

CORPORATE GOVERNANCE CYCLES DURING TRANSITION: A COMPARISON OF RUSSIA AND SLOVENIA+

Niels Mygind*, Natalia Demina**, Aleksandra Gregoric***, Rostislav Kapelyushnikov**

Abstract

The governance cycle – here defined as the changes in the identity of the dominant owner and ownership concentration - is marked by the key phases of firm life-cycle, including start-up, growth, an eventual restructuring or exit stage. Privatized firms in transition countries, however, experience somehow specific cycles, which reflect the characteristics of the economic and institutional environment in transition: i) the type of privatization that initially often introduced a high proportion of employee ownership (like in Russia and Slovenia); ii) strong pressures for restructuring and ownership changes; iii) limited possibility for external finance due to the embryonic development of the financial system. The hypotheses on the development of the governance cycles in transition are tested upon a sample of Russian enterprise data for 1995-2003 and Slovenian data covering 1998-2003. In spite of the differences in institutional development concerning privatization and development of corporate governance institutions, we find that governance cycles are broadly similar in the two countries. Employee ownership is rapidly fading in both countries. While change to manager and non-financial domestic outsider ownership is typical for Russia, this is not the case in Slovenia. Instead, change to financial outsiders in the form of Privatization Investment Funds is more frequent. Foreign ownership, which is especially rare in Russia, is quite stable. The ownership diversification to employees and diversified external owners during privatization did not fit well to the low development of institutions. As expected, we observe a subsequent concentration of ownership on managers, external domestic and foreign owners in both countries.

Keywords: corporate governance, privatization, ownership, transition economies, Russia and Slovenia

+ This research is supported by a grant to the Institute for Southeast Europe, Slovenia; REB-Monitoring (Russian Economic Barometer), Russia; Center for East European Studies, Denmark, from USAID's SEGIR EP Contract No.220/001.0-03-354, reference Russia task order no. 803, Improvement of Economic Policy Through Think Tank Partnership Project, administered by IRJS. The findings expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development.

*Niels Mygind, Center for East European Studies, Copenhagen Business School, Howitzvej 60.2, 2000 Frederiksberg, Denmark, nm.cees@cbs.dk

**Natalia Demina and Rostislav Kapelyushnikov, REB-Monitoring (Russian Economic Barometer), Moscow, Russia.

*** Aleksandra Gregoric, Institute for Southeast Europe, Faculty of Economics, University of Ljubljana, Slovenia.

Introduction

To the extent that there is a possibility for the ownership structure to adjust, any changes in enterprise characteristics over its life-cycle and in the surrounding environment lead to changes in the firm's ownership structure (Jones and Mygind, 2004). The classic entrepreneurial company starts up as a small entity with relatively low capital inputs; the information asymmetry makes the transaction costs of writing and controlling the contracts high. Most of the capital is thus provided by the entrepreneur and by debt based on personal loans e.g. with collateral in the family-house. While firm grows (initial growth stage), the owner needs more external financing; at the same she starts building reputation and her access to outside financing improves. The owner-entrepreneur may get new capital by issuing extra shares to new owners, normally from a rather closed circle of stakeholders (e.g. firm's top-employees, local investors, close

business partners). At a more mature growth stage, when the firm has developed its potential, it may attract a strategic investor or decide to go public. Going public is often related to the process of ownership diversification. Hence, firm growth often leads to a lower degree of ownership concentration. Sooner or later many companies run into a stage of crisis. Diverse internal and external factors, including changes in technology and/or markets or the institutional setting, force the company to adjust to the new conditions and undertake restructuring. New external capital and expertise are needed and banks, venture capital and strategic investors may play an important role. As an alternative to firm closure, insiders may make a defensive takeover to protect their jobs and their specific human capital. The crisis may also result in an exit of the company and liquidation of the assets, which is then taken over by new investors for other activities.

The second set of elements determining the ownership dynamics lie in countries' economic and cultural environments. For example, MBOs are more frequent in business cycle troughs because of low pricing of assets during dips (Wright et al., 2001), while boom periods on the stock market create incentives for IPOs (going public). Defensive employee takeovers should be more frequent in recessions because of higher threats of closure and lower alternative employment possibilities (Ben-Ner 1988). The degree of legal protection of minority owners, the liquidity and development of the stock markets also have strong impact on the diversification of ownership (La Porta et al. 1999, Becht et al. 2002). On the other hand, proper bankruptcy legislation enhances the possibility of financing growth through bank-loans. Historical traditions, cultural values, norms and preferences of the stakeholders, can also explain important differences in the governance structure between countries. Given the specifics of the economical and institutional development in transition countries, we expect the firm governance cycle in transition to be different than the governance cycle in market economics. The enterprises experience a transition in ownership structure, a transition in relation to the changing institutions in the environment, and a transition of the market in relation to prices, costs, and competitiveness. All these somehow shape a special governance cycle and determine a specific evolution of ownership and control in the post-privatization period. In this regard, our paper provides important evidence on the applicability of the governance cycle theory in transition. We observe that a switch away from the dominance by employee owners characterizes both countries, namely Russia and Slovenia. Notwithstanding the similarities in the initial ownership allocation and decreases in the employee ownership, the differences in the post-privatization ownership adjustments in Russia and Slovenia can be explained by the differences in their macroeconomic, institutional and cultural environments.

The paper is structured as follows. The specifics of transition and the predictions on the evolution of the governance cycle in transition countries are outlined in Section 2. Section 3 draws the differences in the privatization and institutional development in Russia and Slovenia. The data, models and the results of the empirical analysis of the ownership changes and their determinants are presented in Section 4.

