database 2.

the end of the year prior to privatization and the end of 1996 by 13.3%.

It should be noted that the maximum values are outliers, as in 1997 only two companies in the sample had employment of over 1000.

As noted in Section 3.4, unionization is negatively correlated with employment changes between the time of privatization and the end of 1996, providing some evidence that unions were effective in preventing layoffs, at least early on. Later the situation seems to change: while 1997 unionization is positively correlated with employment in the year before privatization and at the end of 1996, unionization in 1999 is not correlated with employment at the end of 1998.

A comparison of tables 38 and 39 shows that average employment in the companies that have attracted strategic investors is consistently higher than the sample average, while average employment in those owned by top management is consistently below average. These companies are similar to the others in the sample, however, in that they also consistently reduced employment throughout the analyzed period. Moreover, there appears to be no significant

difference in the rate at which employment was reduced over the course of the entire period.

Two measures of adjustment and restructuring activity that we expected to be particularly telling are measures of employment in marketing and expansion into new markets. Sixty-three firms (57.3% of the sample) had marketing units as of mid-1999. The average employment in these units was 2.12 persons. The existence of a marketing unit and the size of that unit were both positively correlated with employment at the end of 1998. These variables were not, however, correlated with any ownership variables, with investment indicators, or with expansion into new markets.

With respect to new markets, the respondents were asked on three occasions whether they had acquired new markets⁴⁰. A majority had (table 40), and almost half of the firms that had not acquired new markets were in trade, as table 41 shows.

One was a monopolist, two were oligopolists, and 35 were in competitive markets. However, as in the case of marketing activity, expansion into new markets has little correlation with other variables, and the few correlations

Table 40. Positive responses to new market expansion question, 1997–1999

Number of positive responses	Number of firms	%
0	42	38.5
1	31	28.4
2	25	22.9
3	11	10.1

Source: own calculations using Database 2.

Table 41. Positive responses to new market expansion question, 1997–1999

	Frequency	Percent
Food processing	2	4.8
Other manufacturing	5	11.9
Construction	8	19.0
Trade	19	45.2
Services	8	19.0
Total	42	100.0

Source: own calculations using Database 2.

⁴⁰ In 1997 they were asked if they had acquired them since privatization; in 1998 and 1999 they were asked if they had acquired them in the previous year.

Table 42. ISO quality certification by ownership group, 1998

	Top management domination		Strategic investor		Whole sample	
	Number	Percent	Number	Percent	Number	Percent
No data	-	-	1	5.9	2	1.9
Certified	4	12.9	2	11.8	13	12.0
In process of certification	2	6.5	4	23.5	11	10.2
Intends to obtain certificate	3	9.7	4	23.5	16	14.8
Not certified and not planning certification	22	71.0	6	35.3	66	61.1
Total	31	100.0	17	100.0	108	100.0

Source: own calculations using Database 2.

which do exist (with EQ2 and OWN) do not seem to admit of any explanation.

Finally, we looked at the question whether concentrated ownership had affected ISO quality certification (Table 42).

In terms of actual certification, there is virtually no difference between the percentages of certified firms in the three groups; however, a significantly lower proportion of firms with strategic investors have no ISO certificate and do not plan to obtain one than in the other two groups. Moreover, a much higher percentage of firms with strategic investors is in the process of certification.

5. The Relationship between Ownership Structure and Productivity: Evidence from the Early 1990s

In this section we present the results of econometric analysis of the relationship between the ownership structure of employee-leased companies and productivity⁴¹. In particular, we would like to know whether the extent of participation of non-managerial employees is related to enterprise performance. The sample is very well suited to such an analysis due to its great diversity with respect to the extent of employee participation in share ownership, with firms ranging from virtually no employee ownership to complete employee ownership. The analysis was carried out using data from Database I.

5.1. Productivity Analysis: Estimating Framework

We analyze productivity here using an augmented production function framework that has been used in several earlier studies analyzing the relation between employee participation and productivity⁴². Ideally⁴³, the logarithmized production function estimated is a Cobb-Douglas function:

$$\ln V_{it} = \alpha_0 + \alpha_1 \ln K_{it} + \alpha_2 \ln L_{it} + \alpha_3 Z_{it} + \alpha_4 X_{it} + \mu_{it}$$

where V denotes value added, K and L represent capital and labor inputs, respectively, X is a vector of industry and enterprise-specific variables such as dummies for the year of production and the branch in which the enterprise operates, Z is a vector of participatory variables, firms are denoted by the subscript i , the time period in years by t , and the residual by μ .

We estimate the models using Ordinary Least Squares (OLS) techniques. Ordinarily, the endogeneity of the independent variables would rule out use of the OLS method.

However, researchers studying the relation between employee participation and productivity use this technique due to the fact that it is more robust against specification errors than simultaneous equations methods⁴⁴.

5.2. Productivity Analysis: The Results

For this analysis, a fairly large portion of the sample was eliminated. This was due to the fact that various branches of manufacturing were represented by too small a number of firms. Thus, we were left only with firms in construction, trade, and services. The results of the OLS estimations are reported in Table 43.

