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Derek Jones* and Niels Mygind

Abstract:
To provide evidence on patterns of and changes in ownership structures both at the start and during early privatization, we develop different typologies of enterprise ownership and use new data for more than 1500 firms in the Baltic Republics. We find that: (i) by international standards, insider ownership is very common in all Baltic countries; (ii) ownership patterns differ much across the Baltic Republics with a much higher incidence of foreign ownership in Estonia; (iii) ownership patterns are quite heterogeneous within all countries (e.g. by sector and by size). In Estonia and Latvia more insider ownership is found in small enterprises, and in agriculture, less in services and transport, and also less in trade in Estonia. Similar tendencies are not found in Lithuania; (iv) In Estonia and Latvia capital intensity is significantly lower in insider owned enterprises and this is not the case in Lithuania; (v) changes in ownership category are relatively frequent in all countries; (vi) for firms that change ownership regime, typically levels of employee ownership fall and managerial and outside ownership rises; (vii) in Estonia employee dominated ownership tend to be most stable in small enterprises. There is great heterogeneity across firms both in the situation at the time of privatization and in the following ownership dynamics. These findings are consistent with an institutionalist perspective that predicts variation across and within countries and points to roles for factors both at societal and firm level in accounting for such differences and changes.

Note:
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I Introduction.

The pivotal importance of privatization and new structures of ownership for successful transition has been stressed by many. Attention has been drawn not only to ownership (especially whether firms are privately or state owned) but also to control (by insiders or outsiders) and - in the case of insider control - whether the controlling group are managers or workers (e.g. Ash and Hare, 1994; Blasi, 1994; Jones and Weisskopf, 1996; Blasi et al, 1997). For reasons including easier access to capital markets, the conventional wisdom is that firms with outside ownership are more efficient than firms with insider ownership (e.g. Boycko et al. 1993). Furthermore, by allegedly providing superior solutions to agency problems, it is argued that the most efficient form of insider ownership is manager (rather than worker) ownership (e.g. Earle et al. 1995).

These theoretical issues concerning new forms of enterprise ownership and control are all the more salient because, following the widespread use of policies providing insiders with concessional shares, employee ownership has proven to be a widespread feature of the privatization process in several transition economies (Nuti 1995). While most economists saw this development as somewhat unexpected and unwelcomed, they also viewed it as likely to be only a temporary phenomenon. With the development of secondary capital markets, insider ownership was expected to rapidly diminish in importance; consequently, similar patterns of ownership would quickly emerge. But others have stressed the pervasive importance of diverse institutional factors and organizational rigidities; these would be expected to result both in marked differences only slow evolution in ownership structures. For example, Mygind (1997) argues that ownership structures after privatization are determined both by conditions at the level of society (especially the social power structure and the resulting political process) and by factors at the enterprise level (such as size and market situation). According to this institutionalist perspective, ownership structures would be expected to vary across countries and, within countries, between enterprises of different sizes and in different sectors.

To date, the empirical evidence on the nature as well as the economic effects of the new structures of ownership in transitional economies is quite slim. While there have been some important early attempts to chart the new patterns of corporate ownership, these studies usually suffer from problems. These include the difficulties in obtaining data both for large samples of firms and on the dynamics of ownership, as well as a tendency to focus on selected cases, especially that of Russia.[1] Sometimes the absence of systematic panel data for large samples of firms has led to mixed and confused findings. For example, Blasi et al.(1997) find evidence of substantial inertia in ownership structures in Russia, whereas Bogomolov (1996), reports evidence of very fast changes in ownership composition in Russian firms.

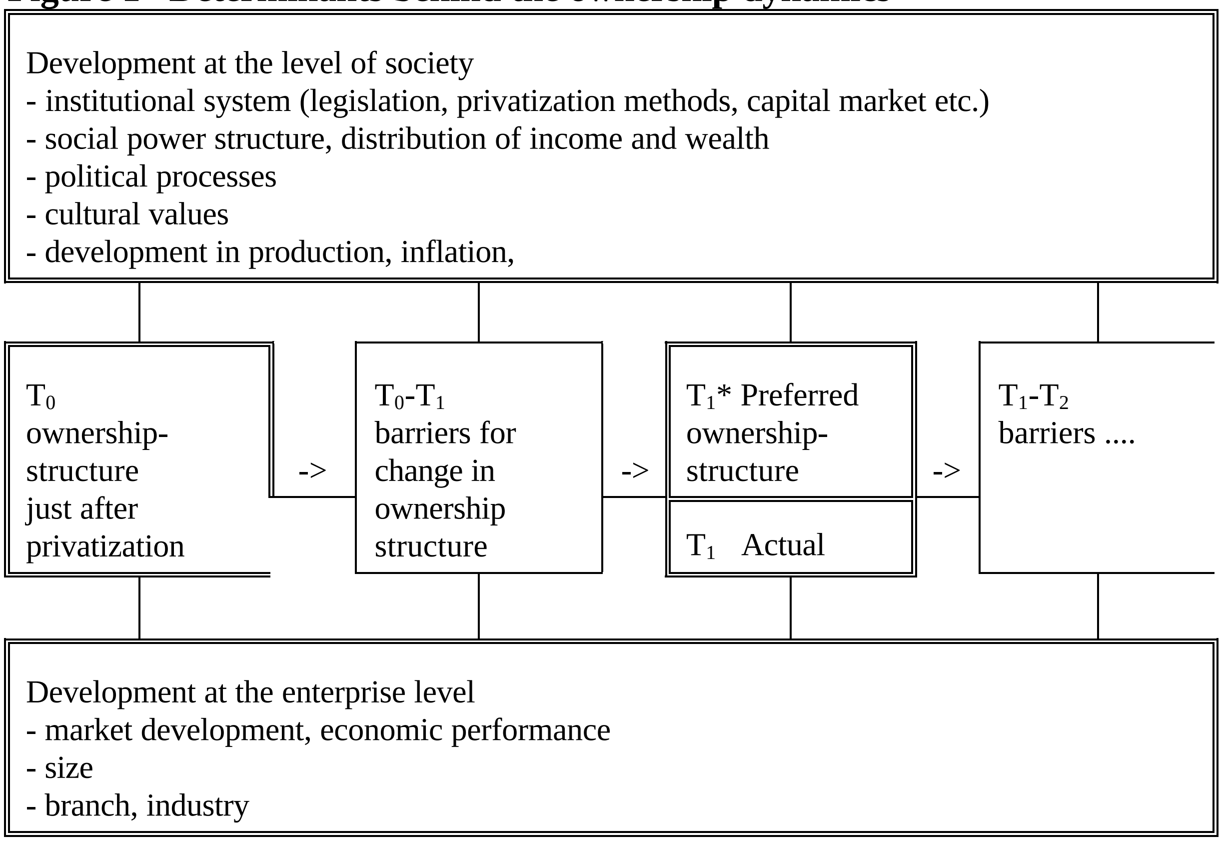
In this paper we use data for firms in the Baltics to shed some light on some of these issues. Since our data are for large samples (from 400-700 firms in each of the Baltic Countries), we are able to provide some of the most reliable data for these cases. Not only have the Baltic countries been comparatively neglected, but also they are interesting cases to examine since there were important similarities in conditions at the start of reforms and yet subsequently there have been important differences in reform policies, including approaches to privatization. Since our data are quite rich, often we are able to examine elements of ownership, such as distribution, that have tended to be neglected. Moreover, since the data are in the form of panels**,** we are able to undertake various calculations including constructing transition matrices for the *dynamics* of ownership. In turn this enables us to begin to examine the respective roles that differences at the level of society and the enterprise may play in accounting for these patterns and changes in ownership.

The structure of the paper is as follows. In the next section (which draws on relevant theoretical and empirical work) we discuss relevant typologies and provide a conceptual framework. This is followed by discussions of the data and an overview of the political context for and the nature of privatization in each of the countries. In the main part of the paper we present our findings for each of the Baltic Republics. In a concluding section we discuss some implications of the work.

II Typologies and Conceptual Framework

In examining patterns of ownership to date, no uniform approach has been adopted. Several considerations, including some based on theory and more pragmatic considerations about the way the data are generated, has influenced the literature. A major theme in the literature and a focus for our analysis of the change in ownership structures is whether enterprise are owned by *insiders* or by *outsiders*. Insiders include all the people working in the enterprise. Usually by stressing agency issues, theorists often have distinguished two groups of insiders: managers or other employees (in the following also called workers, non-managerial employees or just employees). For outsiders, the key distinction is between state owners (including ownership by local municipalities) and others who may be divided into domestic private owners and foreign owners. This division is illustrated in Figure 1, second column.

Figure 1 Determinants behind the ownership dynamics



In examining patterns of ownership, one influential approach in the literature (Earle et al., 1995) is to assume that the corporate governance system is functioning so if a group owns the *majority* of the equity it will also effectively control the company. The alternative approach involves using a less restrictive condition that a group has a *dominant* ownership stake -- it owns a larger part of the shares than other groups. One problem with this approach is that one cannot be sure that this dominant group in fact controls the company. Thus if we divide the possible owners into many groups, a dominant group might be rather small and it will be possible for other groups to form an alliance and effectively control the company. Therefore, using dominant ownership will only be relevant if the number of groups in the analysis are rather low. Also, if it is likely that certain groups will form alliances, it will be appropriate to add these groups together. In this way it can be argued that the whole group of private owners should be taken together so the ownership is divided between either private or state dominated (column 1 or 4 in Figure 2). At a more disaggregated level we might argue that insiders would form an alliance, and private outsiders another alliance (column 5). Subsequently these alliances could be split according to which partners are dominating the alliance (column 6). Note, however, that in column 6, the state might dominate even if the state does not own a majority of the shares.

Figure 2. Typology of owners.

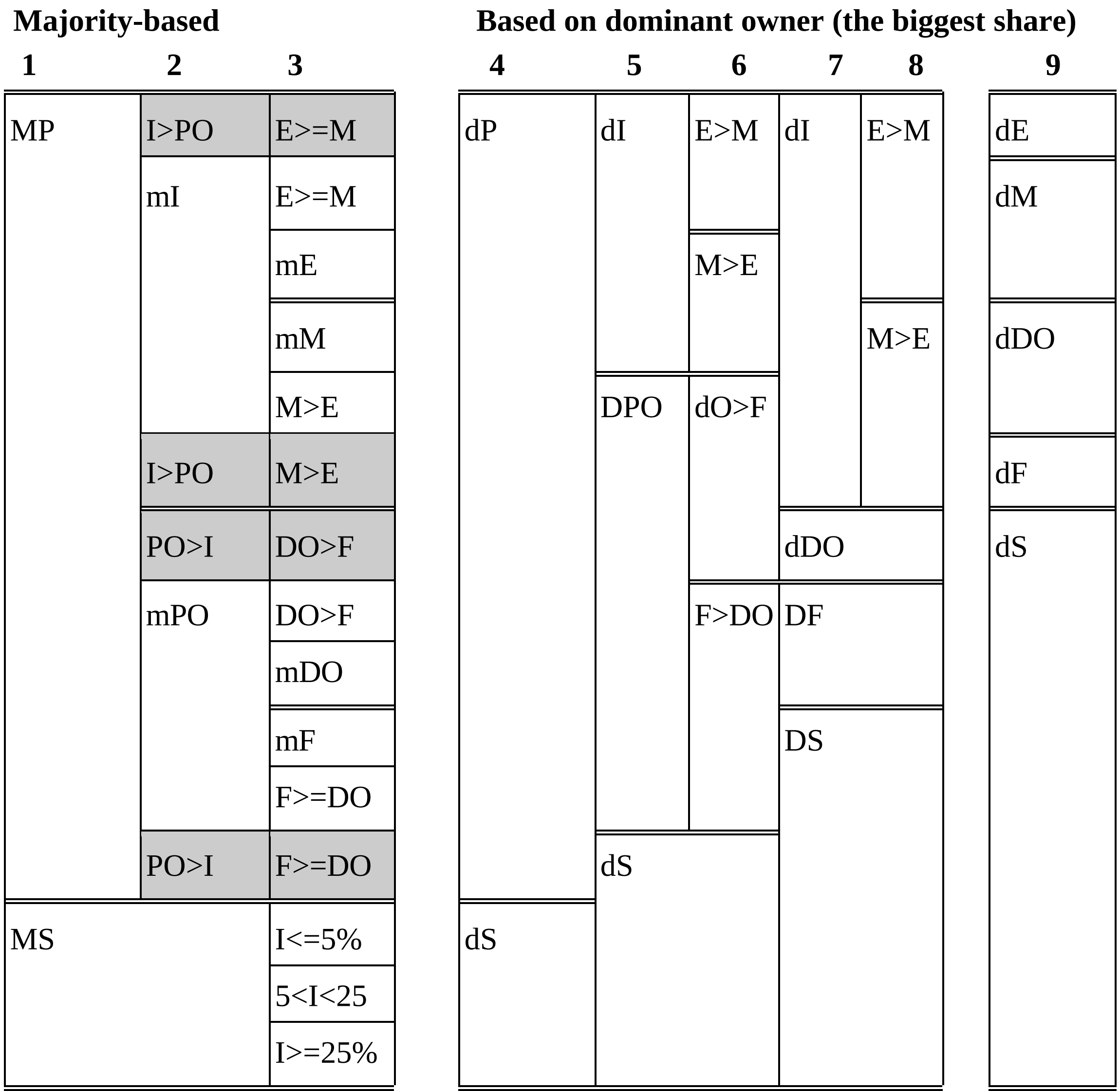
INSIDERS	MANAGERS	
	OTHER EMPLOYEES	owners/non-owners, distribution
OUTSIDERS	DOMESTIC PRIVATE	persons
		institutions, companies
	FOREIGN	
	STATE	state
		local municipalities