2. Predictions on the evolution of the governance cycle in transition countries

The final section concludes. There are special conditions that need to be taken into account when explaining the governance cycle in transition. The privatization process itself initially created specific conditions for the development of private ownership. Different methods favoured different types of owners (employees, managers, domestic or foreign outside

owners) and created specific ownership structures that would not have developed otherwise. The path-dependency may create a learning process and institutional development, which may lead to specific paths for subsequent developments in the governance structure (Roe, 1990). It is, however, expected that post-privatization adjustments will tend to bring the ownership structure back to a "normal" equilibrium. Moreover, nearly all state owned enterprises were initially confronted with a strong pressure for restructuring of production methods, organizational structure and markets and required new capital, skills and networks. In the developed market economies all these often leads to a change in ownership bringing new investors with the necessary resources for restructuring. In transition, privatization itself might deliver the best-fit investor for restructuring at the very beginning. Alternatively, the 'right' owners might enter later on through takeovers or block trades. Last but not least, the lack of a proper institutional environment in transition delays the ownership adjustments and, in the early transition, favours special types of owners. For example, given the lack of outside investor protection (credible auditing procedures, transparent stock markets) insiders have an advantage in relation to outside owners (Mygind, 2001). In many countries (including Slovenia and Russia), privatization introduced a high degree of employee ownership. However, the lack of governance skills, lack of capital and excessive risk-concentration may lead to a rapid sale to other investors; this tendency is particularly strong in the firms with high number of employees, high capital intensity, and low wages. On the other hand, the employee desire to preserve employment (Blanchard and Aghion, 1996), a satisfactory level of employee governance skills acquired prior to transition or a high degree of specific human capital might delay this change. With underdeveloped institutions, low degree of outside investor protection, high asymmetry of company information and lack of markets for company shares, managers as acquirers of employee shares have a strong advantage compared to outside investors (Kalmi, 2002). We therefore expect that most of the employee shares end up in the hands of managers, at least in the early stages of transition.

Voucher-privatization on the other hand provides for a high degree diversified external ownership at the initial stage of transition. Most of these initial small external shareholders are under strong wealth constraints and, due to underdeveloped institutional environment, enjoy no legal protection. Therefore, we initially expect to observe a concentration of ownership in the hands of managers and small groups of external investors, who have accumulated wealth in the early transition. Upon improvements in the institutional environment and external investor protection, the managers would probably sell some of their shares to outside owners, in particular in the companies with a strong need for extra capital. Given the low size and limited liquidity of the capital

markets, the tendency probably goes towards a higher concentration of ownership in the hands of outside blockholders rather than towards a diversification of ownership among many small external investors. Foreign ownership, on the other hand, results both from new green-field entities or the takeovers in the privatization or during the post-privatization adjustment process. It is probably rather stable since these enterprises have reached their final stage of development in the ownership cycle at least within the relatively short time-horizon of our analysis (Jones and Mygind, 2004).¹ Cross national differences, institutional differences related to the speed and form of transition make both the starting point and the speed of change different across the transitional countries; all these makes the tendencies ambiguous and requires further empirical investigation. For example, the dominant form of privatization determines the size of the employee, managerial or other types of ownership at the beginning of transition (Mygind, 2001). Specific privatization rules and other restrictions (e.g. restrictions on share transfers) may reduce the flexibility of ownership structure after privatization. In addition to privatization, general economic and institutional environment and political stability determine the level of foreign investments (Bevan et al., 2004). The speed of ownership change also depends on the transition of institutions, in particular the development of the banking sector (debt financing), the development of capital markets and shareholder protection. The governance cycle can be further shaped by countries' economic development, the degree and duration of the initial fall in the production and possible later reversals. For example, the steep fall in population income may put a strong pressure on liquidity-strained and other low-income employees to sell their shares, leading to higher concentration. On the other hand, high risk of unemployment may increase the defensive motive of the employees to keep their shares in order to preserve their jobs and secure their specific human capital. Finally, cultural factors and historical experience of management style, employee participation in ownership and control, and the attitudes of risk-taking affect the sustainability of employee ownership and the development of a broader shareholder-culture with diversified ownership. Specific developments in the Russian and Slovenian economic and institutional environment are presented in the next section (see also Table a-3 in the Appendix).

3. Privatization and Governance Institutions in Russia and Slovenia

The background for Russian privatization is represented by generations of centralized planning

¹ It is necessary to point out that this paper analyses privatized firms in transition. A normal governance cycle is, on the other hand, expected for new start-up firms, namely either manager→outside concentrated (domestic→foreign) or foreign concentrated (stable).

with limited entrepreneurial scope. Firms were characterized by paternalistic management style and a low degree of employee participation in firm governance. Though the first wave of market-oriented reforms began under Gorbachyov's Perestrojka, privatization started only after the dissolution of the Soviet Union in 1991. Privatization of small entities was done quite fast, mostly upon auctions and tenders in 1992 and 1993. Mass privatization, directed toward medium and large enterprises, started in the fall 1992. Vouchers distributed to the whole population could be used for buying shares in the enterprises. The companies could choose between different models: 1) 25 % non-voting shares were offered to employees for free, with the option to buy a further 10 % of ordinary shares at a 30 % discount of the book value of January 1992, which was much lower than the market value by the time of privatization. Managers were offered to purchase 5 % of ordinary shares at nominal price; 2) Employees could for cash or vouchers buy 51 % of ordinary shares at 1.7 times the 1992 book value. In order to be implemented, at least 2/3 of the employee should support this model; 3) Managers could buy 30 % of voting shares, while insiders could purchase additional 20% at 30 % discount. Given the rapid inflation in Russia at that time, the prices to pay in all three options were so low that the mass privatization really was a give-away (Hare and Muravyev, 2002). The privatization was very rapid. Over 15,000 of 24,000 medium and large enterprises were privatized by the end of 1994. Over 70 % of the firms offered for privatization chose to privatize under option 2, while 21% of firms chose the first option. In combination with the paternalistic ownership style, these choices only lead to further consolidation of managers' positions (Hare and Muravyev, 2002). Foreign involvement was negligible; the role of investment funds (collecting shares from small shareholders) remained limited. Many of the large jewels of Russian industry like the metal company: Norilsk Nickel and the oil-companies: Sibneft, Sidanco and some shares in Lukoil were privatized through the "loans for shares" or "mortgage" privatization in 1995. This involved direct, non-competitive sales of blocks of shares at low prices to the leading financial-industrial groups, which at the same time administered the process (IET, 1997). In the following years case-by-case privatizations of a few large enterprises and leftover state holdings were performed with increasing speed and transparency.