Before discussing these results, some remarks on the quality of the data and its implications for our analysis are in order. Unfortunately, no measure of capital costs (e.g., depreciation) is included in the data. For this reason, construction of a value added variable was impossible. Moreover, in a number of studies of labor productivity in transforming economies, researchers have used sales revenues rather than value added in constructing measures of productivity⁴⁵. This is most likely due to the fact that the manipulation of profits in post-Communist economies is endemic for a number of reasons. Two reasons are: first, the fact that an increase in the enterprise's profits entails a proportional increase in its tax liability, and second, the fact that some portion of profits is often distributed to shareholders in the form of dividends. In order to avoid such "losses" to the state treasury and shareholders and retain as much money in the firm as possible, managers manipulate their accounts. These manipulations occur on the cost side (for instance, by including some part of investment costs in production costs).

⁴¹ A full discussion of this analysis is found in Woodward (1999). An earlier version was published in Woodward (1998).

⁴² See Estrin et al. (1987), Conte and Svejnar (1988), and Jones (1993).

⁴³ Departures from the ideal are discussed in Section 5.2.

⁴⁴ In fact, the use of OLS to estimate production functions is generally accepted as appropriate. See Zellner et al. (1966).

⁴⁵ See, for example, Brada and Singh (1995), Grosfeld and Nivet (1998).

Table 43. OLS estimates of productivity effects (using sales revenues instead of value added)

Variable	Construction	Trade	Non-material services
lnL	0.981263* (10.10735)	0.429334* (3.07973)	0.62137* (5.40815)
lnK	0.151614* (2.38320)	0.350398* (3.20938)	0.20496* (3.47193)
YEAR	0.208879* (2.48804)		
POP2			-1.35048* (-3.97939)
POP5			0.90459* (6.02102)
AMORT			-0.02946* (-5.76673)
EQ1	-0.367536* (-2.34528)	-0.410853* (-2.70768)	
EQ3	-0.495985* (-3.09907)		
WOR		-0.003266 (-1.11267)	-0.00517 (-1.77634)
UNI		0.006062* (2.53779)	
n	86	52	40
adjusted R ²	.81642831	.78083193	.84440984

Asterisks indicate coefficients which are statistically significant at the 95 percent confidence level.

Figures in parentheses are t-statistics.

Source: Own calculations using Database I.

For this reason, we performed regressions using the natural logarithm of sales revenues instead of that of value added. With respect to non-participatory variables, we observe the following. Population coefficients appear only for one sector. We see that here, large population positively affects sales, and smaller population negatively affects sales. Amortization is significant in only one sector, but its coefficient has a negative sign, as one would expect.

Turning to the ownership variables which are our chief interest here, we note, first, that a number of them do not appear in the estimations at all, including EQ2 and OWN.

A coefficient for variable WOR – i.e., the percentage of shares held by non-managerial employees – appears in two sectors; it is negative, but insignificant, in both. A high degree of concentration (EQ1) has a negative relationship with productivity in four sectors (significant in two). The coefficient for unionization is positive and significant, but very small. In one case EQ3 appears, with a coefficient which is negative and significant. This result is the only one which can be interpreted as evidence of a negative relationship between (a relatively) egalitarian ownership structure and productivity.

6. Corporate Governance

6.1. Formation of Corporate Governance Bodies

Privatization, as one of the pillars of the construction of the new economic and social relations in Poland's market economy, is effective only if it spurs innovation in the management of enterprises. Privatization cannot, therefore, be seen as a simple matter of transferring shares to private hands; rather it involves a play of interests regulated by the Commercial Code and business practice: the interests of the new owners, in whose hands the chief decision-making powers are vested, and those of various stakeholders. Mechanisms are set in motion serving to harmonize the interests of these main groups. The ownership and stakeholder configurations emerging in the context of privatization play a decisive role in determining the firm's fate⁴⁶, shaping authority structures that, in turn, direct the companies' post-privatization development and orientation. Thus, the reorganization of ownership is accompanied by a reorganization of management and control structures; the question is, how deep and effective is this latter process?

Of course, this process represents a very complicated task. In the most highly developed market economies, corporate organizational structures were formed in a longlasting, largely spontaneous, process. The organizational structure, tasks and functions of management and control bodies were subject to permanent evolution directed at ensuring the best possible defense of owners' interests. Legislative codification of these structures and functions represents a sort of consensus regarding "best practices" which had already emerged. In the post-Communist countries, by contrast, these structures were formalized by legislative means, overnight as it were, without a preceding phase of spontaneous evolution.

In contrast to many post-Communist countries, Poland inherited, at the outset of its transition, a continental European (three-tier) model of corporate governance laid out in its Commercial Code, dating from the 1930s, which had never been

suspended by the Communist authorities. However, the legislative circumstances are of secondary concern to us here. More important for our purposes is the mechanism for supervision of the company's executive bodies implied in adoption of the continental model. This is particularly important in Poland, as the influence of various forms of so-called external control (e.g., product and financial markets) is in many cases still not fully effective. In such conditions, the efficient functioning of so-called internal supervision assumes fundamental importance.

The basic task of the new body introduced into Polish enterprises as a result of ownership transformation – the supervisory board – consists in supervision of the company's operations on behalf of – and in the interests of – its owners. Lately, more and more frequently opinions are expressed that the supervisory board should not confine itself to representing exclusively the interests of the owners, but rather become a platform for coordinating the manifold interests in which the company is involved; i.e., to be a stakeholder forum. Without entering into a discussion on whether, in Polish conditions, the supervisory board should shoulder this additional responsibility, we will attempt to determine the extent to which such a function has been assumed by the supervisory boards in the companies under review. The formation and definition of the supervisory board's goals and functions, of its place among other organs of the company, is extremely complicated in Poland, where this body faces the brand new task of performing supervisory functions in the name of the share owners, a concern which did not exist in the state-owned enterprise.