This is not the case when a classification based on majority ownership is used, as shown in Figure 2, column 2. This majority ownership approach, however, has the drawback that in a large number of enterprises there might not be one group with a majority. However, if the remaining group is divided according to precise criteria, as is done in column 3, some well defined groups emerge. For these we are able to make more precise predictions than is the case for dominant ownership (column 9). Accordingly, while the main part of the analysis will use classifications based on majority ownership, for comparative purposes we will also use typologies based on dominant ownership.

The literature also identifies other factors which bear on patterns of ownership, These include the distribution of ownership on the employees (Mygind, 1987), the importance of income derived from work compared to ownership of capital (Nuti, 1995), whether private companies are de novo or transformations of erstwhile state owned firms (Barberis, et al. 1996; EBRD 1995, Earle et.al. 1995)), and participation in decision making versus participation in ownership (Ben-Ner and Jones, 1995).[2] Unfortunately, usually data are seldom available on all of these aspects. For example, in practice it is often very difficult to make the distinction between de novo companies and privatized companies. Often companies that were subject to “wild privatization” will formally be registered as a new start up company, whereas in fact they arose because powerful individuals, usually from a state owned company, have taken over some profitable assets of an existing company. In our analysis, while we are unable to distinguish between "de novo" companies and privatized companies, sometimes we are able to provide information relevant to some of the other aspects, especially the distribution of ownership on the employees.

In considering the factors that bear on the initial ownership structure after privatization, our sense is that the specific advantages different groups have managed to achieve in the privatization process are of crucial importance. This line of argument can be illustrated by Figure 3 which provides a heuristic framework for the key determinants behind the dynamics of ownership. In this context, widespread insider ownership can be explained by high political power for the insiders at the political level combined with their advantages on information and their power of implementation at the enterprise level. However, although insiders use their potential to acquire a relatively large share of the ownership in the start of the process, the resulting distribution of ownership might diverge from what the participants want when trading of shares becomes possible. After a certain time, it is likely that the preferred situation (T_1*) will diverge from the initial distribution of ownership (T_0). However, the preferred situation is not static. Again it will depend on the development in the conditions at the level of society including institutional rules (e.g. taxation, definition of ownership rights) social conditions (distribution of income and wealth), culture (attitude towards being an owner), and the general economic situation (alternative possibilities for investment, employment etc.). Also, developments at the enterprise level (e.g. the specific conditions in the relevant market) will be important in helping to determine the preferred ownership situation. For reasons such as the lack of transferability of shares, this preferred outcome might diverge from what in fact is possible. Also the specific power structures at the enterprise level, (e.g. with quite strong managers controlling the actual trading of shares) as well as conditions at the level of society, especially the development of secondary markets for shares, will strongly influence both the speed and often the direction of ownership change. In other words, diverse barriers for change exist so that the *actual* ownership structure in period one, T_1, is expected to be different from the *preferred* distribution, T_1*.

Figure 3. Typology for division in ownership groups



m=majority, d=dominant,
P=private, S=state (+municipal), I=insider, PO=private outsider,
E=non-managerial employee, M=manager, DO=domestic outsider, F=foreign

III Data and Overview of Political context and Privatization in the Baltics

To examine ownership patterns we have worked closely with the statistical department in each of the three Baltic Countries. This has enabled us to have access to "in-house" data already collected on ownership; also, when undertaking supplementary ownership surveys, this has enabled us to secure a higher response rate than would otherwise have been the case.[3] So far as is possible, we aimed to adopt procedures that used survey methods and ownership categories that were broadly comparable. However, since the existing data-bases and procedures for collecting data often differed across countries and over time, in practice it was not possible to do this. Hence the resulting key variables are not always the same in each country and survey designs also differed. In Figure 4 we provide an overview of the data sets that have been assembled to date.[4]

Figure 4. Overview over the quantitative data sets and case-studies.

	Estonia	**Latvia**	**Lithuania**
ownership survey	time of privatization Jan.95 Jan.96 Jan 97	Jan.95, Spring 1997	July 1994, 95 & 96
N surveyed	500 461* 470*		450 700
responses	409 423 388	5589 167	357 475
sample	random, stratified covering all sectors and size-groups	random for small,total for L>20 / sub-sample	industry / industry construct trade
ownership variables	share of capital workers, managers state, foreign, domestic outsiders, insider-distribution, % non-owners	share of capital state,domestic/foreign outsiders, own insiders, / as large + managers/ employees distribution % non-	share of capital employees,managers state, foreign, domestic outsiders, % non-owners

* the 1995-sample + later privatized SOEs

The first ownership survey for **Estonia** was undertaken in the first months of 1995. The ownership survey scheme was send to 500 enterprises with 5 or more employees. The enterprises were chosen as a stratified random sample so that 18 different branches and different size groups were represented. Enterprises which were either 100% state owned enterprises or 100% foreign owned companies were excluded from the survey, since the ownership distribution for these companies were already known. We have in the analysis included 232 of the fully state owned and 25 of fully foreign owned Estonian companies. These firms were included in the later surveys when they changed ownership. The results are not directly representative for the whole Estonian economy, but the sample can be "normalized" using some of the known variables for the whole Estonian economy.

The response rate was higher than 80% for all the three years investigated in Estonia. This is unusually high rate for these kind of surveys. The first ownership survey covered both the situation at the time of privatization and on January 1995.

The surveys included information about: the distribution of shares on different owners; the total number of managers and of other employees; and the number of owners and non-owners among these two groups. There was also included a question about the differences between large and small employee-owners. Three alternatives were given about the distribution of shares among the employee owners: 1) rather equal, 2) unequal - typical more than 1:2 and 3) very unequal - typically more than 1:10.

The data gathered in **Lithuania** have many similarities with the Estonian data, including a similar survey scheme. However, since privatization in the early years of transition in Lithuania was in most cases a gradual process, it is difficult to define a clear date for privatization and thus it proved impossible to collect data on the distribution of shares at the time of privatization. Instead we arranged for data on the distribution of ownership to be collected for a particular date, namely July 1, 1994 for relatively large companies in industry (which for a number of years had been reporting financial data to the statistical department). The response rate for this first wave was very good--almost 80%. Two later surveys in Lithuania collected ownership data for July 1995 and July 1996. Coverage was extended to include construction and trade. For these waves, while the sample size increased to 500, the response rate fell considerably to around 68%. In large part this reflected a very low response from some of the smaller companies in construction and trade.[5]

The available “official” **Latvia**n data do not distinguish between managers and other employees, and special ownership survey comparable to those used in the other Baltic Republics proved much more difficult to be implemented. Therefore, most of our data for Latvia contain less detail than those for Estonia and Lithuania. Nevertheless, the data we have been able to assemble, contain information on many interesting characteristics for the remaining owner groups. For 1994 we were able to use a sample for a very large group of enterprises (in fact, 5589) that reported to the Statistical department's enterprise register. This sample included a random sample of enterprises with fewer than 20 employees (2096 enterprises) and *all* larger firms (3493). In addition, for 1996, we were able to obtain ownership data a subsample of 645 enterprises, though this sample is not representative of the whole Latvian economy. In the spring of 1997 we implemented a detailed manager-survey with response from 167 enterprises. The total sample was 298 enterprises of which 42 were reported to have stopped. This means that out of 256 enterprises the response rate was 65%. These companies were asked about their ownershipstructure back to 1993, but the information about the later years are probably more reliable than the historical information uncovered in this survey.

Before turning to the individual country cases it is useful to briefly review some of the key dimensions of the political context of privatization in the Baltic Republics. The historical development in the last centuries show many similarities between the three Baltic countries. Russia dominated all three countries except for a short period in between the two world wars. However, there are also many important differences which should be stressed when the differences in political development and transition strategies are analyzed (Mygind 1996). Latvia and Lithuania have special Baltic languages while Estonia has a language quite close to Finnish. Therefore, Estonia from the beginning had stronger Western relations than its southern neighbors. From a cultural point of view Estonia and Latvia have been influenced by a German Protestant tradition while Lithuania had closer ties to Poland and a strong catholic tradition. Compared to Lithuania, Estonia and Latvia was more industrialized before the Soviet occupation. The later development of industry in Lithuania was based on the labor reserve from agriculture while in Estonia and Latvia a massive immigration of workers from other Soviet republics especially Russia took place. Therefore, the majority of the industrial workers in the two northern countries had Russian as their mother tongue and the Russian speaking minority made up 39% in Estonia and 48% in Latvia in 1989 (Hanson, 1990). In Lithuania the Russian minority is less than 10% of the population.

These background differences can to a high extent explain the political development and the different transition strategies chosen in the three countries. In the late 1980's and the beginning of the 1990's Lithuania had the strongest confrontations with Moscow. After full independence in August 1991 the national question played a minor role in Lithuania, but in Estonia and Latvia the questions concerning the large Russian minority dominated the political debate and development. The Russian minority lost most of its political influence since most of immigrants did not get citizenship and thus did not have voting rights at parliamentary elections. This change in the political power structure is probably an important explanation behind the development in the privatization policy in Estonia and Latvia. The results of privatization in the three Baltic countries are summarized in Figure 5.

Figure 5. Overview over privatization of enterprises, 1989-96

	Estonia	**Latvia**	**Lithuania**
early	Small SOEs and new coops,	new cooperatives	new cooperatives

	mostly owned by management. Soviet leasing, 12 empl.owned Estonian leasing 200 man.owned	mostly owned by management Soviet leasing to employees	mostly owned by management Soviet leasing, 60 empl.owned 90-91, E-shares, 2-3% of assets
small	Dec 1990 law: insider advantages 80% of 450 employee owned, amended May 92, no advantages 1993 sold 944, 142 mill EEK 1994 sold 126, 68 mill EEK 1995 sold 120, 79 mill EEK 1996 sold 94, 155 mill EEK total sold 1284, 445 mill EEK	legislation November 1991 partly by local municipalities, below 10 employees, auction bidders >16 years residency trade, catering, service 85% privatized 1994 mainly management takeovers, some to other employees.	vouchers and cash quotas can be used in auctions, conditions: employment cannot be reduced more than 30% and same activity 3 years. 1992 1993 1994 1995 sold 57% 70% 76% 100% no advantages for employees
large	1989 IME: 7 Peoples enterprises 1991: 7 SOE experiments most employee owned 1992: EPA Treuhandmodel. advantages outsiders, foreigners <u>millEEK 93 1994 1995 1996 total</u> price 353 1330 919 474 3007 invest 238 858 1003 453 2552 1000 jobs 9 26 17 1 53 firms 54 215 142 43 451 Public auction of minority shares for vouchers started autumn 1994 priv. of utilities started 1995.	Decree March 1991, 1991,6 SOE sold to employees, - sale decentralized to ministries, April 93, 20 SOEs sold/leased, Jan. 1994, 46 SOEs sold/leased, 1994, ca. 150 SOE sold/leased, mostly to insiders. March 1994, new law, LPA <u>mill Lats 1994 1995 1996</u> total price 2 34 25(Nov.) investment 1 18 20(Nov.) 1000 jobs 0.3 14 9(Nov.) firms 14 231 264 about 50% for vouchers 1995 start public offerings Aug. 1994 start voucher market	Febr. 1991, LIPSP privatization law, voucher legislation Sept. 1991, sales begin, sale of shares through vouchers and cash quotas, Dec. 1991, Investment Funds, the share employees can buy at preferential terms increased 1991:10%,1992:30%,19 93:50% 1992 1993 1994 1995 sold 38% 62% 75% 99% of LIPSP 2926 enterprises, tenders of min. shares utilities, 46 SOE hard currency sale, 1996 Privatization Agency privatization for cash

IV Estonia[6]

In Estonia, as in all three countries, the early legislation (before August 1991) favored insiders, in company take-overs, in small privatization and in more experimental large privatization. The first transformation of state ownership started in 1987 in the form of “semi private” or “small state owned enterprises”. Also “new cooperatives” developed quite early and rapidly.[7] It is generally assumed that these enterprises were mainly taken over by managers. The first cases with employee ownership in this early stage of privatization in Estonia were leased enterprises established under the Soviet legislation of 1989 (Frydman <u>et al</u>, 1993). In July 1991 this law was changed to Estonian rules and around 200 of such enterprises were started. The early reform program also favored so-called "peoples enterprises" which included a type of experimental leasing system for insiders. But by 1991 only 7 large enterprises had been taken over mainly by insiders with a minimum of five of these firms having full employee ownership (Terk, 1996).