Due to lack of legislation, regulation and enforcement at the beginning of the 90-ties, few managers and their allies succeeded in appropriating rights from employees and diversified external owners and to accumulate large fortunes through widespread tunneling. Despite the development of the legislation and the institutions in the mid 1990es, its enforcement remains relatively weak due to widespread corruption and lack of trained officials (Puffer and McCarthy, 2003). Russian financial sector faces several problems in regard to its functioning and 'efficiently'

channeling the capital to the enterprises. The banking sector remains underdeveloped; except from the largest state-controlled bank, most of banks are small and undercapitalized. The Russian stock market has never played an important role in providing enterprises with financial resources. The number of listed equities is about 250; few very large individual companies contribute most of the capital market capitalization and liquidity (Buck, 2003). However, large companies have been improving their corporate governance systems and introducing higher standard of disclosure, accountability, and protection of minority owners since 2001; both regulation and enforcement of governance rules have been improving ever since (Puffer and McCarthy, 2003). However, active foreign investor participation in firm governance and control is still rather rare.

Slovenia's economic development has been quite different from the situation in Russia due to relatively high level of firm productivity and competitiveness since the 1960s and USD wages that were 8-15 times higher than those of the Russian level (see Table a-2 in the Appendix). Prior to transition firms were owned by the society as a whole (social capital) and formally managed by workers (for more, Prasnikar and Svejnar, 1991). The Privatization law (1992) provided for the compulsory free transfer of shares to different State-controlled Funds (10 % to the Restitution Fund, 10 % to the Capital Fund for reserve and pension purposes) and 20 % to the Development Fund (for further sale to the Privatization Investment Funds)² and, the distribution of 20 % of the shares to insiders in exchange for their vouchers. Companies could then freely decide on the allocation of the remaining 40 %; they could either privatize internally and sell them to insiders according to a special scheme or privatize externally through public offering of shares, tenders or auctions. During the six years, more than 1,300 companies (96.2%) successfully completed the ownership transformation; more than 90% of these firms chose the internal distribution and internal buyout as the main privatization method. Internal owners ended up holding about 40 % of the social capital subject to privatization. Internal ownership prevailed as dominant mostly in smaller, labor-intensive firms (Privatization Agency report 1999).

Slovenian corporate legislation is on level with the standards in most EU-countries, and the implementation is also about to reach this level (See Table a-2). The stock exchange in Ljubljana opened already in 1990, but capitalization and trading started only with the first listings of the privatized firms in 1996. Since then market capitalization of shares grew quite fast to reach 23% of GDP in 2002, one of the highest in Eastern Europe (Caviglia et al 2002).

² For the purpose of mass privatization, 2,000,900 ownership certificates or vouchers (at a value of 49% of estimated value of social capital) were issued. Certificates were not transferable and could be used for acquiring shares in internal distribution (buy-out), public offering or for the exchange with shares of Privatization Investment Funds.

However, the trading on the Stock Exchange is thin and concentrated among few shares of the largest firms. Firms mostly rely on inside funds (retained earnings or depreciation) to finance their investments, while bank financing represents the most important outside source of financing, particularly in the last years. Commercial banks prior to transition were strongly dominated by the largest companies and provided funds to the latter regardless sound lending principles; consequently, they ended up with a large proportion of bad loans in their portfolios. The 6-year rehabilitation process of the banks started with the establishment of the bank-restructuring agency. Banks came under state governance, their portfolios were cleaned and privatization process initiated. Bad bank loans dropped from a level of 22 % in 1994 to 10 % of loans in 2002 (EBRD 2003). However, the privatization of banks was relatively slow with one of the largest banks privatized as late as 2002 to a Belgium banking group. After this, most of the banking sector was privatized and 16 % of the total assets in Slovenian banks were in banks with majority foreign ownership. The size of bank intermediations has been increasing steadily since 1993 to reach a level of 41 % of GDP in 2002. Although this is lower than the EU average, Slovenia is on a quite high level measured by East European standards (Cufer et al., 2002). How has the described cultural, economic and institutional development influenced the governance cycle in Slovenia and Russia? As observed, privatization models in both countries initially introduced a high degree of employee ownership. This raises a second question: is the next step going to be managerial ownership, as predicted in the theoretical part? Can we assume that the Slovenian institutional setting reached such a level or minority investor protection that it can open up for an increased weight on diversified share-ownership? The empirical analysis of the latter and other hypotheses on the evolution of the governance cycle in Russia and Slovenia is presented in the next section.

4. Data and empirical analysis

The empirical analysis is based upon data gathered through special ownership surveys. The Russian panel has been collected by a team connected to The Russian Economic Barometer (REB), a Moscow-based independent research centre founded in 1991. They address regular business surveys to about 700 entities from different industries and regions of Russia, which are in terms of size, industries and methods of privatization representative for the population of medium- and large-size industrial enterprises. The usual response rate is close to 30 %. In Slovenia, the target group consisted of a representative sample of 623 Slovenian non-financial joint-stock companies (all companies) with shares registered in the Shareholder Register of the Central Securities Corporation. A total of 150 companies returned filled questionnaires giving a response rate of

24 %. They employed on average 500 employees and generated around 50 million Euros of yearly income. Additional data on the identity and ownership stakes of the largest shareholders were obtained from the Official Shareholders' Register.