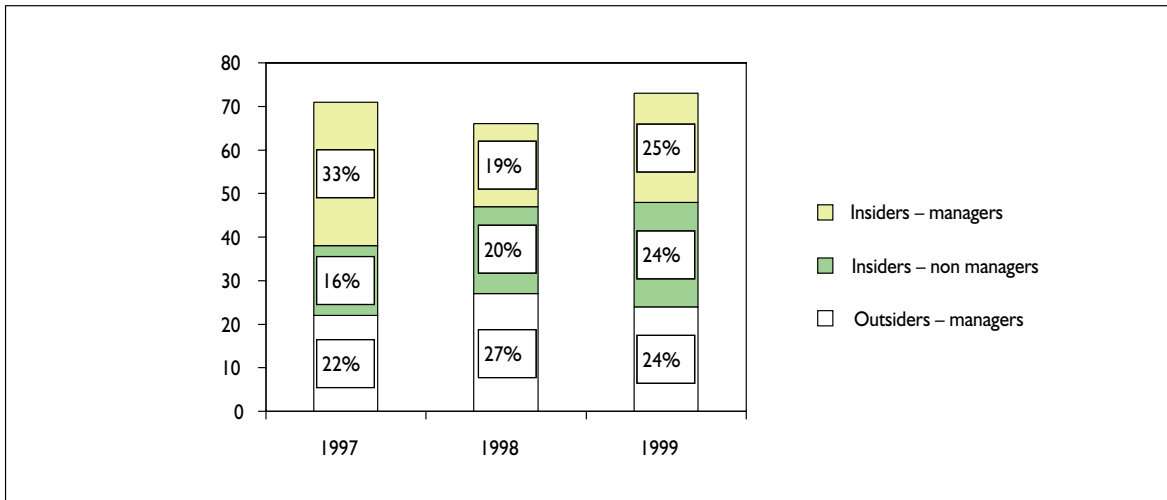
The supreme element of the executive line of authority – the executive board – has a very wide range of powers and is limited only insofar as certain powers are reserved for the owners themselves, acting through the shareholders' meeting.

Shareholders' Meeting

The impact of ownership changes on the composition of the general assembly of shareholders is obvious. Partici-

⁴⁶ See Frydman and Rapaczynski (1994).

Figure 1. Basic groups of supervisory board members (% of total number of members)



Source: own calculations using Database 2.

pation in shareholders' meetings and the degree of influence on decision making at those meetings are strictly dependent on the size of one's share in the company's share capital. Therefore, the constellation of interests and power within this body is implied in the analysis of the ownership structure of employee-leased companies. In this section we will attempt to describe the general assembly's place within the authority structure of the firm with respect to other organs and interest groups.

Supervisory Board

The supervisory board is appointed by the shareholders. It is (at least in theory) a supervisory and not a management body, despite the fact that, in the nature of things, it cannot be excluded from participation in the firm's influence structure.

Based on responses to the Jarosz team's survey, we can confirm that a large majority of companies aspire to create, at least formally, a corporate governance body with the full range of responsibilities, implying that their owners are aware of the advantages of separating the ownership and control functions. Supervisory boards (which are required in companies exceeding certain size limits) exist in 86 percent of all the companies under review. This conclusion is supported by the fact that the minority of companies that have dispensed with a supervisory organ are mostly limited to the very smallest ones (in terms of employment, charter capital and number of owners).

One of the most important traits of the personal composition of the supervisory boards under review is the very high participation of insiders (most notably managerial employees). Interestingly, after a drop in their participation to 19 percent in 1998 from 33 percent in 1997, we witnessed an increase to 25 percent in 1999. On the other

hand, the percentage of board members employed in the firm in non-managerial posts has grown steadily over this three-year period (16 percent, 20 percent and 24 percent, respectively). As a result, in 1999, the overall share of insiders in the membership of supervisory boards returned to the 1997 level (i.e., 49 percent). Among the outsiders, managers from other firms continue to make up the largest category (22 percent in 1997, 27 percent in 1998, and 24 percent in 1999), of which three fourths are managers from private companies (Figure 1).

The column "Total" in Table 44 contains detailed data on the personal composition of supervisory boards in the companies under review in 1999. In comparison with earlier years, it seems to have remained very stable. There are still very few experts from various fields of knowledge potentially useful to this body's work: the joint share of bankers, consultants, scientific and technological experts and professionals amounted to 9 percent in 1997 and 7 percent in 1999. Thus, in practice, little use is made of one of the basic instruments for equipping the supervisory boards with the capacity for exercising expert control on behalf of the owners.