After Estonian independence in August 1991 the political climate changed and a strategy emphasizing employee ownership was no longer in favor. Thus while the initial legislation on small privatization which started in January 1991 favored insiders, after May 1992 most of these preferences were at least formally taken away. It is estimated that around 80% of the first wave of 450 small enterprises were taken over by insiders before the change in policy (Kein & Tali, 1994). Subsequently, while insider ownership still continued to be an element in the privatization process, its importance fell. The bulk of small privatization had been implemented by the end of 1993.

From 1992 the strategy for large privatization changed to resemble the German Treuhandanstalt model. The Estonian Privatization Agency put out large enterprises for open tender, often announced internationally. The offered price was only one of the criteria for choosing the buyer, though employees were not given any preferential treatment. Also the proposed business plan and guarantees for investments and employment played an important role. In this model the main idea was to find a core investor. Since substantial capital was needed, foreign capital had an advantage in this process. Also at this stage, since the managerial group often had accumulated some capital, it was therefore possible for them to begin to secure loans in the rapidly developing system of private banks. Furthermore, domestic capital suppliers were allowed to buy on installment. Hence, at this stage, alliances between managers and a broad group of employees were no longer necessary. In addition, foreign capital gained increasing access during this late stage of large privatization. Only in rare cases did broad groups of employees have the opportunity to take over their enterprises in this type of privatization. The Treuhandanstalt model gained speed during 1993 and at the end of 1995 most of the large enterprises had been privatized.

In the Estonian case, it is also important to appreciate that, in the early years, insider take-over of enterprises meant that control transferred from Moscow to Estonia. However, after Estonia's full independence in 1991, this transfer to Estonia was fulfilled for nearly all enterprises. From this time, the problem for the Estonian politicians was that an employee take-over would often mean that Russian workers would take over the ownership. However, at this point the Russian workers had lost most of their political power, and here lies probably an important explanation behind the shift in policy (Mygind, 1997a). There was a clear tendency to remove advantages for insiders and to give a higher priority to external capital including foreign capital. Partly because of this privatization strategy, Estonia became one of the countries in Eastern Europe with the highest foreign investment per capita (Meyer, 1998). At the end of 1996, 451 large enterprises had been sold through SPA direct sale at a total price of around 3 bill EEK, (see figure 5).

Now we turn to findings derived from our survey data. Figure 6 gives an overview over the distribution of ownership in the Estonian sample at the time of privatization before January 1995. The 83 enterprises privatized during 1995 and 1996 were included in the 255 state (and municipality) owned enterprises. Among the 405 responding private enterprises (666-255-6) there are slightly more outside owned than insider owned. Enterprises with outside majority dominated by domestic owners constitutes 31% of the private enterprises or 19% of the total. Outside majority with foreign dominance are at the same level as inside majority with employee dominance - 22% of the private enterprises or 13% of the total. Inside majority with management dominance makes out 16% of the private enterprises and 10% of the total enterprises. 6% had no majority for either state, outsiders or insiders.

At the top of the table similar results for the ownership structure on January 1995, 1996 and 1997 are shown. Not surprisingly the number of state owned enterprises have fallen. Many of them have moved to the no answer category, which also include enterprises closed down. Out of the total of 74 "no answers" in January 1996, 47 are known to be closed down state owned enterprises. Among the private enterprises the number with foreign dominance is quite stable while domestic owned and management owned enterprises are increasing and enterprises with insider majority with employee dominance are falling.

Based on information about the total distribution of enterprises for different size groups and branches a "normalization" for the whole economy can be calculated, see figure 6. The proportion of foreign ownership out of the total number of firms with 5 or more employees increases in this calculation because foreign ownership is very high in trade, and at the same time this sector has a high number of enterprises. Employee ownership was most widespread in agriculture (39%) and lowest in transport (3%) in January 1995. Manager ownership was most widespread in fishing, mining and wood production (27%)

Figure 6 Estonia: Ownershipstructure January 1995 (some from Jan. 1997) **size 1994, capital intensity, time of privatization**.

frequency / row percent	majority: state	majority: outsiders foreign>dom	majority: outsiders domestic>f	majority: insiders managers>e	majority: insiders employees>m	no majo-rity	no an-swer	total
TOTAL								
sample at priv.	255 (38)	89 (13)	125 (19)	65 (10)	88 (13)	38 (6)	6 (1)	666 (100)
sample Jan. 95	243 (36)	96 (14)	144 (22)	83 (12)	74 (11)	26 (4)	0 (0)	666 (100)
whole economy	4383(39)	2204(20)	1861(17)	1064(10)	1232(11)	415 (4)	-	11158(100)
sample Jan. 97	110 (17)	86 (13)	145 (22)	106 (16)	52 (8)	17 (3)	150(23	666 (100)
whole economy	621 (5)	3621(31)	2208(19)	2947(26)	1185(10)	974 (8)	-	11556(100)
EMPLOYEES	normalized	whole	economy					
5-19	3315(41)	1823(23)	1226(15)	570 (7)	790 (10)	292 (4)	-	8017(100)
20-99	902(33)	346(13)	500(18)	466(17)	368 (14)	122 (5)	-	2705(100)
100-	166(38)	34 (8)	135(31)	28 (6)	73 (17)	0 (0)	-	436(100)
average	205	66	118	59	137	26	-	133
25% quartile	13	10	21	20	26	10	-	14
50% median	47	22	59	32	60	22	-	42
75% quartile	128	68	146	62	138	38	-	110
BRANCHES	normalized	whole	economy					
agricult.	285(28)	0 (0)	338 (33)	0 (0)	390 (39)	0 (0)	-	1013(100)
fish,mine,wood	179(31)	28 (5)	144 (25)	154 (27)	67 (12)	3 (1)	-	576(100)
manu. food etc	126(20)	54 (8)	227 (35)	81 (13)	109 (17)	46 (7)	-	642(100)
manu. paper et	239(22)	173(16)	361 (34)	121 (11)	94 (9)	80 (7)	-	1068(100)
construction	696(57)	61 (5)	223 (18)	86 (7)	115 (9)	41 (3)	-	1222(100)
trade	1748(43)	1404(35)	255 (6)	255 (6)	343 (9)	29 (1)	-	4035(100)
transport	132(26)	99 (20)	116 (23)	75 (15)	17 (3)	64(13)	-	504(100)
service	977(47)	383(18)	197 (9)	293 (14)	96 (5)	153 (7)	-	2098(100)
nom. capital / employee1000EEK								
average	35	299	34	6	4	13	-	66
25% quartile	2	5	2	1	0	0	-	0,7
50% median	10	49	8	2	1	1	-	4
75% quartile	28	141	29	7	5	7	-	22
0-25% firms	0 (0)	9 (9)	22 (22)	27 (26)	30 (29)	14 (14)	0 (0)	102 (100)
75-100% firms	3 (3)	44 (44)	42 (42)	6 (6)	3 (3)	3 (3)	0 (0)	101 (100)
total assets / employee1000EEK								
average	412	398	154	44	42	179	-	258
25% quartile	19	71	30	15	16	20	-	24
50% median	56	161	57	34	35	60	-	54
75% quartile	122	437	125	61	52	99	-	123
0-25% firms	67 (42)	5 (3)	23 (14)	33 (21)	25 (16)	8 (5)	0 (0)	161 (100)
75-100% firms	59 (37)	53 (33)	36 (22)	5 (3)	2 (1)	6 (4)	0 (0)	161 (100)
Year of privatization								
-1990	6 (5)	7 (10)	22 (32)	13 (19)	9 (13)	10(14)	2 (3)	69 (100)
1991	5 (5)	13 (12)	25 (23)	24 (22)	31 (28)	10 (9)	1 (1)	109 (100)
1992	6 (5)	30 (24)	40 (32)	16 (13)	23 (18)	9 (7)	2 (2)	126 (100)
1993	3 (4)	12 (15)	27 (35)	8 (10)	20 (26)	7 (9)	1 (1)	78 (100)
1994	3 (11)	2 (7)	11 (41)	4 (15)	5 (19)	2 (7)	0 (0)	27 (100)
1995 (own ult.)	4 (8)	5 (10)	25 (48)	11 (21)	0 (0)	3 (6)	4 (7)	52 (100)
1996 (own ult.)	14 (45)	2 (6)	7 (23)	3 (10)	0 (0)	1 (3)	4(13)	31 (100)
total	41 (8)	71 (14)	157 (32)	79 (16)	88 (18)	42 (9)	14 (3)	492 (100)

and lowest in trade (6%). However, by January 1997 the share of manager ownership for the whole economy increased to 26%, and for trade to 13%, not reported.

A normalization based on capital show that foreign ownership amounted to 52% of the nominal capital for the privatized enterprises on January 1995[8]. This high proportion of foreign ownership is closely related to the strategy of privatization, a consistent transition policy concerning stabilization and liberalization, and also the proximity to Finland must be taken into account (Mygind, 1997b).

There is no clear tendency in the distribution between different ownership types concerning the average size measured as the average employment in 1994. Only state owned enterprises tend to be relatively large with an average size of 205 employees. A few very large state owned enterprises account for this result since the median state owned enterprises are on the level with the whole sample. The high number of small foreign owned trading companies explains why foreign ownership is most common for small enterprises, (average of 66 employees). Also insider majority owned enterprises with management dominance tend to be rather small. Comparing these results with the situation of ownership in January 1997 and average employment in 1996 (not reported in the figure) it is striking that most of the large employee dominated enterprises in the sample have disappeared. At the time of privatization there were 28 employee dominated enterprises with more than 100 employees in the sample. By January 1997 this number had fallen to 9. For the similar enterprises with less than 100 employees the numbers fell from 60 at the time of privatization to 42 in January 1997. Normalized for the whole economy employee ownership had in 1995 a higher proportion in large enterprises (17%) than in small (10%), but in 1997 the proportion of employee ownership in large enterprises fell to 7% (not reported). For management dominated enterprises especially the number of small enterprises in the sample increased. Domestic outside majority owned increased their share especially for large enterprises.

Capital intensity both measured as total assets per employee and nominal capital per employees is relatively high in foreign owned enterprises and relatively low for insider owned enterprises. Nominal capital per employee is only 2000 EEK per employee or less for more than half of the insider owned enterprises. In the 25% of enterprises with the lowest nominal capital per employee 26% of the enterprises are management owned and 29% employee owned. In the 25% of enterprises with the highest capital intensity the are only 4% insider owned enterprises. In this category state owned enterprises (37%) and foreign owned enterprises (33%) are dominating. The average number of 299,000 EEK per employee in foreign owned companies versus 4,000 in employee dominated enterprises show a striking difference. For total assets the difference is "only" ten times higher in foreign owned than in insider owned. These results can probably partly be explained by the fact that outsiders especially foreigners can afford enterprises with a higher capital per employee. Also, typically foreign owners have paid a price that is relatively high (at least compared to insiders) for similar enterprises. Relatedly, foreign capital was mainly used to buy enterprises in the later stages, with insiders dominating during the early stages of the privatization process.