Our empirical analysis concerns the evolution of the governance cycle in transition. Our main hypotheses are as follows. The paternalistic leadership style, strong managers' position, low experience and thought liquidity constraints for employees, low transparency and lack of proper institutions make the change from employee to manager ownership quite likely in Russia. Given the low price of shares, the underdeveloped financial system and limited access to bank loans for financing buy-outs does not represent an important barrier to these changes. The situation is somehow different in Slovenia. Despite the higher development of the financial system and access to bank loans, the value of firm shares is relatively high due to high competitiveness and performance of Slovenian firms; employees are used to participate in ownership, face lower wealth constraints, have better understanding of the value of their shares and are not easy to manipulate. All this and somehow better institutional environment make it quite difficult for managers to cover deals and appropriate employee shares at extremely low prices. Instead of buying out their firms, it is more realistic for managers to hold control by making alliances with the employees (for example, through Workers' Associations). Hence, Slovenian employee ownership might be more stable than predicted. The next step in the governance cycle towards external, although concentrated owners, requires a more sophisticated development of the governance institutions that enable owner control over management. Such development is expected to be slow in Russia. The exceptions here are the large companies, where manager need alliances with strong external groups to get dominant positions. In Slovenia, the State-controlled funds and Privatization Investment Funds provide the external owners with a quite strong position already from the time of privatization. Quicker developments of the institutional environment and more advanced financial sector are expected to encourage a relatively fast adjustment to external ownership. Finally, a fast transition process and development of the institutional system improve the business climate and attract foreign investors and therefore, facilitate a faster change in the direction of foreign ownership. We do not expect to see this development for the Russian enterprises in the observed period. Slovenia offers foreign investors better conditions, but a move to more foreign ownership may to some degree be blocked by the 'rent-seeking' behaviour of Slovenian funds (for more, see Gregoric, 2003). We moreover expect a strong tendency in the direction of ownership concentration in Russia, since the latter should provide the outside owners with a mechanism to control the managers in a relatively weak institutional environment. These tendencies may not be so strong

in Slovenia. We provide a first description of the ownership dynamics by relying on transition matrices, which classify the firms according to the dominant group owners (that is the group of owners that aggregately holds more capital than any other group), at the beginning and at the end of the period under observation. For the purpose of our empirical analysis, owners are divided in six groups: managers, employees, non-financial outsiders, financial outsiders, foreigners and the State. A closer examination of the ownership changes relies on the analysis of the determinants that influence the odds for a certain type of ownership or for a certain ownership change. In estimating these, we rely on multinomial logit models with two proxies of ownership structure. The first proxy is used to estimate the determinants of ownership at the beginning and at the end of the period under observation. This variable has three categories corresponding to managers, employees and outsiders dominant ownership (for Slovenia the firms with managers and employees dominance are combined into one category). To analyse the determinants of ownership changes, we use a six-outcome ownership variable which includes categories corresponding to continuing managers, employees and outsiders dominance and to changes in dominant shareholding from employees to managers, from employees to outsiders and from outsiders to insiders (for Russia only). When explaining the ownership, we use several explanatory variables as suggested by our theoretical predictions and data availability. For Slovenia, we measure firm size by the NUMBER OF EMPLOYEES, the labour productivity (as measure for performance) by TOTAL SALES per EMPLOYEE, while capital intensity is approximated by FIXED ASSETS per EMPLOYEE. The effect of wages is measured by AVERAGE LABOUR COSTS (cost per employees). Due to limitation of Russian data we use a specific proxies of performance for Russian firms. These include two variables: FINANCIAL OUTCOME (a binary variable equal to 1 if a firm declares profits and 0 otherwise) and ORDER BOOK LEVEL (a number of orders as a percentage of firm's normal level of orders). We measure size of a firm as a TOTAL NUMBER OF EMPLOYEES. To account for high wage inflation in 1997-2003 in Russia, we use the DEVIATION OF WAGE FROM SAMPLE YEAR'S AVERAGE as measure of wage. For both countries we use sets of time and industry dummies to control for time and industry specific effects.

The main hypotheses based on our discussions (see Section 2) are summarized in Table 1 below.

The ownership dynamics of the Russian sample in the period 1995-2003 is shown in the Tables a-3 and a-4 in the Appendix.³ Table a-3 shows the dynamics for each two years period for the companies who

³ A reason for the relatively low number of observations in the Russian sample is high monthly rotation among the REB respondent enterprises. As a result, only one third of usual monthly numbers (about 150 enterprises) responded in two consecutive rounds.

responded in two consecutive rounds. As shown in column Total (1995) of the transition matrix for 1995-1997, 26 out of 41 firms were employee dominated in 1995 - the group of employees had a higher stake than

the other mentioned owner-groups. Non-financial domestic outsiders dominated 7 firms, while 4 firms were in domination of financial outsiders.

Table 1. Hypotheses on the determinants of ownership change – firm level.