We see that the composition of supervisory boards continues to be dependent primarily on the ownership structure: outsider dominance in the ownership structure is accompanied by outsider dominance in supervisory board membership. The most "outsiderized" supervisory boards are in the companies dominated by an outside strategic investor (79 percent of board members in such cases do not work in the company). The same applies to the dominance of managerial and non-managerial employees. Lack of dominance of any of the insider groups is correlated with managerial dominance of the supervisory board. We observe a larger than average share of private managers

Table 44. Composition of the supervisory board in 1999, by categories of ownership dominance (%)

Post occupied outside the supervisory board	TOTAL	Ownership structure of the company; dominance of:				
		Strategic outsiders	Other outsiders	Managers	Non-managerial employees	Without dominant group
At the firm under review						
Managerial post	25	14	12	25	38	37
Specialist	12	4	14	20	16	11
Trade union activist	1	2	–	–	2	2
Non-managerial post	11	1	9	8	24	13
Outside the firm under review						
Managerial post in state-owned enterprise	5	–	8	6	4	4
Managerial post in private sector	19	37	20	13	3	13
Bank employee	3	3	1	1	1	3
Employee of state administration	3	4	3	–	2	1
Employee of local administration	1	–	–	2	–	–
Scientist	3	3	1	4	2	3
Employee of consulting firm	1	6	–	1	–	–
Private businessman	8	10	25	8	1	6
Pensioner	6	10	4	12	4	8
Other	2	6	1	–	1	1
Total	100	100	100	100	100	100

Source: own calculations using Database 2.

and consultants in the supervisory boards of companies dominated by strategic outside investors, which should give these boards superior capacity to carry out their supervisory function competently.

This aggregate picture of the composition of supervisory boards fails to convey the diversity of combinations of forces and interests found in different boards. The representation of different groups (most importantly insiders and outsiders) varies widely across companies. In 1999, in more than half (51 percent) of the boards under review, the majority was made up of people who were not employees of the given firm, and in 20 percent the boards were made up exclusively of outsiders. In 47 percent of the supervisory boards insiders dominated, and in 28 percent there was not a single person from outside the firm. When viewed over a longer period of time, the evolution of the composition of the supervisory boards has not been unidi-

rectional. Contrary to what one might expect in view of the process of ownership "outsiderization", the position of insiders measured by numerical dominance in the composition of different boards was markedly strengthened in 1998–1999. At the same time, polarization into purely "insider" and purely "outsider" boards was accentuated.

A closer look at the problem reveals that this seeming paradox actually constitutes a continuation of earlier concentrated trends: in companies belonging to the employees, institutional control is increasingly concentrated in the hands of insiders, while in the "outsider" companies their employees are more and more often allowed to participate in the organs of corporate governance.

This can be seen as evidence that the corporate governance system in Polish companies is gradually nearing the continental model. Moreover, this process has entered a new phase in which this adjustment does not stem primar-

Table 45. Supervisory board composition in 1997–1999, by ownership structure (%)

Supervisory board composition	Ownership structure in the company											
	Without strategic investor			With a strategic investor			Dominant insider ownership			Dominant outsider ownership		
	1997	1998	1999	1997	1998	1999	1997	1998	1999	1997	1998	1999
Only outsiders	19	12	12	54	41	46	17	10	10	54	37	37
Dominance of outsiders	16	29	29	23	50	38	16	29	27	21	49	40
Mixed composition	11	6	2	13	–	3	13	5	1	9	2	4
Dominance of insiders	28	25	21	5	9	10	28	26	22	9	8	13
Only insiders	26	28	36	5	–	3	26	30	40	7	4	6
Total	100	100	100	100	100	100	100	100	100	100	100	100

Source: own calculations using Database 2.

Table 46. The body that appoints the executive board, by ownership structure type (%)

Dominant owner group	The executive board is appointed by:		Total
	shareholders' meeting	supervisory board	
Dominance of strategic outsider	25	75	100
Dominance of other outsiders	36	64	100
Dominance of managers	35	65	100
Dominance of non-managerial employees	40	60	100
Lack of dominant group	17	83	100
TOTAL	31	69	100

Source: own calculations using Database 2.

ily from legal requirements, but rather from the needs of the agents involved in the functioning of the companies.

When we look at the evolution of supervisory board composition from the point of view of the occupations of their members (e.g., the increasing percentage of members with specialist and non-managerial positions), we see evidence of increasing representation of stakeholders on this body, which is consistent with the above-mentioned continental model. While the external investor does not risk loss of control over the board (an overwhelming majority of incumbent and newly appointed supervisory board presidents are outsiders), naming a person from the company to the supervisory board contributes to ease tensions or conflicts between employees and the owners and to create at least an illusion of employee representation. Presumably this is also due to the owners' realization that insiders have better access to certain information about what is going on in the firm than those observing it from outside.

Executive Board

The executive board can be appointed in different ways, depending on stipulations of the company's charter. In 1999, in 69 percent of the companies under review, the executive board was appointed and dismissed not directly by the owners, but by the supervisory board (in 1998 this was the case in 60 percent of the companies). Appointment of the executive board by the supervisory board is most frequent in the companies not dominated by any particular group of owners, and secondly in companies with a strategic outside investor. The opposite pole is made up of firms characterized by "insider" ownership structures, where the executive board is relatively most frequently appointed directly by the owners (Table 46). Interestingly, supervisory boards appointed executive boards more often in 1999 than in 1998, especially in the groups of companies where earlier they had performed this function most infrequently.

Research shows that the boards' behavior depends largely on what positions their members occupied previously, in particular on the nature of their involvement in the governance system of the transformed state-owned enterprise. From this point of view, the majority of companies in

our sample constitute examples of the reproduction of managerial elites⁴⁷: as many as 79 percent of the current executive board members worked at the given firm before its privatization, and 74 percent occupied managerial positions.