This last point is supported by the observation that insider takeovers were especially important during the early stages of privatization. This is shown at the bottom of figure 6. Insider ownership was very important especially in 1991, when takeovers with broad employee ownership were quite prevalent. During 1992-1994, after the ending of preferences for insiders, we see that the percentage of nominal capital owned by outsiders has become more important.[9] In 1995 and 1996, 65 of out of 243 state owned enterprises were privatized. It is worth noting that in this group there were no cases of insider majority with employee dominance. Nearly half of the responding enterprises (46%) went to majority outside domestic ownership, 16% to majority foreign ownership, 25% to management dominated insider ownership, and 7% to no majority.

The variation in the incidence of employee ownership also applies across individuals as well as firms. Thus from data on the "take-up" rate for employee ownership, we find that even in enterprises with majority broad employee ownership, normalized for the whole economy on average 46 were *not* owners in January 1995, for the sample the average was 38%, see figure 7. This percentage increased to 52% in January 1997. Moreover, this "participation rate" varies enormously across sectors. Whereas in agriculture the sample shows that on average only 22% were not owners in January 1995, in other sectors including hotels and restaurants and transport, more than 90% of the employees are non-owners. For January 1995 there is a slight tendency to find more non-owners in smaller enterprises. However, for 1997 the opposite tendency is dominating, see figure 7. There is a both tendency of a fall in the total number of employees in large employee dominated enterprises and an increase in the percentage of non owning employees in these enterprises. This confirms the earlier stated result that employee ownership seems to be most stable in small enterprises. For the whole sample in January 1995, 76% of employees were non-owners and, normalized for the whole economy, there were 71% non owners. These percentages increase to 84% and (normalized)% in January 1997.

Figure 7 Percent of employees who are not owners

Shares owned by employees in % of total shares **January 1, 1995**	0%		0-10%		10-30%		30-50% employee owned		30-50% management owned		50-100% employee owned		50-100% management owned		Total	
Number of employees	Total	no own	Total	no own	Total	no own	Total	no own	Total	no own	Total	no own	Total	no own	Total	no own
5 –19 employees 1995	959	100%	537	87%	95	71%	22	36%	185	76%	106	37%	359	77%	2263	87%
20-99 employees 1995	1683	100%	323	73%	573	82%	264	40%	340	82%	1364	52%	2318	85%	6865	79%
More than 99 employees1995	15053	100%	4792	69%	2065	59%	2028	55%	571	82%	8132	35%	2685	86%	35326	75%
total 1995	17095	100%	5652	71%	2733	65%	2314	53%	1096	81%	9602	38%	5362	85%	44454	76%
5 –19 employees 1997	335	100%	79	63%	76	86%	181	47%	59	83%	142	38%	235	76%	1107	74%
20-99 employees 1997	2611	100%	336	87%	505	64%	223	44%	382	85%	1877	60%	2265	91%	8199	83%
More than 99 employees1997	14929	100%	4557	86%	2651	74%	811	40%	1300	91%	3859	48%	2715	76%	30822	85%
total 1997	17875	100%	4972	86%	3232	73%	1215	42%	1741	89%	5878	52%	5215	83%	40128	84%

The survey also generated information on the distribution of ownership within the group of employee owners. In 65% of the small enterprises with employee ownership, the distribution of ownership was reported as being fairly equal among employees who are owners, see figure 8. The percentage increased to 71% in 1997. In large enterprises with more than 99 employees this percentage was approximately the same for the two years, 31-32%. In this group about half of the cases indicate a very unequal distribution with differences typically more than 1:10. Again the tendency of stabilization of employee ownership in small enterprises are revealed.

Figure 8 Distribution of shares among the employees who are owners.

Percent of enterprises where Shares are distributed	Rather equal		Unequal, more than 1:2		Very unequal more than 1:10		Total
T O T A L	1995	1997	1995	1997	1995	1997	97/95
5 –19 employees	65	71	20	21	14	8	100
20-99 employees	60	50	18	22	23	28	100
More than 99 employees	31	32	22	17	47	52	100
Total	52	51	20	20	28	29	100

From many studies of other countries it is well known that broad employee ownership of capital does not necessarily mean that the employees have a similar degree of control (e.g. for Russia, Blasi et al. 1997; Jones and Weisskopf, 1996). One reason why this is likely also to be the case in Estonia is because the system of non-voting shares for employees is especially frequent in cases in which there is a high degree of broad employee ownership (figure 9). 47% of large enterprises with majority employee ownership had this type of governance structure in January 1995. This number fell to 41% in 1997. In General the number of enterprises with voting discrimination against employees has decreased from 17% to 13%. In the new company law from 1995 the possibility of making different voting classes was abolished. Again it is worth noting that the purest form of employee ownership is found in small enterprises.

Figure 9 Percentage of firms with some shares with less votes than others January 1995 and January 1997.

Shares owned by employees in % of total shares	0%		0-10%		10-30%		30-50% employee owned		30-50% management owned		50-100% employee owned		50-100% management owned		Total	
number of firms and percentage of firms	Total firms	less votes	Total firms	less votes	Total firms	less votes	Total firms	less votes	Total firms	less votes	Total firms	less votes	Total firms	less votes	Total firms	less votes
5-19 employees	48	0%	8	0%	11	27%	3	0%	13	8%	11	18%	23	13%	117	8%
20-99 employees	36	0%	7	14%	13	23%	6	50%	9	11%	33	39%	55	27%	159	23%
100- employees	52	0%	15	7%	11	18%	11	27%	4	0%	30	47%	15	33%	138	18%
total **1995**	136	0%	30	7%	35	23%	20	30%	26	8%	74	39%	93	25%	414	17%
5-19 employees	28	0%	8	0%	8	13%	4	25%	8	13%	13	8%	26	8%	95	6%
20-99 employees	55	0%	7	29%	11	18%	6	17%	10	20%	41	37%	49	8%	179	15%
100- employees	49	0%	14	14%	10	20%	5	60%	7	29%	17	41%	12	33%	114	18%
total **1997**	132	0%	29	14%	29	17%	15	33%	25	20%	71	32%	87	11%	388	13%

As indicated earlier, for several reasons we are particularly interested in the *dynamics* of ownership. By using our survey data we are able to examine changes in ownership in sample firms between the time of privatization and subsequent times. Some of these results have already been reported in figure 6. To analyze the dynamics more closely we present two transition matrices in figure 10 and figure 11. Figure 10 shows the same ownership categories presented earlier, comparing the change from the situation at the time of privatization and the situation on January 1997. The earlier shown fall in employee ownership from 88 to 52 enterprises is shown, but additionally it can be seen that this change covers a stable group of 38 enterprises combined with a deduction of 50 enterprises and an addition of 14 enterprises. The flow away from employee dominance has gone mainly to management dominance, 21 cases, and to domestic outside ownership, 17 cases. Only 4 enterprises have developed in the other direction from management to employee dominance and only 3 from domestic to employee ownership. Management ownership has got 14 case from domestic outside ownership and 16 cases from state ownership. It is revealing to see that the number with no clear majority ownership group has fallen from 38 to 17, indicating a strong tendency in Estonia for an ownership configuration to emerge in which there is a clear core-owner. Most of the no-majority cases have gone to domestic and management ownership.

**Figure 10 Transition matrix Estonia -
majority at privatization by majority January 1997**

majority at time of privatization	majority January 1997: state	outsiders: foreign	outsiders: domestic	insiders: managers	insiders: employees	no majority	no answer	total
state	110 (43)	15 (6)	33 (13)	16 (6)	2 (1)	3 (1)	76 (30)	255 (100)
outsider foreign>domestic	0 (0)	64 (72)	1 (1)	3 (3)	1 (1)	1 (1)	19 (21)	89 (100)
outsider domestic>foreign	0 (0)	2 (2)	79 (63)	14 (11)	3 (3)	2 (2)	25 (20)	125 (100)
insider managers>employees	0 (0)	1 (2)	5 (8)	44 (68)	4 (6)	2 (3)	9 (14)	65 (100)
insider employees>managers	0 (0)	1 (1)	17 (19)	21 (24)	38 (43)	2 (2)	9 (10)	88 (100)
no majority	0 (0)	3 (8)	9 (24)	5 (13)	3 (8)	7 (18)	11 (29)	38 (100)
no answer	0 (0)	0 (0)	1 (17)	3 (50)	1 (17)	0 (0)	1 (17)	6 (100)
total privatization	255 (38)	89 (13)	125 (19)	65 (10)	88 (13)	38 (6)	6 (1)	666 (100)
total Jan. 1995	243 (36)	96 (14)	144 (22)	83 (12)	74 (11)	26 (4)	0 (0)	666 (100)
total Jan. 1996	162 (24)	89 (13)	155 (23)	94 (14)	71 (11)	21 (3)	74 (11)	666 (100)
total Jan. 1997	110 (17)	86 (13)	145 (22)	106 (16)	52 (8)	17 (3)	150 (23)	666 (100)

Excluding the no-answer group and the state-owned group, only looking at changes within the private ownership enterprises giving information for the two dates, 100 enterprises have changed category while 232 have been stable. This means a change of 100/332 = 30% in the period of approximately 3 years - a quite dynamic ownership adjustment. From the time of privatization to January 1995 this transition percentage was 71/405 = 18%, from 1995 to 1996 it was 52/373 = 14%, and from 1996 to 1997 it was 60/378 = 16%. (The sum of the three periods is less than 30 because a firm can change more than once).

Figure 11 Transition matrix Estonia -

degrees of employee ownership at privatization by January 1997

Time of privatization	**January 1997**								
employeeshares	**0%**	**0-5%**	**5-10%**	**10-30%**	**30-50%**	**50-100%**	**100%**	**no data**	**total**
0%	332 (67)	13 (3)	5 (1)	14 (3)	5 (1)	4 (1)	0 (0)	126 (25)	499 (100)
0-5%	2 (20)	6 (60)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (20)	10 (100)
5-10%	1 (14)	2 (29)	1 (14)	0 (0)	1 (14)	0 (0)	0 (0)	2 (29)	7 (100)
10-30%	4 (15)	0 (0)	3 (19)	15 (27)	0 (0)	0 (0)	0 (0)	4 (15)	26 (100)
30-50%	0 (0)	1 (4)	4 (17)	6 (25)	5 (21)	3 (13)	0 (0)	5 (21)	24 (100)
50-100%	6 (7)	5 (6)	3 (4)	19 (22)	19 (22)	25 (29)	0 (0)	8 (9)	85 (100)
100%	0 (0)	0 (0)	0 (0)	0 (0)	2 (22)	3 (33)	2(22)	2 (22)	9 (100)
no data	3 (50)	0 (0)	0 (0)	1 (17)	0 (0)	1 (17)	0 (0)	1 (17)	6 (100)
total at priv.	499 (75)	10 (2)	7 (1)	26 (4)	24 (4)	85 (13)	9 (1)	6 (1)	666 (100)
total Jan. 1995	476 (71)	25 (4)	11 (2)	52 (8)	34 (5)	61 (9)	7 (1)	0 (0)	666 (100)
total Jan. 1996	409 (61)	23 (3)	17 (3)	49 (7)	35 (5)	50 (8)	6 (1)	77 (12)	666 (100)
total Jan. 1997	348 (52)	27 (4)	16 (2)	55 (8)	32 (5)	36 (5)	2 (0)	150 (23)	666 (100)

Figure 11 shows a transition matrix for employee ownership comparing the time of privatization and January 1997. There is a clear tendency so that the frequency of the high degree employee ownership are falling and the frequency of the low degree of employee ownership are increasing. The cases with 0% employee shares includes mainly state owned enterprises. Thus the fall in this category reflects privatization. From the matrix it can be seen that the 85 enterprises with 50-100% employee ownership at the time of privatization has been reduced to 36 enterprises. The enterprises have transferred mainly to the neighboring categories 10-30% and 30-50%, but some majority employee owned enterprises has also transferred to the lowest categories of employee ownership. Only 45 enterprises have jumped to a category with higher employee ownership and of these 41 enterprises have jumped from 0, indicating that it covers mainly privatization cases. 80 enterprises have moved in the other direction. A similar transition matrix for management ownership (not shown) shows complementing tendencies: fall in the low categories and an increasing number of enterprises in the high categories of management ownership. This is not surprising seen in combination with the earlier mentioned tendency of transfer from employee to management ownership.