<p>From employee ownership</p> <p>+ Size High number of employees => free rider problem, high costs of decision making. Falling number of employees => some owners become outsiders, often sell off in the process.</p> <p>+ Capital intensity High capital intensity => high capital needs per employee, capital constraint, weak financial system => low employee ownership. Increasing capital intensity => need shift of owners</p> <p>- Wage Low wage => liquidity constraint for employees, more sell off Indicator of low quality, low human capital => not fit for employee ownership Falling wage, increased constraint => sell off</p> <p>? Performance: indicators: profit-margin, ROA, ROE High profitability => high incentive to sell and get capital But very low profitability, crisis, also push for new owners Falling profitability => pressure for sell out</p>	<p>To manager ownership</p> <p>Capital constraint => not too large and capital intensive. Information advantage => managers' opportunity to take over best performing firms.</p> <p>- Size - Capital intensity ? Wage + Performance</p> <p>To outsider ownership</p> <p>Capital advantages => size and capital intensity no constraint. Employee owners leaving the firm can increase the formal number of outside owners. Information disadvantage. + Size + Capital intensity ? Wage - Performance</p>
---	---

Only 13 or 50% (see the diagonal) of the employee-dominated firms in 1995 were still dominated by employees in 1997. 2 firms have changed to manager ownership, 5 to non-financial outsiders, 3 to financial outsiders, 2 to foreign and 1 back to dominant state ownership. The table clearly shows that the outsider domination is much more stable than the insider domination; only one out of the 11 domestic outsider dominated firms has changed and, in all cases, it was to foreign dominant ownership. The changes from 1997 to 1999 are quite similar to the first matrix. Again, the tendency away from ownership dominated by employees is very strong, and the most frequent change is to non-financial outsiders. Dominant employee ownership continues to be reduced by around 50% per period also in the two latest matrices. Now the changes to management ownership are on level with the change to non-financial outsiders. The highest number behind the category non-financial outsiders covers domestic firms. Managers from the target company may dominate some of these firms; the reported numbers for management domination may thus be underestimated. The changes for companies that have been observed for at least two periods are summarized in Table a-4. More than half of all the companies are changing; employee-dominated firms change most frequently, mostly towards non-financial outsiders and managers. The change for financial outsiders is also quite high, but spread on many different directions, while less frequent is the change for managers and non-financial outsiders. The single foreign company represented is too thin evidence for any conclusion on the stability for this group, but it is a strong indication of the extremely low importance of foreign ownership in Russia.

The Table a-5 includes all the enterprises for the period 1999-2003, for which we obtained data on ownership concentration for at least two points in time. Not surprisingly, employee-dominated firms have the lowest ownership concentration, while financial outsiders, foreigners and state have the highest. The average stake of the single largest owner has increased from 31 % to 38 % over the observed period; this increase is the strongest in the enterprises taken over by managers from employees and from non-financial outsiders – these two changes are also the most frequent in this table. Some of the enterprises staying in the same category (frequencies reported on the diagonal) - management, and the two groups of domestic outsiders – also have quite steeply increasing concentration. A fall in the ownership concentration accompanies the changes from State to non-financial outsiders or from non-financial to financial outsiders.

When comparing the transition matrices in table a-4 and a-7 we observe some striking similarities between the ownership dynamics in Russia and Slovenia; employee ownership dominates in the initial period and decreases very rapidly afterwards, while there is nearly no supply of new employee-dominated firms. Foreign ownership is stable but quite rare, although rapidly increasing in Slovenia. While the employee ownership changes most frequently, the frequency of changes in firms dominated by non-financial outsiders is the lowest in both countries. However, there are also important differences between the two countries. With only 2 cases in the start and 4 in the end, management dominant ownership is surprisingly rare in Slovenian medium and large enterprises. This level might be slightly underestimated since, similarly to Russia, some of the domestic companies may be actually owned by managers. Moreover, the strong bargaining position of

Slovenian employees and their 'hidden' support to managers makes the alliance between managers and employees (against outside raiders) more likely and hence, decreases the need for managers' acquisition of employee shares. At any rate, employee domination rarely shifts to dominant manager ownership, but rather directly to financial or non-financial outsiders. Financial outsider ownership (in case of Privatization Investment Funds in particular) is much more stable than in Russia.

Table a-8 covers both the owner identity and the concentration on ownership of the first largest single owner over the period 1998-2001. The average size of the single largest owner has increased from 32% to 39% and is quite similar to Russia. Employee-dominated enterprises have the lowest concentration, while foreign and state owned has the highest concentration. The enterprises remaining insider owned have a stable concentration, while enterprises continuing with outsider ownership have growing concentration. The largest increases in concentration follow the changes from the employees to foreigners or/and non-financial outsiders.

The logit-analysis of the determinant of the probability for different ownership types in Russia is reported in Table a-6 in the Appendix. The analysis is done both for the initial and last year of observation as well as for the determinants of ownership changes over the period. In the static analysis on top of table a-6, bad financial outcome leads to higher probability for outsider versus employee ownership both at the start and end year (although with weakening significance). However, higher order book level decreases the probability for employee ownership at least in the start year. Wage level and number of employees have only a quite weak influence. The number of employees comes out quite strongly in the dynamic analysis in the bottom part of table a-6. The results are quite robust to whether the level and change variables are separated or combined and to the inclusion of control variables. The probability for a change from employees to outsiders compared to continuing employee ownership increases with higher number of employees. This is consistent with our predictions that higher size makes employee ownership less sustainable. Likewise in line with our predictions is the result that higher wage and wage growth result in lower odds for the change from employee to outsiders compared to continuing employee ownership. However, for shifts from employee to manager we do not find such significant results although the signs point in the same direction.

Table a-9 shows the results of the logit-analysis on the determinants of ownership structure for Slovenia. Here we only distinguish between the two large groups of employees and outsiders. The very few manager and state dominated firms are excluded from the analysis. The analysis for the start year 1998 show no significant results while the end year 2002 analysis confirms the theoretical prediction that a high number of employees has a negative effect on the odds for

employee in relation to outsider dominated ownership. This is also confirmed by the dynamic analysis in table a-9 (at the bottom) showing that higher number of employees increases the probability for a change from employees to outsiders compared to continuing employee ownership. The positive relation between high labour costs and odds for employee ownership for the 2002 analysis is also in line with our predictions. However, this result is weakened by the positive relation between wage level and the odds for change away from employees in the dynamic analysis in the bottom part of table a-9. It should be noted that this results is at the 10 % level and not robust for other specifications of the model.