The membership of the executive boards is dominated by former state enterprise managers (former state enterprise directors and deputy directors together make up 55 percent). Those coming to the companies' executive boards from outside are primarily managers and owners from the private sector – private businessmen or managers of private firms (together 14 percent). On the other hand, there are very few former managers of other state-owned enterprises or persons previously occupying non-managerial positions.

Table 47 adds the ownership dimension to this analysis. There are few surprises here: the reproduction of elites is more frequently halted in firms in which over 50 percent of the shares are in the hands of outsiders than in the "insider" firms, especially those in which the majority of shares belong to non-managerial employees. Certain exceptions to this rule are firms with ownership dominance of the managerial staff, among which we see a surprising percentage (14 percent) of private businessmen from other firms.

6.2. The Decision-Making Process

The role of supervisory boards

The main factor defining the place and role of the supervisory board in the governance system of the companies in question is the range of powers with which it is vested and which are exercised by it in practice. Polish law sets the general framework in the Commercial Code, which provides only for the following basic, minimum range of the supervisory board's responsibilities:

- review of the company's balance sheet and profit and loss statement;
- review of reports of the executive board;

⁴⁷ On the reproduction versus replacement of elites see Wasilewski and Wnuk-Lipinski (1995), 669

Table 47. Former posts of executive board members, by the companies' ownership structures (percent)

Former positions of executive board members	TOTAL	Dominant ownership categories			
		outsiders	managers	non-manual employees	without dominant group
Worked at the firm before privatization	79	68	81	96	86
Of which, in the position of:					
Director	26	25	24	31	29
Deputy director, chief accountant	29	25	34	41	27
Other managerial post	19	16	19	20	23
Non-managerial post	5	2	4	4	7
Did not work at the firm before privatization, but:	21	32	19	4	14
In managerial position in a state-owned enterprise	2	5	–	2	–
In managerial position in a private firm	8	17	4	2	4
As employee of a public institution	1	–	1	–	2
As employee of a consulting firm	1	2	–	–	–
As private businessman	6	5	14	–	4
Other positions	2	3	–	–	4

Source: own calculations using Database 2.

- review of the executive board's proposals regarding the distribution of profits and coverage of losses;
- reporting the results of the above reviews at the shareholders' meeting;
- suspending, for important reasons, the executive board or individual members of the board in the performance of their functions;
- delegating supervisory board members to temporary performance of functions of the suspended executive board members;
- when necessary, taking steps towards supplementing the membership of the executive board.

The Commercial Code allows for widening the range of the supervisory board's responsibilities through appropriate provisions of the company's charter. In all the companies under review, the formal powers of the executive board were extended in comparison with the minimum provided for by Polish law. The extensions mostly regard approval of decisions made by other statutory bodies of the company, more rarely to making "own" binding decisions. Directions in which the rights of the supervisory boards have been extended can be divided into six categories:

1. Decisions on broadly understood organizational matters (found in 99 percent of the companies where supervisory boards had been created): appointing executive board members, setting the company's wage scale, monitoring the execution of resolutions made by the executive board or shareholders' meeting.
2. Decisions on financial matters (84 percent): approval

of profit distribution, giving consent to contracting large financial liabilities.

3. Decisions on economic and production-related matters, i.e. the company's development and production plans, quality control, etc. (74 percent).
4. Disposing of the firm's capital and the firm itself as a corporate entity, i.e. decisions on changes in the shareholders' agreement and the company's line of activity, size of the company's capital, operations on shares, change in the ownership structure, etc. (88 percent).
5. Giving consent to changes in the company's assets: acquisition or sale of real estate, putting assets to lease, investment purchases, etc. (73 percent).
6. Powers conventionally defined as "social": monitoring compliance with occupational safety regulations and safeguarding the interests of employees (21 percent of the companies).

The supervisory boards did not use all the powers they were given, at least during 1998–1999. The use of these powers depends not only on the character of the board, but also on the company's need for such actions. For example, it can be assumed that all supervisory boards are active in reviewing financial documents, statements, etc., while, as a rule, their participation in appointing and dismissing the executive board, approving large transactions, etc., occurs much more rarely, simply because these actions are much less frequent.

Table 48 shows which powers were actually exercised by the supervisory boards in 1998–1999. Only 9 percent of the boards under review confined their activity to the min-

Table 48. Percentage of supervisory boards exercising given powers in 1998–1999

Characteristics of firm	Kind of powers						
	Only those provided for in the Commercial Code	Organizational	Financial	Economic and production-related	Disposing over the capital and the firm	Control over the assets	Social
Total	9	81	44	60	62	49	14
Dominating ownership group							
Outsiders	8	85	40	66	64	57	8
Managers	14	72	62	59	62	38	17
Non-managerial employees	5	75	45	65	50	60	25
Lack of predominant group	–	95	29	62	86	38	14
Presence of strategic investor							
Is not present	7	81	47	58	65	45	14
Is present	8	84	37	76	66	61	13
Type of supervisory board composition							
Only outsiders	7	86	54	75	57	61	11
Predominance of outsiders	9	84	43	64	59	36	7
Dominance of insiders	4	89	52	63	63	48	11
Only insiders	13	70	38	45	68	55	23
Profit criterion							
There is no profit	11	89	48	78	70	63	30
There is profit	9	79	43	56	60	46	10

Source: own calculations using Database 2.

imum outlined by the Commercial Code. The most frequently used additional powers were those of an organizational nature (81 percent of the supervisory boards under review), followed by powers to dispose of the capital and the firm (62 percent), economic and production-related powers (60 percent), control over the firm's assets (49 percent), and powers in the financial sphere (44 percent). The list ends with supervisory boards that have made use of the powers defined as social (14 percent).