V Latvia[10]

While developments in Latvia have many similarities with those in Estonia, political developments were more unstable and a political deadlock dominated the situation for some years. Accordingly, stabilization came a little later, liberalization was not so extensive and initially the privatization process was much slower. As in Estonia, initially many new cooperatives were established, and leasing according to the Soviet legislation also had some importance (See Figure 5). The early years of transition also gave some advantages for insiders concerning small privatization. In addition, six experimental privatization of large enterprises were implemented in 1991 and most of the ownership in these firms was transferred to insiders. Finally, the initial legislation on large privatization formally included some preferences for employees for buying 10-20% of the shares in their enterprise (Frydman et al, 1993). But as in Estonia, most of the initial advantages for insiders were subsequently (in 1992) formally taken away (Mygind 1997). However, it seems that in the actual implementation of these changes, the advantages for employees prevailed for a long time (Vojevoda and Rumpis, 1993). Until 1994 the privatization process appears to have been quite decentralized, and to have given a key role to different ministries. This meant that the existing networks could be used to the advantage of insiders. Mostly by using the method of leasing with an option to buy, insiders (especially managers) had good opportunities to take over their enterprises. However, until 1994, privatization was rather slow and this type of privatization only included around 200-300 firms.

As in Estonia, after 1994 the legislation was changed in the direction of a Treuhandmodel. The Latvian Privatization Agency made its first international tender in the end of 1994, but in both 1995 and 1996 the process proceeded relatively slowly. The centralization of the privatization process in the Latvian Privatization Agency speeded up the process somewhat, although it remained slower than in the other Baltic states. Mainly through a tender process, 14 enterprises were sold in 1994, 231 in 1995 and 264 in 1996. Most of these sales were to domestic outsiders and some to foreign owners, and insiders played a minor role. This was also the case for public offerings which started in August

1995. In both types of privatization it was possible to pay by vouchers, and according to the figures from the statistical department, on average 59% of the total price was paid with vouchers.

Turning to our survey data, in Table 12 we show ownership distribution for 5589 enterprises for January 1995.The ownership distribution is quite interesting since typically one group of owners has more than 50% of the ownership and in only 2% of the enterprises did no group of owners have a majority of the ownership. In 16% of cases, enterprises were mainly owned by the state and municipalities, 5% of firms were owned by foreigners, 26% by domestic outsiders while in 51% of firms insiders owned more than 50%.

Based on a survey on managers in 167 enterprises we have evidence for the distribution between managers and other employees in companies. These results are in figure 12 used to divide the insider ownership in two groups. However, it must be noted that this procedure includes some modifications since the 73 enterprises with majority insider ownership is not a representative sample of the total. First of all they have 20 or more employees. From the small sample we can see that employee and management dominance have the same frequency for enterprises with 20 or more employees.

As can also be seen from figure 12 state ownership was still quite high in manufacturing with, the state having majority in around 24% of the enterprises. In particular, the state maintains a strong ownership stake among the largest enterprises and 54% of firms with more than 500 employees were still predominantly state owned in January 1995. At the same time, on average, the state owned less than 15% of enterprises with fewer than 100 employees. These small enterprises have mainly been taken over by insiders and more than 50% of companies with fewer than 100 employees are majority insider owned. More

Figure 12 Latvia: Ownershipstructure, January 1, 1995
size, branches, capital intensity

Frequency	**majority**						**no majo-rity**	**total**
	state	**outsiders**		**insiders**				
(row percent)		foreign>dom	domestic>f	total	managers>e	employees>m		
TOTAL	895 (16)	279 (5)	1464(26)	2838 (51)	36 (25)*	37 (25)*	113 (2)	5589 (100)
EMPLOYEES								
1-4	47 (6)	23 (3)	161 (21)	528 (67)	-	-	26 (3)	785 (100)
5-19	196 (15)	62 (5)	332 (25)	681 (52)	-	-	38 (3)	1311 (100)
20-99	366 (14)	141 (5)	693 (27)	1343 (52)	(29)*	(23)*	44 (2)	2587 (100)
100-199	119 (24)	28 (6)	160 (32)	193 (39)	(22)*	(17)*	3 (1)	503 (100)
200-	165 (41)	25 (6)	118 (29)	93 (23)	(0)*	(23)*	2 (0)	403 (100)
Average	215	70	74	45	64*	182*	31	
25% quartile	17	16	13	7	25*	38*	5	
50% median	52	33	33	23	40*	83*	17	
75% quartile	145	76	77	44	102*	184*	36	
BRANCHES								
Agricult. fishing	72 (12)	5 (1)	124 (20)	406 (67)	(11)*	(56)*	2 (0)	609 (100)
Mining wood	93 (19)	29 (6)	101 (20)	269 (54)	(27)*	(27)*	7 (1)	499 (100)
Manufacturing	130 (22)	36 (6)	92 (16)	310 (53)	(32)*	(21)*	12 (2)	580 (100)
Manufacturing	51 (26)	13 (7)	19 (10)	108 (55)	(14)*	(41)*	4 (2)	195 (100)
Construction	102 (13)	15 (2)	180 (24)	455 (60)	(43)*	(17)*	7 (1)	759 (100)
Trade	217 (14)	105 (7)	379 (24)	825 (52)	(39)*	(13)*	47 (3)	1573 (100)
Transport	75 (20)	49 (13)	112 (30)	130 (34)	(34)*	(0)*	11 (3)	377 (100)
Service	153 (15)	27 (3)	453 (46)	332 (34)	-	-	23 (2)	988 (100)
Nominal capital /employee 1000 lat								
average	5289	6568	5170	477	488*	630*	3696	2846
25% quartile	380	125	99	7	4*	58*	13	20
median	1663	1137	538	35	90*	195*	100	165
75% quart.	3965	5333	2240	211	1035*	650*	625	1200
0-25% firms	16 (1)	34 (3)	176 (13)	1097 (81)	(52)*	(29)*	32 (2)	1355 (100)
75-100% firms	512 (37)	136(10)	525 (38)	200 (14)	(7)*	(7)*	23 (2)	1396 (100)
year of privatization								
1991	8 (26)*	2 (6)*	3 (10)*	14 (35)*	7 (23)*	7 (18)*	4 (13)*	31 (100)*
1992	0 (0)*	4 (7)*	15 (27)*	35 (64)*	17 (31)*	18 (33)*	1 (2)*	55 (100)*
1993	4 (10)*	4 (10)*	14 (35)*	17 (43)*	7 (18)*	10 (25)*	1 (2)*	40 (100)*
1994	4 (29)*	1 (7)*	2 (14)*	7 (50)*	5 (36)*	2 (14)*	0 (0)*	14 (100)*
total	16 (11)*	11 (8)*	34 (24)*	73 (52)*	36 (26)*	37 (26)*	6 (4)*	140 (100)*

* the numbers are based on the sample of 167 enterprises with 20 or more employees, percentages are normalized so the total equals insiders total, numbers for employees and nominal capital cannot be directly compared with other ownership groups.

than two thirds of enterprises with 1- 4 employees were majority insider owned. For enterprises with more than 500 employees the corresponding figure is only 18. Most of the enterprises with majority insider ownership in 1995 were 100% owned by insiders. It is striking that for enterprises with 20-199 employees there is slightly more management owned enterprises than employee owned. However, for large enterprises with more than 200 employees we have no enterprises with management dominance in our small sample of 167 enterprises.

There is substantial dispersion in the extent of insider ownership across sectors. In Latvia, we find that insider ownership is highest in agriculture and fishing and lowest in transport and services. At the same time from the small sample it can be seen that the bulk of insider owned enterprises in agriculture and fishing are broadly owned by employees, in manufacturing there is about balance, while managers are dominating in sectors such as construction, trade and transport. Figure 12 shows some data for capital intensity, measured as nominal capital per employee. There is a similar tendency like in Estonia that enterprises with insider majority have much lower (around ten times lower) capital intensity than other enterprises. This is also confirmed by the data from the small sample. These data do not point to significant differences between management and employee dominated enterprises.

A distribution based on the year of privatization for the small sample is shown at the bottom of the table. However, from these results no clear tendencies can be seen, so a tendency to lower insider or lower employee ownership cannot be confirmed.

Figure 13 Percent of employees who are not owners - Latvia, 1994 and 1996

Shares owned by employees in % of total shares	0%		0-10%		10-30%		30-50% employee owned		30-50% management owned		50-100% employee wned		50-100% management owned		Total		
number of employees	total	no own	total	no own	total	no own	total	no own	total	no own	total	no own	total	no own	total	no own	firms
5 -19 employees	11	100%	0	-	0	-	0	-	19	84%	9	0%	53	79%	92	74%	10
20-99 employees	521	100%	30	0%	602	76%	252	26%	156	78%	1040	40%	1013	91%	4243	72%	98
100-199 employees	760	100%	0	-	286	48%	393	58%	135	96%	767	65%	795	93%	3868	83%	31
> 200 employees	1929	100%	1403	27%	373	71%	594	19%	0	-	4481	36%	208	100%	10467	57%	19
total **1994**	3221	100%	1433	26%	1261	68%	1239	33%	310	86%	6298	40%	2069	93%	18671	66%	160
5 -19 employees	19	100%	0	-	16	94%	0	-	0	-	27	37%	67	85%	147	80%	7
20-99 employees	726	100%	0	-	609	51%	208	41%	150	85%	848	54%	1524	80%	4686	73%	90
100-199 employees	648	100%	0	-	218	66%	440	68%	0	-	1181	47%	988	98%	4084	79%	30
> 200 employees	1249	100%	1165	50%	472	28%	204	0%	0	-	3109	32%	0	-	7563	57%	25
total **1996**	2642	100%	1165	50%	1315	46%	852	45%	153	84%	5166	39%	2579	87%	16484	67%	153

From the study of the 167 enterprises we also have evidence about the distribution within the group of employees. The number of non-owners are shown in figure 13. The tendency known from Estonia with a more equally distributed ownership in small enterprises cannot be confirmed in the Latvian sample. Not surprisingly the percentage of non-owners are higher for management dominated than for employee dominated ownership. Surprisingly the percentage of non owners for 0-10% insider ownership in 1994 is very low. However, because of the low number of companies no conclusions can be drawn from this fact, and in 1996 the figures looks more reasonable. There is not a tendency for an increasing number of non-owners from 1994 to 1996. For both years about one third of the employees in sample own shares in their own enterprise. The distribution of shares among the employee is rather equal for half of the enterprises with some insider ownership and “unequal” for 25% and “very unequal” for the remaining 25%, see figure 14. This is the same pattern as in Estonia, but unlike Estonia the numbers do not show a significant variation between different size groups.