The results on high capital-intensity increasing the probability of employee ownership is quite surprising. It is only significant on the 10 % level in the static analysis, but in the dynamic analysis it is strongly significant on the 1 % level both in the first and the third column of the bottom part of table a-9 and quite robust for variations in the specifications. The observed results could be due to a selection bias so that employees have been able to choose the most valuable companies. On the other hand, high capital intensity might proxy the assets specificity, which implies that idiosyncratic investments are conducive for conservation of employee dominance. A high level of labour productivity, measured as sales per employee, decreases the probability of employee ownership. Again this is quite surprising, especially, seen in relation to the high capital-intensity, which should support higher labour productivity. These results certainly require some further research.

5. Discussion and conclusions

Our study provides a clear confirmation about the applicability of the concept of firm governance cycle to economies in transition. The model can be efficiently used to conceptualize many peculiar features of post-privatization evolution of ownership structures and patterns of control in transition countries. These economies are undergoing fundamental changes in institutions with emerging and changing markets creating specific conditions for enterprises and their life-cycles. Privatization, pressures for restructuring and weak, but developing institutions define the conditions for the evolution of ownership structures and shape somehow peculiar governance cycles.

Notwithstanding the striking differences in macroeconomic environment, institutional setting and cultural traditions Russia and Slovenia exhibit very similar general trends in post-privatization adjustments of their ownership structures, namely the decrease of employee shareholdings and the concentration of ownership by dominant blockholders. Thus, the instability and fragility of employee ownership might be interpreted as a universal phenomenon – at least for economies in transition. Employees have been losing dominance despite

visible differences in bargaining power enjoyed by workers – extremely weak in Russia and extremely strong in Slovenia. It seems that the concentration of the bulk of shares in the hands of workers at the start of transition, which characterized both countries, created somehow unbalanced ownership structures, which were very far from a perceived equilibrium and made a path to it prolonged and costly.

The post-privatization adjustment in the two countries differs mostly due to the differences in their macroeconomic, institutional and economic environment. The Russian results supports to a high degree the proposed transition governance cycle of employee → manager → outsider ownership. Russia is still in a stage of weak governance institutions that give the managers some advantages in relation to employees and potential external owners. Most of the employee owned enterprises have changed to either manager ownership or to the next step in the governance cycle, outside domestic ownership. Change from managers to outsiders is rarer.

Although substantial changes from employee-dominance are observed in Slovenia too, managers have taken over the dominant ownership position in quite few cases in the sample. The Slovenian cycle has to a high degree skipped this stage; the typical development is from employee → outsider ownership. Several explanations apply. First, the institutional development in Slovenia is so advanced that outsiders are in a stronger position and more motivated to acquire firm shares than in other transition countries. However, it is surprising to find a relatively high number of employee dominated firms. The explanation can be found in the cultural/historical heritage, the relatively high Slovenian income level, and specific institutional settings like the format of special employee shareholder associations that provide strong employee support to managers and reduce the incentives of the latter to gather the employee shares. An indication that Slovenian governance is yet not at the highest level is the increasing concentration of firm ownership; minority investor protection is apparently not strong enough for the development of more diversified shareholder ownership.

In both countries, the higher number of employees reduces the odds for employee ownership, while higher wages result in a lower probability for a change away from employee ownership. High capital intensity increased the odds for employee ownership in Slovenia (In Russia data for capital was not collected due to the lack of reliability for this type of data). If capital intensity can be interpreted as proxy for asset specificity this implies that idiosyncratic investments are conducive for conservation of employee dominance. Finally, on the contrary to Slovenia, good firm performance decreases the odds for ownership change in Russia.

The concept of governance cycle and the application to specific transitional conditions contribute to explain the ownership dynamics both in relation to the enterprise life-cycle and in an

institutional perspective. However, the importance of different drivers behind the specific changes over the governance cycle opens up for further research both in the form of quantitative analyses and in the form of case studies to reveal detailed stories about the background and actual implementation of the changes at the firm level. Another interesting question is whether other transition countries, where alternative privatization schemes without employee dominance were implemented, pass through the “classical” or some specific governance cycles. These under-explored problems are certainly interesting issues for further research.

References

1. Alchian, Armen, and Demsetz, Harold, 'Production, Information Costs, and Economic Organization'. *American Economic Review*. 62: pp. 777-795. 1972.
2. Becht, Marco, Bolton, Patrick, and Röell, Ailsa "Corporate Governance and Control", ECGI Working Paper Series in Finance, www.ecgi.org/wp , 2, October, 2002.
3. Ben-Ner, Avner, 'The Life Cycle of Worker-owned Firms in Market Economies: a Theoretical Analysis'. *Journal of Economic Behavior and Organization*. 10: pp. 287-313, 1988
4. Ben-Ner, Avner, and Yun, Buyong, 'Employee Buyout in a Bargaining Game with Asymmetric Information'. *American Economic Review*. 86, 3: pp. 502-23, 1996.
5. Berglöf, Erik, and Bolton, Patrick, "The Great Divide and Beyond – Financial Architecture in Transition, *Journal of Economic Perspectives*, 16, 1, 2002
6. Berglöf, Erik, and Pajuste, Anete, "Emerging Owners, Eclipsing Markets?" in P.K. Cornelius and Kogut, Bruce, Eds., *Corporate Governance and Capital flows in a global economy*, pp. 267-304, New York, Oxford University Press, 2003.
7. Bevan, Alan A., Estrin, Saul, and Meyer, Klaus, "Institution Building and the Integration of Eastern Europe in International Production", *International Business Review*, forthcoming 2004.
8. Bim, Alexander, Derek C. Jones and Tom Weisskopf, "Hybrid Forms of Enterprise Organization in the Former USSR and the Russian Federation," *Comparative Economic Studies*, 35, 1: pp. 1-37, 1993.
9. Blanchard, Olivier and Philippe Aghion, On Insider Privatization, *European Economic Review*, 40, pp. 759-766, 1996
10. Blasi J., M Kroumova and D. Kruse, "Kremlin Capitalism: The Privatization of the Russian Economy", ILR Press, Ithaca, New York, 1997
11. Buch T. (2003): Modern Russian corporate governance: Convergent forces or product of Russia' s history? *Journal of World Business*, 38(4): 299-313
12. Caviglia G., G. Krause and C. Thiman (2002): Key features of the financial sectors in EU accession countries, in *Financial Sectors in EU Accession Countries* (ed. C. Thiman) European Central Bank.
13. Cufer U., J Fabian, M. Majic, D. Prelovsek and J. Tratnik (2002): The structure and the functioning of the financial sector in Slovenia, pp 217-228 in *Financial sectors in EU accession countries* (C. Thiman ed.), European Central Bank.
14. Djankov S. and P. Murrell (2002): The determinants of enterprise restructuring in transition