This table points to certain trends. Confinement of activities to the statutory minimum of responsibilities is most frequent in supervisory boards that are composed exclusively of insiders, and in companies with ownership dominance of the managerial staff. The supervisory boards' powers in the organizational sphere are most frequently exercised where the board's composition is mixed, in loss-making companies, and in companies without a dominant owners' group. Financial powers are exercised most frequently in the companies in which more than 50 percent of the shares belong to the managerial staff and in loss-making companies. Economic and production-related powers are most characteristic of supervisory boards in loss-making companies and companies with a strategic investor. Disposing of the capital and the firm is most typical of supervisory boards in firms without any dominant owner category, boards with mixed membership and boards of loss-making companies. Exercise of the right of control over the assets

and of powers in the social sphere is most frequently observed in companies with employee ownership dominance and in loss-makers.

To sum up, we can say that extension of the supervisory boards' activities is observed most frequently in companies in economic distress. Interrelationships between the ownership structure and the extension of the supervisory boards' powers are of a more complex nature. The most striking relationships seem to be the following: lack of any dominant owners' group is linked to extension of the supervisory boards' activities to the organizational sphere and to the control over the capital and the firm; dominance of employee ownership is linked to the board's "social" activity and control over the firm's assets, and dominance of the managerial staff in the ownership structure is, in general, not accompanied by any extension of the supervisory board's powers, except to the area of finance. Thus, different configurations of the insider-dominated ownership structure go hand in hand with different patterns of extension of the supervisory board's range of powers. Lack of dominance of any group is often accompanied by the assumption of other organs' and services' functions by the supervisory boards; dominance of employee ownership dictates special attention to matters that are important for the employees, i.e. to social problems, and dominance of the managerial staff in the ownership structure tends to be accompanied by limita-

Table 49. Average influence of different actors on decision making processes in the company, in the opinion of company presidents (1 – the weakest influence, 5 – the strongest influence)

Agent	Dominating ownership group category					Total
	strategic outsiders	other outsiders	managers	non-managerial employees	without dominant category	
Executive board president	4.50	4.73	4.63	4.52	4.45	4.57
Executive board as a whole	4.42	4.54	4.58	4.68	4.40	4.52
Supervisory board	3.58	3.71	3.22	3.42	3.38	3.54
General assembly of shareholders	3.42	3.87	3.88	3.86	3.05	3.62
The biggest shareholders	4.00	4.00	4.00	3.05	3.50	3.80
Trade unions	2.38	2.00	1.80	2.17	2.09	2.07
Non-managerial employees	2.17	2.40	2.27	2.70	2.29	2.32

Source: own calculations using Database 2.

tion of the supervisory board's powers to certain strictly defined areas.

The hierarchy of decision-makers

The strong, stable ownership position of the executive board members and the inertia in the composition of executive boards constitute evidence of continuity of the governance structures in the periods before and after privatization. We would therefore expect that in most cases it is the executive board that has the greatest influence on decision making processes, not only in day-to-day management matters but also with respect to strategic problems. This was verified in company presidents' responses to questions concerning the relative role of various groups in decision-making processes.

The important role of company presidents is stressed more frequently than average in companies with ownership dominance of non-strategic outsiders and managerial staff; whereas that of the executive board as a whole is more frequently stressed in firms with dominance of employee ownership. The biggest shareholders have strongest influence in the "outsider" and manager-controlled companies, and the weakest where there are few such shareholders; i.e., in firms with dominant employee ownership. The general assembly of shareholders, in turn, is relatively strongest where the ownership dominance of managers, employees, or non-strategic outsiders has evolved. The influence of the supervisory board is at its strongest where there is ownership dominance of external investors, and weakest in the manager-owned companies. Trade unions are also at their weakest in the latter group and strongest in strategic outsider-controlled firms and in companies with dominance of non-managerial employee ownership. The role of non-managerial employees is perceived as relatively strongest (but still at the lower end of hierarchy) in companies controlled by non-managerial employees and weakest in firms with strategic outsider investors (Table 49).

The owners most frequently act as decision makers where ownership is concentrated in the hands of a strategic outside investor. The role of owners in decision-making also grows in loss-making companies (at the expense of the powers of the executive and supervisory boards).

The small role of owners is striking. Only 10 percent of company presidents mentioned them among the decision makers at all, and a mere 3 percent named them as the sole center of strategic decision-making. Accordingly, the perception of the relative importance of the general assembly of shareholders is often very low too. Almost half (45 percent) of the company presidents, when asked directly, described the role of this body as purely formal. There is no doubt that among company presidents there is a certain skewing in the perception of the power distribution within the companies. They perceive this question from the standpoint of their own position, tasks and responsibilities. Since the executive board's basic task is keeping the company in operation, for them, the most important people are those who are directly involved in carrying out this task.