Figure 14 Latvia - distribution of shares among employee owners

Enterprises where shares are distributed (%)	Rather equal	Unequal, more than 1:2	Very unequal more than 1:10	Total
T O T A L	1996	1996	1996	1996
1 -19 employees	3 (33)	1 (11)	5 (56)	9 (100)
20-99 employees	42 (55)	19 (25)	16 (21)	77 (100)
more than 99 employees	15 (44)	10 (29)	9 (26)	34 (100)
Total	60 (50)	30 (25)	30 (25)	120 (100)

The dynamics of ownership in Latvia can be usefully examined by constructing transition matrices based on the survey on the 167 enterprises analyzed for the period 1993-1996. In the transition matrix shown in figure 15 the results in the end of 1994 are compared with the results ultimo 1996. We have not gone back to 1993 since the number of non-answers here is as high as 28%. The enterprises were asked in 1997 about their ownership structure in the preceding four years. The reliability of the data is probably falling the further back in time we go, and there is probably a tendency to underreport changes in ownership since it is simply easier to answer “unchanged” instead of specifying the changes. Even with this concern, the transition matrix do show some

Figure 15 Transition matrix Latvia - majority ultimo 1994 by ultimo 1996

Majority Ultimo 1994	majority ultimo 1996					no majority	no answer	total
	state	outsiders		insiders				
		foreign	domestic	managers	employees			
State	12 (75)	1 (6)	0 (0)	2 (13)	0 (0)	1 (6)	0 (0)	16 (100)
Outsider foreign>domestic	0 (0)	10 (91)	0 (0)	1 (9)	0 (0)	0 (0)	0 (0)	11 (100)
Outsider Domestic>foreign	0 (0)	1 (3)	29 (85)	2 (6)	1 (3)	1 (3)	1 (3)	34 (100)
Insider Managers>employees	0 (0)	0 (0)	0 (0)	36 (100)	0 (0)	0 (0)	0 (0)	36 (100)
Insider Employees>managers	0 (0)	0 (0)	3 (8)	3 (8)	30 (81)	1 (3)	0 (0)	37 (100)
no majority	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	6 (100)	0 (0)	6 (100)
no answer	1 (4)	1 (4)	2 (7)	0 (0)	2 (7)	1 (4)	20 (74)	27 (100)
total 1993	15 (9)	7 (4)	29 (17)	29 (17)	34 (20)	6 (4)	47 (28)	167 (100)
total 1994	16 (9)	11 (7)	34 (20)	36 (22)	37 (22)	6 (4)	27 (16	167 (100)
total 1995	14 (8)	13 (8)	35 (21)	38 (23)	35 (21)	9 (5)	23 (14)	167 (100)
total 1996	13 (8)	13 (8)	34 (20	44 (26)	33 (20)	10 (6)	20 (12)	167 (100)

interesting developments. 4 companies have been privatized from 1994 to 1996. 5 out of 34 enterprises with domestic outside ownership have changed, and most markedly 7 out of 37 employee dominated insider majority have changed, 3 to management dominance, 3 to domestic ownership and one to no majority. Looking at the summary table at the bottom there is a tendency for foreign ownership, management ownership and no majority ownership to increase. The tendency from Estonia with falling employee ownership is also reflected in the transition matrix in figure 16. A closer analysis shows that the ownership is especially shifting from employees to managers like it was the case in Estonia, although there is a weaker tendency in the Latvian data. Measuring the speed of change for majority ownership (excluding changes including state and no-answers) show a change between 4% and 7% year to year, and a 18% change from 1993 to 1996. This is about half the speed of change compared to Estonia. This can probably partly be explained by a bias in the data-collection method, but a it also indicates a more open and dynamic market for ownership in Estonia. (In fact, an analysis of 694 enterprises on ownership in 1994 and 1995, but insiders not divided in managers and other employees, show that the ownership change is 7.6% compared to 3.7% in the small sample of 167 enterprises).

Figure 16 Transition matrix Latvia -
degrees of employee ownership ultimo 1994 by ultimo 1996

Ultimo 1994	**ultimo 1996**							**no data**	**total**
Employeeshares	**0%**	**0-5%**	**5-10%**	**10-30%**	**30-50%**	**50-100%**	**100%**		
0%	60 (94)	0 (0)	0 (0)	2 (3)	1 (2)	1 (2)	0 (0)	0 (0)	64 (100)
0-5%	1 (13)	4 (50)	0 (0)	2 (25)	1 (13)	0 (0)	0 (0)	0 (0)	8 (100)
5-10%	0 (0)	1 (17)	4 (67)	1 (17)	0 (0)	0 (0)	0 (0)	0 (0)	6 (100)
10-30%	2 (12)	1 (6)	2 (12)	12 (71)	0 (0)	0 (0)	0 (0)	0 (0)	17 (100)
30-50%	0 (0)	0 (0)	0 (0)	2 (22)	6 (67)	1 (11)	0 (0)	0 (0)	9 (100)
50-100%	0 (0)	0 (0)	0 (0)	4 (12)	3 (92)	27 (79)	0 (0)	0 (0)	34 (100)
100%	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (50)	1 (50)	2 (100)
no data	4 (15)	0 (0)	0 (0)	1 (4)	0 (0)	2 (7)	0 (0)	20 (74)	27 (100)
total ult. 1993	53 (32)	5 (3)	6 (4)	15 (9)	9 (5)	30 (18)	2 (1)	47 (28)	167 (100)
total ult. 1994	64 (38)	8 (5)	6 (4)	17 (10)	34 (5)	34 (20)	2 (1)	27 (16)	167 (100)
total ult. 1995	67 (40)	9 (6)	4 (2)	20 (12)	35 (5)	32 (19)	2 (1)	23 (14)	167 (100)
total ult. 1996	67 (40)	6 (4)	6 (4)	24 (14)	11 (7)	32 (19)	1 (1)	20 (12)	167 (100)

VI Lithuania[11]

In the first years of transition, Lithuania had the fastest pace of privatization and the biggest emphasis on employee ownership in the Baltic countries (see figure 5). While privatization according to Soviet legislation in the form of new cooperatives and leasing was probably not so developed as in Estonia and Latvia, as early as 1990-1991, a temporary law which gave the first possibility of distributing shares to employees, was implemented. Privatization legislation for both small and large firms was already passed at the start of 1991. The most important of these measures was the ambitious voucher program, LIPSP, which was passed in February 1991 and already being implemented in September 1991. A feature of the

LIPSP was that from an early stage egalitarian ideas have had a strong role in the major part of Lithuanian privatization.

Under LIPSP (which is one of the earliest implementations of a mass-privatization program in Eastern Europe), employees had the opportunity to buy a certain percentage of the shares in the first round at concessional rates before most of the remaining shares were sold in public offerings in later rounds. This percentage of shares available for employees was increased from 10% in 1991, to 30% in 1992 and to 50% after the labor party took over the government in early 1993. Employees could use vouchers as cash to buy shares. The price paid in the first round was usually below the market price. Moreover, because of only partial indexation of the price of the assets and on the value of the vouchers, the advantage of employees increased over time (Martinavicius, 1996). This system made it possible for employees to obtain a considerable part of the ownership even in large enterprises with relatively high capital-intensity. Also while the 20% extra shares reserved for employees after 1993 initially did not have any voting rights, later in the process it was made possible for the general meeting of the enterprises to convert these shares into normal voting shares.

Contrary to the case in the other Baltic countries, the advantages for employees in small privatization was usually smaller than in large privatization because small enterprises had already been mostly sold in public auctions.

While programs for sale of state owned enterprises to foreigners were introduced in 1992, until 1995 this program was used only in a limited number of cases. Also, little use was made in Lithuania of restitution of industrial enterprises to former owners. Hence, employee ownership was an important element in the privatization process in Lithuania, especially in large enterprises. Also, while the LIPSP programme did not formally include special preferences for employees in small privatization, because of inside information and access to resources for purchase in the form of vouchers, insiders have probably also had a relatively strong position in the privatization of small firms. It should be noticed that although small privatization included around half of the 6000 enterprises to be privatized in the LIPSP program, the small enterprises only covered a small percentage of the total assets and the total number of employees.

Data from the Privatization Department in the Ministry of Economics clearly show the spread of employee ownership over time in Lithuania. Soon after the start of privatization, at the end of 1992, employees got a relatively small part of total privatized equity and 67% of enterprises had no employee ownership. But in just two years there was an astonishing change. By 1994 fewer than 5% of the privatized firms in the LIPSP program had *no* employee ownership and the percentage of enterprises where the majority of *privatized* assets were taken over by employees increased from 3% in 1991-1992, to 65% in 1993, and to 92% in 1994-1995. These developments reflect the massive increase in support for employee take-overs. However, in most of the enterprises the state kept some equity. Furthermore, many enterprises started to change ownership soon after privatization. Therefore, the following results show a much lower percentage of employee ownership.

Our ownership survey, undertaken in July 1994, elicited responses from 356 industrial enterprises. It confirms to some extent the rapid extension of employee ownership in large enterprises in Lithuania, figure 17. By July 1994 only 5% of these enterprises had no insider ownership and most of these 25 enterprises were still state owned. 16% of the enterprises had 31-50% insider ownership, and 14% of the enterprises had majority insider ownership. Most of these enterprises have more shares owned by the employees than by managers. In July 1994 in only 13% of cases with some insider ownership did managers own more equity than do the rest of employees. This result shows a strong difference from the Estonian data where managers owned more than the other employees in most cases. The survey data also indicate that ownership by foreigners plays a limited role in Lithuania. On average only 2.5% of an enterprise is owned by foreigners.

As can be seen from figure 17, 15% of the industrial enterprises had insider majority with employee dominance and only 3% had insider majority with manager dominance in July 1994. As the entries in the lower rows of figure 17 indicate, the degree of employee-ownership in July 1994 is not dependent on the time of privatization. The difference in relation to the distribution of ownership at the time of privatization is probably the result of two tendencies from the privatization date to July 1994 - a gradual take-over by employees through enterprise reserves and profits, and secondly the sale of some employee shares, with the strongest effect in enterprises where employees

Figure 17 Lithuania: Ownershipstructure July 1994, industry - size, capital intensity, time of privatization.

Frequency row percent	majority					no majority	no answer	total
	state	outsiders		insiders				
		foreign>dom	domestic>f	managers>e	employees>m			
TOTAL	70 (20)	6 (2)	124 (35)	12 (3)	53 (15)	60 (17)	31 (9)	356 (100)
EMPLOYEES	1						6	7
5-19	1 (33)	0 (0)	0 (0)	1 (33)	0 (0)	0 (0)	1(33)	3 (100)
20-99	15 (32)	0 (0)	11 (23)	0 (0)	4 (9)	3 (6)	14(30)	47 (100)
100-199	15 (18)	0 (0)	36 (44)	1 (1)	12 (15)	15 (18)	4 (5)	83 (100)
200-499	18 (18)	2 (2)	38 (37)	2 (2)	19 (19)	21 (21)	3 (3)	103 (100)
500-	20 (18)	4 (4)	39 (35)	8 (7)	18 (16)	21 (19)	3 (3)	113 (100)
Average 1994	496	753	616	1092	639	657	333	601
25% quartile	113	401	168	418	207	194	70	153
median	221	750	327	798	322	311	94	304
75% quartile	596	1084	753	1831	737	793	131	722
BRANCHES							3	3
Mining, wood	41 (24)	2 (1)	40 (23)	5 (3)	30 (17)	43 (25)	14 (8)	175 (100)
Manufacturing	18 (14)	3 (2)	62 (48)	4 (3)	17 (13)	14 (11)	10 (8)	128 (100)
Manufacturing	11 (22)	1 (2)	22 (44)	3 (6)	6 (12)	3 (6)	4 (8)	50 (100)
total assets /employee								
average 1994	29867	32838	16699	31853	20664	27689	21380	23002
25% quartile	9996	18876	8545	12006	9141	14872	4505	9083
median	22232	32004	13217	24730	17096	21815	8394	16856
75% quart.	37712	39881	20711	51948	26427	28731	24638	27345
0-25% quart.	16 (20)	0 (0)	30 (37)	1 (1)	12 (15)	7 (9)	15(19)	81 (100)
75-100% quart.	26 (33)	4 (5)	12 (15)	5 (6)	12 (15)	17 (21)	4 (5)	80 (100)
nom. Capital /employee								
average 1994	8669	5839	2769	2403	1895	7424	-	4695
25% quartile	768	1738	503	315	386	678	-	497
median	3290	3986	1319	1529	738	2698	-	1524
75% quart.	8571	8714	3071	4398	1733	5566	-	4236
0-25% quart.	15 (19)	0 (0)	31 (38)	5 (6)	20 (25)	10 (13)	0 (0)	81 (100)
75-100% quart.	31 (39)	3 (4)	21 (26)	3 (4)	6 (8)	18 (22)	0 (0)	82 (100)
year of privatization								
1991 (own 94)	0 (0)	0 (0)	3(100)	0 (0)	0 (0)	0 (0)	0 (0)	3 (100)
1992 (own 94)	0 (0)	0 (0)	56 (70)	0 (0)	14 (18)	8 (10)	0 (0)	78 (100)
1993 (own 94)	2 (2)	2 (3)	42 (50)	7 (8)	9 (11)	21 (25)	0 (0)	83 (100)
1994 (own 95)	1 (1)	3 (4)	34 (49)	0 (0)	7 (10)	21 (30)	4 (6)	70 (100)
1995 (own 96)	3(20)	0 (0)	7 (47)	1 (7)	3 (20)	1 (7)	0 (0)	15 (100)
total	6	5	142	8	33	51	4	249 (100)

owned a high proportion of the shares. The last tendency can explain the difference to the results from Ministry of Economics, which indicated a higher number of majority employee ownership. The proportion of “no majority” is quite high in general and especially in enterprises privatized in 1993 and 1994. This can be explained by the state still keeping a relatively high proportion of shares in especially the larger enterprises.