- an assessment of the evidence. World Bank, Washington, D.C.
15. Earle J. S. and S. Estrin (1996). 'Employee Ownership in Transition'. in Roman Frydman, Cheryl Gray and Andrzej Rapaczynski (eds): Corporate Governance in Central Europe and Russia. vol. 2: Insiders and the State. Budapest:CEU Press.
 16. EBRD (2003): Transition report. London
 17. Estrin, Saul and Mike Wright (1999): 'Corporate Governance in the Former Soviet Union: An Overview'. Journal of Comparative Economics. 27:398-421.
 18. EU-Commision (2002): 2002 Regular Report on Slovenia's Progress towards Accession.
 19. Fama E. and Jensen M. (1983): Separation of Ownership and Control, Journal of Law and Economics, vol 26, no 2, pp. 301-325.
 20. Filatochev I.,M. Wright and M. Bleaney (1999): 'Privatization. Insider Control and Managerial Entrenchment in Russia'. Economics of Transition. 7: 481-504.
 21. Gregoric A. (2003): Corporate Governance in Slovenia: An International Perspective, PhD Dissertation, University of Ljubljana, Faculty of Economics.
 22. Grossman S. and O. Hart (1986): The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration, Journal of Political Economy, 691-719.
 23. Hansmann. Henry (1996): The Ownership of Enterprise. Cambridge. MA: Belknap Press.
 24. Hare P. and A. Muravyev (2002): Privatization in Russia, RECEP, Research Paper Series.
 25. IET (1997), Russian Economy in 1996: Tendencies and Perspectives, Moscow: Institute for the
 26. Economy in Transition
 27. Jensen M. C. and W. H. Meckling (1976): Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, Journal of Financial Economics, Vol. 3 (4) pp 305-360.
 28. Jones Derek.C., Panu Kalmi and Niels Mygind (2003): Choice of Ownership Structure and Firm Performance: Evidence from Estonia. William Davidson Working Paper, no 560
 29. Jones Derek C. and Niels Mygind (1999): 'The Nature and Determinants of Ownership Changes After Privatization: Evidence From Estonia'. Journal of Comparative Economics. 27: 422-441.
 30. _____ (2002) "Ownership and Productive Efficiency: Evidence from Estonia, Review of Development Economics, 6(2), , 284-301
 31. _____ (2004) "Corporate governance cycles during transition: Theory and Evidence from the Baltics, forthcoming in (Filatotchev I. and M. Wright eds): (title yet unknown)
 32. Kalmi Panu (2002): On the (In)stability of Employee Ownership, Ph.D serie 10.2002, Copenhagen Business School.
 33. Kapelyushnikov Rostislav (2001): The Largest and Dominant Shareholders in the Russian Industry: Evidence of the Russian Economic Barometer Monitoring, Journal of East-West Business, vol 6, no 4 pp 63-88.
 34. La Porta, R., F. Lopez-de-Silanes and A. Shleifer (1999): Corporate Ownership around the world, Journal of Finance, Vol. 54, no 2, pp 471-517.
 35. Meade, J. E. (1972): The Theory of Labor-Managed Firms and of Profit-Sharing, Economic Journal no 82, pp. 402-28.
 36. Mygind N. (1991): Democratic Privatisation – A Model, CBS April 1991, conference-paper Tallinn: Democratization and Privatization, June 1991 and IAFESM Ithaca NY August 1991, proceedings.
 37. _____ (2001): 'Enterprise Governance in Transition: A Stakeholder Perspective'. Acta Oeconomica 51(3): 315-42.
 38. Pedersen T. and S. Thomsen (1997): European Patterns of Corporate Ownership: A Tvelwe Country Study, Journal of International Business, vol 28, no 4, pp 759-778
 39. Pfeffer J, Salancik GR. 1978. The External Control of Organizations: A Resource-Dependence Perspective. Harper & Row: New York.
 40. Prasnikaar, J., Svejnar, J. (1991): Workers Participation in Management vs. Social Ownership and Government Policies: Yugoslav lessons for Transforming Socialist Economies, Comparative Economic Studies, 4:27-45.
 41. Prasnikaar, J., Gregoric, A. and Pahor, M. (2004): Corporate Governance in Slovenian Enterprises: From Self-Managemetn to Blockholder Control, forthcoming in the Politics and Economics of Central and Eastern Europe
 42. Puffer S. M. and D. J. McCarthy (2003): The emergence of corporate governance in Russia, Journal of World Business 38 pp 284-298.
 43. Putterman L. (1993): Ownership and the Nature of the Firm, Journal of Comparative Economics, no 17, pp. 243-263.
 44. Roe M. (1990): Political and legal restraints on ownership and control of public companies, Journal of Financial Economics, vol 27, pp 7-41.
 45. Shleifer A. and R. W. Vishny (1997): A Survey of Corporate Governance, Journal of Finance, no 2, Vol 52 pp 737-783.
 46. Williamson O. (1985): The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting, New York, The Free Press.
 47. Wright M., R. E. Hoskinsson, L. W. Busenitz. and J. Dial (2003): 'Finance and Management Buyouts: Agency versus Entrepreneurship Perspectives'. Venture Capital 3 (3): pp 239-61.