7. Conclusions

The ownership structure of Polish employee-leased companies, especially immediately after privatization, was characterized by large holdings of dispersed insider owners. Subsequently, the shares of non-managerial employees gradually decline, while those of outsiders grow. Concentration of shares in the hands of managers can be seen from the very moment of privatization. Later, however, managerial holdings stabilize and even decrease somewhat in favor of outsiders.

The sample of employee-leased companies is gradually becoming more and more heterogeneous. We observe three chief directions of ownership structure changes:

- perpetuation of a dispersed shareholding structure, with dominance of insiders (an approximation of an egalitarian, worker cooperative ownership structure);
- consolidation of ownership in the hands of insider elites;
- concentration of ownership in the hands of outside investors.

In general, however, change is incremental. Radical changes in the ownership structure are rare, and ownership structure seems to be fairly inert. It would, nevertheless, be wrong to conclude that significant change is not possible when it is in the interests of the incumbents, as new strategic investors had appeared in about 10 percent of the sample by 1998. (It is, however, worth noting that there is a negative relationship between the size of top management's share and the appearance of strategic investors; it appears that once managers have decisive control over the ownership structure of a company, they are reluctant to relinquish it.)

A number of factors which influence the direction and the dynamics of ownership changes, among others sector affiliation, company size, initial ownership structure, etc., but the most important is the economic condition of the company, which, when it is poor, favors concentration and "outsiderization" of ownership (as well as changes in corporate governance). Management ownership on the average appears in relatively small companies, while strategic investors appear in companies whose average employment

is above the sample average. This is probably due to the fact that, given low levels of personal savings at the beginning of the transformation, it was more difficult for an individual or small group of individuals to buy a large block of shares in a large company than in a small firm.

Post-privatization ownership transformations were achieved not only by trade in existing shares but also by issues of new ones. Nineteen firms had carried out new share issues by mid-1997. Most frequently, new share issues serve to promote concentration of shares (especially in the hands of management and strategic investors).

Access to credit and company size seem to be the most significant determinants of investment spending. Very surprisingly, the presence of strategic investors seems to be unrelated to investment spending. Many firms in the sample refrain from making dividend payments, but there is no indication that this leads to increased investment and may simply be a result of abuses by management. There is some evidence that concentration of shares in the hands of management is positively related to investment, while the evidence concerning the relationship between the share of non-managerial employees and investment is ambiguous. There appears to be no relationship between ownership structure and marketing activity or expansion into new markets (the former is most strongly related to company size, and the latter to the branch in which the company is operating). However, companies with strategic investors do much better than others in the area of ISO quality certification.

There is (very) slight evidence that the extent of non-managerial employees' share in the ownership of the firm had a negative effect on economic performance in the early 1990s. In particular, there is a case – albeit a weak one – to be made for the claim that companies whose employees constitute the dominant owners follow a policy favoring consumption (wages, dividends and the like) over investment and development. However, the situation in the companies is likely to be differentiated, with the character of relationships between ownership structure and economic decision-making dependent on many

factors which we were unable to analyze here⁴⁸. An example of such differences is found in the opinion encountered by one of the authors of this paper in case studies of Polish employee-owned companies, according to which the most consumption-oriented attitudes are exhibited by former employees. One of the company presidents expressing this opinion about former employees also said that he regretted the fact that new employees were unable to acquire shares in the company, since such employees (young, well-educated persons hired in the 1990s) are often the most valuable in the firm⁴⁹. From this point of view, it is possible that employee-owned companies in Poland could gain certain advantages from the creation of trust funds which would hold employee shares on behalf of the employees, issuing shares to new employees and purchasing them from those that leave the company. Such a mechanism might resemble, for example, the Employee Stock Ownership Plans of the United States⁵⁰.

Turning to issues of corporate governance, we conclude with a brief look at executive boards and supervisory boards.

The membership of the executive boards is dominated by persons who had managed the companies before privatization, when they were still state enterprises. The reproduction of elites is more frequently halted in firms in which over 50 percent of the shares are in the hands of outsiders than in the "insider" firms, especially those in which the majority of shares belong to non-managerial employees.

When viewed over a longer period of time, the evolution of the composition of the supervisory boards has not been unidirectional. Contrary to what one might expect in view of the process of ownership "outsiderization", the position of insiders measured by numerical dominance in the composition of different boards was markedly strengthened in 1998–1999. In companies belonging to the employees, institutional control is increasingly concentrated in the hands of insiders, while in the "outsider" companies their employees are more and more often allowed to participate in the organs of corporate governance. Moreover, when we look at the evolution of supervisory board composition from the point of view of the occupations of their members (e.g., the increasing percentage of members with specialist and non-managerial positions), we see evidence of increasing representation of stakeholders on this body.

At the same time, polarization into purely "insider" and purely "outsider" boards was accentuated.

The supervisory boards did not use all the powers they were given, at least during 1998–1999. The use of these powers depends not only on the character of the board, but also on the company's need for such actions. For example, it can be assumed that all supervisory boards are active in reviewing financial documents, statements, etc., while, as a rule, their participation in appointing and dismissing the executive board, approving large transactions, etc., occurs much more rarely, simply because these actions are much less frequent.