The Lithuanian industry sample consist of rather large enterprises with an average employment in 1994 of 600 employees. Manager dominated insider majority has the largest average, but the data do not reveal striking differences in the size-structure. There are also no clear tendencies among the industrial branches shown in figure 17.

The survey for construction were not undertaken before July 1995, but the results show many of the same tendencies as in industry, figure 18. Out of 148 enterprises only 5% had no employee ownership in July 1995, and 38% had majority insider ownership, figure 25. However, for construction and trade there are more of the enterprises with insider majority which have management dominance, 26%, compared to employee dominance, 14%. However, this difference from the tendency in industry partly reflect the fact that the numbers for construction and trade are from July 1995. Leaving one more year for the change of ownership from employees to managers. There are no striking tendencies in the variation of ownership when comparing enterprises of different sizes except for a weak tendency for higher management dominance in smaller companies. Comparing construction and trade there are about the same degree of employee ownership. However, managers are stronger in trade with 29% of the sample with insider majority with manager dominance. In construction the percentage is 23%.

The most striking difference between the different owner groups in industrial enterprises is the fact that insider owned and especially employee owned enterprises have a relatively low nominal capital per employee, see figure 17. It is the same tendency although not so strong as in Estonia. State owned, foreign owned and no majority companies have relatively high capital intensity. Turning to construction and trade there is another pattern with insider owned companies around the average of nominal capital per employee. Only management dominated enterprises have a slightly lower nominal capital per employee. Looking at the total assets per employee insider owned companies in all the analyzed sectors follow to a high degree the pattern of the average enterprise. This might indicate that in industry insiders and especially managers have been able to get a majority of the shares at a relatively low price.

Figure 18 Lithuania:Ownershipstructure July 1995, construction and trade - size, capital intensity, time of privatization.

Frequency row percent	Majority					no majority	no answer	total
	state	Outsiders		insiders				
		foreign>dom	domestic>f	managers>e	employees>m			
TOTAL	13 (9)	0 (0)	50 (34)	37 (26)	20 (14)	24 (17)	1 (1)	145 (100)
EMPLOYEES								5
5-19	1 (17)	0 (0)	1 (17)	2 (33)	1 (17)	1 (17)	0 (0)	6 (100)
20-99	3 (6)	0 (0)	20 (37)	16 (30)	7 (13)	8 (15)	0 (0)	54 (100)
100-199	5 (12)	0 (0)	15 (37)	9 (22)	3 (7)	9 (22)	1 (3)	41 (100)
200-	3 (8)	0 (0)	11 (28)	9 (23)	9 23)	6 (15)	0 (0)	39 (100)
Average	151	-	134	173	214	173	383	165
25% quartile	78	-	65	72	73	48	-	68
median	136	-	134	106	172	116	-	124
75% quartile	211	-	183	208	251	206	-	213
BRANCHES								
Construction	9 (12)	0 (0)	26 (34)	18 (23)	11 (14)	13 (17)	0 (0)	77 (100)
Trade	4 (6)	0 (0)	24 (36)	19 (29)	9 (14)	11 (17)	1 (1)	68 (100)
total assets /employee								
average	81609	-	31434	30174	23078	33641	9022	34965
25% quartile	14519	-	14959	10390	14361	15324	-	14362
median	19345	-	22707	16000	19727	24943	-	21924
75% quartile	34549	-	36364	38579	24503	36857	-	35522
0-25% quartile	3 (9)	0 (0)	9 (28)	12 (38)	5 (16)	2 (6)	1 (3)	32 (100)
50-75% quart.	3 (10)	0 (0)	12 (39)	8 (26)	2 (6)	6 (19)	0 (0)	31 (100)
nom. Capital /employee								
average	4682	-	4367	3090	4457	8794	-	4818
25% quartile	1398	-	244	588	505	632	-	492
median	3243	-	1302	1399	1097	2272	-	1622
75% quartile	6206	-	6466	3250	7455	10497	-	5589
0-25% quartile	2 (6)	0 (0)	15 (42)	8 (22)	5 (14)	6 (17)	0 (0)	36 (100)
50-75% quart.	5 (14)	0 (0)	13 (36)	5 (14)	5 (14)	8 (22)	0 (0)	36 (100)
year of privatization								
1991	0 (0)	0 (0)	1 (50)	1 (50)	0 (0)	0 (0)	0 (0)	2 (100)
1992	2 (7)	0 (0)	11 (37)	9 (30)	4 (13)	4 (13)	0 (0)	30 (100)
1993	0 (0)	0 (0)	15 (38)	13 (33)	3 (8)	8 (21)	0 (0)	39 (100)
1994	2 (5)	0 (0)	13 (33)	10 (26)	9 (23)	5 (13)	0 (0)	39 (100)
1995	0 (0)	0 (0)	5 (31)	3 (19)	4 (25)	4 (25)	0 (0)	16 (100)
total	4 (3)	0 (0)	45 (36)	36 (29)	20 (16)	21 (17)	0 (0)	126 (100)

Figure 19 Percent of employees who are not owners - Lithuania.

Shares owned by employees in % of total shares	0%		0-10%		10-30%		30-50% employee-owned		30-50% management owned		50-100% employee-owned		50-100% management owned		Total		
number of employees	total	no own	total	no own	Total	no own	total	no own	total	no own	total	no own	total	no own	total	no own	firms
5 -19 employees	12	100%	0	-	0	-	0	-	0	-	0	-	8	25%	36	83%	3
20-99 employees	584	100%	704	39%	465	18%	209	5%	0	-	289	16%	0	-	3278	62%	47
100-199 employees	1033	100%	3155	44%	2738	31%	1535	21%	493	39%	2210	27%	160	67%	11757	42%	83
200-499 employees	1164	100%	5716	48%	7644	31%	8671	15%	1535	21%	5723	21%	1184	28%	32580	32%	103
> 500 employees	511	100%	13298	39%	40682	19%	39121	13%	5195	32%	24436	12%	10241	8%	138300	21%	113
total **July 1994**	3304	100%	22873	42%	51529	22%	49536	13%	7223	30%	32658	15%	11593	11%	185951	25%	349
5 -19 employees	0	-	31	0%	35	14%	0	-	17	47%	33	3%	36	53%	152	22%	9
20-99 employees	1033	100%	2237	54%	1086	52%	482	21%	479	54%	802	30%	1184	66%	7834	60%	123
100-199 employees	1308	100%	3757	59%	4043	46%	2911	30%	1858	60%	999	28%	1975	55%	17248	53%	120
200-499 employees	1717	100%	7470	50%	12838	39%	5257	26%	3193	53%	2680	35%	2900	55%	36438	44%	120
> 500 employees	1101	100%	25858	42%	17798	27%	23725	21%	6732	33%	14162	28%	5125	49%	95012	33%	87
total **July 1996**	5159	100%	39353	46%	35800	34%	32375	22%	12279	43%	18676	29%	11220	54%	156684	39%	459

Figure 19 show results for the internal distribution in the industrial enterprises in Lithuania. First, it is striking that the number of non-owners in the Lithuanian sample is relatively low compared to the other countries. 75% of the employees in the sample were owners in July 1994. For the management staff the corresponding percentage were as high as 87%. This low percentage of non-owners among the employees suggests that the Lithuanian voucher system has helped employees as a group to overcome the problem of lack of capital. There is also a tendency for the percentage of non owners to be higher in large enterprises than in smaller, the opposite result of the situation in Estonia. Finally, figure 19 show a strong tendency for almost all categories of an increasing share of non-owners. In total the share of owners fall to 61% in July 1996.

The dynamics of ownership is illustrated through the transition matrices shown in the figures 20-23. Figure 20 for industry shows a strong tendency of a fall in the number of enterprises with majority insider ownership and employee dominance. The number is more than halved from July 1994 to July 1995. From July 1994 to July 1996, 40% of the 53 employee owned enterprises have changed to outside domestic ownership, 19% to no majority and 6% to management ownership. A few enterprises have changed to more employee ownership. Most of these changes took place from 1994 to 1995. It is worth noting that there do not seem to be the same tendency in Lithuania as in Estonia with stability for employee ownership in small enterprises. All size groups show a steep fall from 1994 to 1996. Outside ownership has increased both for foreign ownership which increased from 6 to 18 and domestic ownership which increased from 124 to 168. The number of industrial enterprises with insider majority with management dominance are relatively stable. However, only 4 or 33% have stayed in this category for both 1994 and 1996. In total the Lithuanian industrial enterprises show very dynamic changes. About 40% of the enterprises (excluding no answers) have changed category in the period of two years.

Figure 20 Transition matrix Lithuania - industry majority July 1994 by July 1996

Majority July 1994	majority July 1996					no majo-rity	no answer	total
	state	Outsiders		insiders				
		Foreign	domestic	managers	employees			
State	47 (67)	2 (3)	9 (13)	1 (1)	2 (3)	4 (6)	5 (7)	70 (100)
Outsider Foreign>domestic	0 (0)	4 (67)	2 (33)	0 (0)	0 (0)	0 (0)	0 (0)	2 (100)
Outsider Domestic>foreign	0 (0)	8 (6)	98 (79)	4 (3)	2 (2)	2 (2)	10 (8)	124 (100)
Insider Managers>employees	0 (0)	1 (8)	3 (25)	4 (33)	1 (8)	2 (17)	1 (8)	12 (100)
Insider Employees>managers	1 (2)	1 (2)	21 (40)	3 (6)	14 (26)	10 (19)	3 (6)	53 (100)
no majority	0 (0)	2 (3)	32 (53)	1 (2)	3 (5)	16 (27)	6 (10)	60 (100)
no answer	2 (6)	0 (0)	3 (10)	1 (3)	2 (6)	1 (3)	22 (71)	31 (100)
total July 1994	70 (20)	6 (2)	124 (35)	12 (3)	53 (15)	60 (17)	31 (9)	356 (100)
total July 1995	59 (17)	9 (3)	148 (42)	14 (4)	25 (7)	53 (15)	48 (13)	356 (100)
total July 1996	50 (14)	18 (5)	168 (47)	14 (4)	24 (7)	35 (10)	47 (13)	356 (100)

Figure 21 Transition matrix Lithuania - construction and trade majority July 1995 by July 1996

Majority July 1995	majority July 1996					no majority	no answer	total July 1995
	state	outsiders		insiders				
		foreign	domestic	managers	employees			
State	10 (77)	0 (0)	2 (15)	0 (0)	0 (0)	0 (0)	1 (8)	13 (100)
Outsider foreign>domestic	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 -
Outsider Domestic>foreign	0 (0)	2 (4)	43 (86)	2 (4)	0 (0)	0 (0)	3 (6)	50 (100)
Insider Managers>employees	0 (0)	0 (0)	2 (5)	31 (84)	2 (5)	1 (3)	1 (3)	37 (100)
Insider Employees>managers	0 (0)	0 (0)	2 (10)	1 (5)	15 (75)	2 (10)	0 (0)	20 (100)
no majority	0 (0)	0 (0)	6 (25)	2 (8)	1 (4)	15 (63)	0 (0)	24 (100)
no answer	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (100)	1 (100)
total July 1996	10 (7)	2 (1)	55 (38)	36 (25)	18 (12)	18 (12)	6 (4)	145 (100)

For construction and trade 18% of the enterprises have changed category during one year from July 1995 to July 1996, figure 21. Employee dominated insider owned enterprises seem to be more stable than in industry. However, in the same period from 1995 to 1996 employee ownership was also rather stable in industry. In construction and trade the number falls from 20 to 18. Most chances are recorded for no majority enterprises falling from 24 to 18 with most enterprises going to domestic outside ownership. The number of foreign owned enterprises increases from 0 to 2.