Extension of the supervisory boards' activities is observed most frequently in companies in economic distress. Interrelationships between the ownership structure and the extension of the supervisory boards' powers are of a more complex nature. The most striking relationships seem to be the following: lack of any dominant owners' group is linked to extension of the supervisory boards' activities to the organizational sphere and to the control over the capital and the firm; dominance of employee ownership is linked to the board's "social" activity and control over the firm's assets, and dominance of the managerial staff in the ownership structure is, in general, not accompanied by any extension of the supervisory board's powers, except to the area of finance. Thus, different configurations of the insider-dominated ownership structure go hand in hand with different patterns of extension of the supervisory board's range of powers. Lack of dominance of any group is often accompanied by the assumption of other organs' and services' functions by the supervisory boards; dominance of employee ownership dictates special attention to matters that are important for the employees, i.e. to social problems, and dominance of the managerial staff in the ownership structure tends to be accompanied by limitation of the supervisory board's powers to certain strictly defined areas.

Generally speaking, the small role of owners in the decision-making process is striking. The owners most frequently act as decision makers where ownership is concentrated in the hands of a strategic outside investor. The role of owners in decision-making also grows in loss-making companies (at the expense of the powers of the executive and supervisory boards).

⁴⁸ We must remember that each firm in fact constitutes a complex social organism, and the number of groupings and factions is probably proportional to the number of employees. For a clear and comprehensive picture of the decision-making process in such firms, we probably need an in-depth sociological analysis which would reveal the differences among such groups as current and former employees, new and old employees, white-collar and blue-collar employees, employees of various departments and divisions, etc.

⁴⁹ See Woodward (1999).

⁵⁰ For more on the subject of ESOPs, see Blasi (1988).

Appendix Definitions of variables and correlations

Definitions of variables

L	employment (end of year)
P.C. CH	percentage change in employment between the end of the year prior to privatization and the end of 1996
MAN	percentage of the company's shares held by members of the Executive Board (at time of privatization, and in mid-1997, 1998, and 1999)
SI	percentage of the company's shares held by the strategic investor (at time of privatization, and in mid-1997, 1998, and 1999)
WOR	percentage of the company's shares held by non-managerial employees (at time of privatization, and in mid-1997, 1998, and 1999; in section 5, in mid-1992, 1993, and 1994)
GRMAN	difference between percentage of the company's shares held by Executive Board members in mid-1997 and at time of privatization
GRSI	difference between percentage of the company's shares held by strategic investor in mid-1997 and at time of privatization
GRWOR	difference between percentage of the company's shares held by non-managerial employees in mid-1997 and at time of privatization
TRCON	dummy indicating whether neither Executive Board members nor a strategic investor had a share of more than 20% at time of privatization and one or both of these types of owners had over 20% in mid-1997
TRSI	dummy indicating whether strategic investor had a share of less than 20% at time of privatization and over 20% in mid-1997
TRM	dummy indicating whether Executive Board members had a share of less than 20% at time of privatization and over 20% in mid-1997
BIG	percentage of the company's shares held by the single largest shareholder (in mid-1997, 1998, and 1999)
OWN	percentage of the work force that holds shares (at time of privatization, and in mid-1997, 1998, and 1999; in section 5, in mid-1992, 1993, and 1994)
UNI	percentage of the work force that belongs to a trade union (at time of privatization, and in mid-1997, 1998, and 1999; in section 5, in mid-1992, 1993, and 1994)
DIV	two variables: absolute value of the dividend payment in PLN, or dummy variable for payment of dividend (1: dividend was paid; 0: dividend was not paid)
DIVS	ratio of dividend to the face value of one share

DIVP	ratio of dividend to net profit
LEA	dummy for whether the lease had been paid off (mid-1999)
NMKT	number of positive responses to question whether new markets had been found (range: 0 to 3)
MK DUM	dummy for whether the firm has a marketing division
MK EMP	employment in the marketing division

Dummies for the degree of equality of shareholding:

EQ1	at least one shareholder holds at least 10 percent of all shares (high concentration)
EQ2	at least one person holds 5–10 percent of all shares (medium concentration)
EQ3	at least one person holds 1–5 percent of all shares (relative equality)

Dummies for the population of the city or town in which the company is located:

POP1	less than 20,000
POP2	21,000–50,000
POP3	51,000–200,000
POP4	201,000–500,000
POP5	over 500,000

Dummies concerning new issues:

NEW	a new share issue was held
CLO	the new share issue was a closed (i.e., not public) subscription

Dummies for market share of the firm:

MON	the company is a monopolist
OLI	the company is an oligopolist
COM	the company operates in a competitive market

Investment variables:

INV	annual investment spending (1996)
PC	value of current investment projects, per employee (total from 1992 through 1996, and 1998)
INCR	dummy for whether investment was financed by obtainment of credit

Variables used only in Section 5:

K	= value of fixed assets, in millions of pre-1995 zlotys (as of June 1993 ⁵¹ , end of 1993, end of 1994)
YEAR	= dummy for year of production (1992=0, 1993=1, 1994=2)
AMORT	= amortization of fixed assets at the time of privatization (as a proxy for the firm's age)

⁵¹ End-of-year fixed assets data for 1992 were unfortunately not available. Given the choice between using fixed assets for the time of privatization (in 1990 or 1991) and in June 1993 as an approximation for the 1992 capital stock, the latter measure seemed much better, given that a great deal of property was frequently sold or leased by the companies within the initial period following privatization.

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