The transition matrices in figure 22 and figure 23 show the strong tendency away from employee ownership. For the industrial enterprises in figure 22, only 23 are shifting to more, while 137 are shifting to lower employee ownership and 139 are unchanged - a rate of change of 54%. There is especially a strong change away from majority employee ownership falling from 30 to 8 and enterprises with 30-50% employee ownership falling from 79 to 42. The categories with low employee ownership are increasing. A similar tendency can be observed in figure 23 with enterprises in construction and trade. 7 enterprises have had increasing, 31 falling, and 101 have had constant

Figure 22 Transition matrix Lithuania - industry degrees of employee ownership, July 1994 by July 1996

July 1994	July 1996							no data	total
Employeeshares	0%	0-5%	5-10%	10-30%	30-50%	50-100%	100%		
0%	20 (74)	1 (4)	1 (4)	2 (7)	0 (0)	0 (0)	0 (0)	3 (11)	27 (100)
0-5%	3 (5)	38 (68)	5 (9)	3 (5)	0 (0)	1 (2)	0 (0)	6 (11)	56 (100)
5-10%	0 (0)	19 (68)	3 (11)	2 (7)	0 (0)	0 (0)	0 (0)	4 (14)	28 (100)
10-30%	2 (2)	22 (21)	21 (20)	48 (46)	5 (5)	1 (1)	0 (0)	6 (6)	105 (100)
30-50%	2 (3)	8 (10)	7 (9)	29 (37)	28 (35)	2 (3)	0 (0)	3 (4)	79 (100)
50-100%	1 (3)	2 (7)	3 (10)	8 (28)	9 (31)	2 (7)	0 (0)	4 (14)	29 (100)
100%	0 (0)	0 (0)	0 (0)	1(100)	0 (0)	0 (0)	0 (0)	0 (0)	1 (100)
no data	0 (0)	4 (13)	0 (0)	3 (10)	0 (0)	2 (6)	0 (0)	22 (70)	31 (100)
total July 1994	27 (8)	56 (16)	28 (8)	105 (29)	79 (22)	29 (8)	1 (0)	31 (9)	356 (100)
total July 1995	25 (7)	69 (19)	36 (10)	111 (31)	53 (15)	14 (4)	0 (0)	48 (14)	356 (100)
total July 1996	28 (8)	94 (26)	40 (11)	96 (27)	42 (12)	8 (2)	0 (0)	48 (13)	356 (100)

Figure 23 Transition matrix Lithuania - construction and trade degrees of employee ownership, July 1995 by July 1996

July 1995	July 1996							no data	total
Employeeshares	0%	0-5%	5-10%	10-30%	30-50%	50-100%	100%		
0%	8 (67)	0 (0)	0 (0)	2 (17)	0 (0)	0 (0)	0 (0)	2 (25)	12 (100)
0-5%	0 (0)	20 (87)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	2 (9)	23 (100)
5-10%	0 (0)	4 (27)	10 (67)	0 (0)	0 (0)	1 (7)	0 (0)	0 (0)	15 (100)
10-30%	0 (0)	2 (3)	12 (20)	42 (71)	2 (3)	0 (0)	0 (0)	1 (2)	59 (100)
30-50%	0 (0)	1 (4)	0 (0)	7 (28)	16 (64)	1 (4)	0 (0)	0 (0)	25 (100)
50-100%	0 (0)	0 (0)	0 (0)	3 (30)	2 (20)	5 (50)	0 (0)	0 (0)	10 (100)
100%	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (100)
no data	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1(100)	1 (100)
total July 1996	8 (6)	27	22 (15)	55 (38)	20 (14)	7 (5)	0 (0)	6 (4)	145 (100)

		(18)							

employee ownership in the period July 1995 to July 1996, a rate of change of 27% . For management ownership (not reported) for industrial enterprises there is from July 1994 to July 1995 a tendency to increasing management ownership (56 up, 36 down and 208 constant, a rate of change of 31%) while in the following year from 1995 to 1996 there is stability with 33 up, 31 down and 231 constant, 22% rate of change. The stability from 1995 to 1996 is also seen for management ownership in the sample for construction and trade with 14 up, 13 down and 112 constant, 19% rate of change.

In conclusion for Lithuania it is seen that privatization to a high degree favored broad employee ownership, but in the years following privatization there has been a strong and fast and dynamic process toward both management and especially outside domestic ownership. This tendency is covering both industry, construction and trade and all sizes of companies.

VII Conclusions and Implications

By using new and often rich panel data for large samples of firms in each of the Baltic countries we provide some of the most reliable information on the nature and dynamics of ownership structures for the Baltic countries to date (and for any transition economies). By international standards in the west, one of the most significant differences that emerges is that a remarkable degree of insider ownership has been introduced in a very short period. Thus in January 1995 it is estimated that in 30%-60% of the private companies in the three countries insiders own at least 50% of the firm. The percentage is highest in Latvia and apparently lowest in Lithuania, but in Lithuania the number are relatively high in large companies and insiders own shares in nearly all companies including those which do not have a single group owning the majority. In the industrial enterprises in Lithuania around 75% of the employees own shares. In Estonia, we find an incidence of employee ownership, with one in four employees owning shares in private firms in 1995. By contrast, the total value of US ESOPs is estimated to be less than 3% of the market value of quoted companies (Blasi and Kruse, 1991:12) while in Japan the comparable figure is less than 1% (reported by Jones and Kato, 1995). Moreover in both the US and Japan, the western countries which appear to have the largest amounts of employee ownership, the spread of employee ownership has taken place gradually, over at least fifteen years.

Another finding that emerges is that there are major differences in ownership patterns between countries. In particular, foreign ownership is very important in Estonia while minor important in Latvia and of negligible importance in Lithuania. In Lithuania, nearly all enterprises have at least an element of employee ownership, the broad group of employees have a quite strong position versus management, and there are fewer non-owners among the employees than in Estonia and Latvia. In Lithuanian industry the employees dominate managers in relation to ownership. In Estonia and Latvia the two types of ownership have about the same weight when measured in January 1995. However, in Latvia there are a higher proportion of enterprises with majority insider ownership than in Lithuania. In Lithuania a relatively high proportion of enterprises are categorized as "no majority", no single group - state, outsiders or insiders - have the majority of the shares. This is mainly because the state has kept a substantial minority stake in many enterprises. In both Estonia and Latvia there is a considerable concentration of shares at a single group of owners leaving only 2-6% of the private enterprises in the category of "no majority". Also, whereas insider ownership is strongest in Estonia and Latvia in agriculture and weakest in services and transport, and in Estonia trade is also quite weak, while in Lithuania we find that insider ownership has a strong presence in trading firms.

In all sectors in Estonia and in Latvia and in construction and trade in Lithuania there is a tendency to a higher proportion of enterprises with insider majority in small enterprises. This is especially the case for management owned enterprises (family-enterprises). In Estonia and Latvia the remaining state owned enterprises in the samples are relatively large. This is not the case in Lithuania.

In Estonia and Latvia there is a strong tendency for a relatively low capital intensity in insider owned enterprises. This is especially the case when measured as nominal capital per employee, but this is also the tendency for total assets per employee. Here is a significant difference from the situation in Lithuania. Total assets per employee is about the same in insider as in outsider owned companies. Nominal capital per employee in employee owned enterprises in industry there is lower than for other ownership types, but the tendency is much weaker than it was the case in Estonia and Latvia. It is probably the higher level of support for employees in Lithuania which explains this difference. In the other countries insiders including the broad group of employees could only afford a take-over when the price reflected in the nominal capital per employee was relatively low.

Most of the results referred earlier covers the situation on January 1995 or earlier. However, for all three countries we have also ownership data for the period two years later. This allows us to analyze the dynamics of ownership. In Estonia and Latvia the data show a quite fast change in ownership. The dynamics are not so profound in Latvia, however, here the survey covers only 167 enterprises and they were asked about historic data, implying a bias in the direction of stability. Thus, our conclusion is that there has probably been a rather dynamic change also in Latvia. At the same time it is striking that the changes go in the same direction in all three countries. First, there is a strong change away from employee dominated ownership. Most of them change to management dominated insider majority, but also many enterprises change to domestic outside ownership. There is a tendency, most pronounced in Estonia, especially for change away from employee ownership in large enterprises. Also the group of enterprises with “no majority” are falling in all three countries.

The tendency away from employee ownership can also be found on the personal level in the enterprises. The number of non-owning employees are increasing in all three countries, except for small enterprises in Estonia. This confirms the tendency for higher stability of employee ownership in small enterprises.

In attempting to account for these patterns of and changes in ownership (both across and within countries), at this early stage of data collection, our work is necessarily preliminary. However, when considering differences across countries, it is important to recognize that in key respects - including level of development, size of the economy and geography - the three Baltic Countries began with very similar conditions. Subsequently, despite these initial similarities, profound differences in ownership patterns have emerged. Undoubtedly some of these differences reflect different policies - for example, in Estonia, the greater incidence of foreign ownership and of firms with dominant owners, is consistent with policy initiatives in those directions. At the same time it is also most unlikely that different policies will account for all of the variation in patterns across countries. It is more likely that the cross country differences suggest that ownership structures are profoundly affected by a host of other factors, many of which operate primarily at the societal level. Thus, undoubtedly the high level of foreign ownership in Estonia also reflects geographical and linguistic proximity to Finland. By contrast the stress on non-managerial ownership in Lithuania reflects deeper egalitarian values as well as an ability, unlike in Latvia and Lithuania, to devise policies that did not have to respond to nationalist concerns.

Equally the heterogeneity of patterns of and changes in ownership points to the potentially important role played by market conditions that influence firms differently as well as other firm-specific factors, such as differences in the informal distribution of power. While pinpointing these specific factors will be the subject of future work, we would expect that economic factors will play a large role in accounting for variation in ownership patterns across and within firms.[12]

One implication of these findings is to suggest, as some have argued (e.g. Nuti, 1996), that in focusing only on simple measures of ownership, potentially important forces behind enterprise restructuring (such as the distribution of ownership, the percentage of employees that own shares, and interactions with participation in decision-making) are being ignored. Indeed the failure to include measures of these forces may be part of the reason why many empirical studies ostensibly have failed to uncover strong effects of different forms of ownership on economic outcomes (e.g. Earle et al, 1995).

Another implication is that although there is a clear tendency away from employee ownership there is still a rather high proportion of these enterprises in all three Baltic economies and they are likely to be a feature of the economic landscape in many transition economies for a considerable time period. In turn, so that the full potential of employee ownership might be realized, this suggests the need for further studies and ultimately the devising of policies that are appropriate for the special circumstances of the transition economies. But even now it is clear that our findings imply that the new structures of ownership will not emerge uniformly and that simply by " letting the planners move out and markets move in" usually has not produced optimal ownership structures nor is it likely to do so in the immediate future. It would appear that there is a need for technical assistance to guide the evolution of institutions and that ways of developing packages of institutional reforms need to be considered. There is an urgent need for on-going work to monitor the evolution of new forms of ownership as well as (when economic data are available) to examine more rigorously the determinants of these structures and the possible consequences of these different forms of ownership for economic performance.

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Endnotes

1. These include Blasi et al. (1997) and Earle et al. (1995) for Russia, Murrell and Korsun (1994) for Mongolia and Jones (1994) for Bulgaria. For overviews see World Bank, 1996 and EBRD, 1996)

2. These distinction are often relevant both in relation to the development in the ownership structure and also in later analyses about economic performance.

3. The data collection exercise on ownership is part of a larger and on-going process. A major focus is to examine links between ownership patterns and economic performance.

4. Note that a number of complementary case studies also have been undertaken. For discussion of these cases see Mygind (ed., 1996).

5. Note, that the survey methods used in Lithuania means that the distribution of ownership cannot be taken as representative for included sectors or the whole economy.

6. For more general discussions of developments in Estonia during early transition see World Bank (1993), Purju (1996). More general discussions for the Baltics include Bradshaw et al. (1994), Sutela (1994), Reardon (1996) and Frydman et al. (1993).

7. The new cooperatives are best known for the case of Russia. See and Bim et al. (1994).

8. Even after the sample is "normalized", so that the different sectors and size are given their correct weight in the overall population, while the percentage of foreign owned capital falls to 37%, this still shows the strong influence of foreign ownership in Estonian privatization. However, if calculations are made according to the number of firms, then foreign ownership is found to play a smaller role. This is because the nominal capital is much higher in foreign owned companies.

9. A t test on the differences in means for the degree of ownership held by “other employees” in 1990 or 1991 compared to 1992 or 1993 or 1994, is always significant at the 1% level.

10. For more general discussions of developments in Latvia during early transition see Davies (1996), Shteinbuka (1994) and World Bank (1993).

11. More general discussions of developments in Lithuania include World Bank (1993) and Cicinskas (1994).

12. Work on the incidence of employee ownership is quite limited. For example, see Jones and Kato (1993) and Jones and Pliskin (1997).