Appendix

Table a-1. Some economic indicators for the transition process in Russia and Slovenia

	production 1989=100			unemployment			av. wage/month USD			FDI/capita
	1995	1999	2002	1995	1999	2002	1995	1999	2002	1989-2002
Russia	62	61	74	9.2%	12.6%	8.6%	117	64	123	48 USD
Slovenia	93	110	122	7.4%	7.4%	5.9%	945	953	911	1702 USD

based on EBRD 2003

Table a-2. The development of governance institution in Russia and Slovenia

	Russia			Slovenia		
Bankruptcy legislation	Strict law 1998 adjusted 2002, enforced?			first law 1994 stronger enforcement 2000-		
Governance enterprise competition corporate governance developments	1995 2 2 1990es much tunneling + abuses of minority investor rights, 1994 MMM pyramid investment fund scandal 1996 JSC law, securities law, but still weak implementation 2002 Code of Conduct	2002 2+ 2+ 3-	2003 2+ 2+ 3-	1995 3- 2 Companies Act 1993, quite secure shareholders' rights, Takeover act 1997, problems Worker codetermination 1993 Investment Fund law 1994 revised 2003, PIF problems	2002 3 3-	2003 3 3-
<u>Bank market</u> total number (foreign) state owned banks % assets private loans as % GDP bad loans as % of total loans regulation EBRD score	1995 2297 (21) 37 (1997) 8.7 12.3 Quite loose 2	2002 1329 (37) 17.3 11.4 2	2003 2 2	1995 39 (6) 41.7 27.3 9.3 3	2002 22 (6) 48.6 41.0 10.0 (2001) 3+	2003 priv 23 23 3+
Stock market start	1991 Moscow	2002	2003	1990 Ljubljana	2002	2003
listed firms	1995	247		1995	154	136
share capitalization % GDP	4.8	36.5		2	23	23
turnover/capitalization %		5		21	23	23
EBRD score	2	2+	3-	3-	3-	3-

based on EBRD 2003, Gregoric 2003, ECB 2002, RTS (www.rts.ru), Ljubljana Stock Exchange (www.ljse.si),

Table a-3. Ownership transition matrices for Russia 1995-2003

1995 \ 1997	Dominant Shareholders 1997						Total 1995
Dominant Shareholders 1995	Managers	Employees	Non-fin. outsiders	Financial outsiders	Foreign	State	
Managers	1	0	1 ^{*)}	0	0	0	2
Employees	2	13	5	3	2	1	26
Non-fin. outsiders	0	0	6	1	0	0	7
Financial outsiders	0	0	2	1	1	0	4
Foreign	0	0	0	0	0	0	0
State	0	0	1	0	0	1	2
Total 1997	3	13	15	5	3	2	41

^{*)} for this firm share of managers and workers were equal in 1995

1997 \ 1999	Dominant Shareholders 1999						Total 1997
Dominant Shareholders 1997	Managers	Employees	Non-fin. outsiders	Financial outsiders	Foreign	State	
Managers	5 ^{*)}	2	0	0	0	0	7
Employees	1	13	8	0	0	0	22
Non-fin. outsiders	1 ^{**)}	3	4	0	0	0	8
Financial outsiders	0	2	0	2	0	0	4
Foreign	0	0	0	0	1	0	1
State	0	0	1	0	0	4	5
Total 1999	7	20	13	2	1	4	47

^{*)} for 2 firms share of managers and workers were equal in 1997

^{**)} for this firm share of non-financial outsiders and workers were equal in 1997

1999 \ 2001	Dominant Shareholders 2001						Total 1999
Dominant Shareholders 1999	Managers	Employees	Non-fin. outsiders	Financial outsiders	Foreign	State	
Managers	9	0	1	0	0	0	10
Employees	9	9	7 ^{*)}	1	0	0	26
Non-fin. outsiders	2	4	21	3	0	0	30
Financial outsiders	1	0	0	4	0	1	6
Foreign	0	0	0	0	0	0	0
State	0	0	2	0	0	4	6
Total 2001	21	13	31	8	0	5	78

^{*)} for 1 firm share of non-financial outsiders and workers were equal in 1999

2001 \ 2003	Dominant Shareholders 2003						Total 2001
Dominant Shareholders 2001	Managers	Employees	Non-fin. outsiders	Financial outsiders	Foreign	State	Total 2001
Managers	7 ^{*)}	3	2	1	0	0	13
Employees	4	9	4	0	0	0	17
Non-fin. outsiders	6	1	16	2	1	0	26
Financial outsiders	0	1	2	1	0	0	4
Foreign	0	0	0	0	0	0	0
State	0	0	1	0	0	0	1
Total 2003	17	14	25	4	1	0	61

^{*)} for 1 firm share of managers and workers were equal in 2001

Table a-4. Ownership transition matrix Russia 1995-2003 (first by last years recorded)

1995 \ 2003	Dominant Shareholders (end)						Total start	change
Dominant Shareholders (start)	Managers	Employee s	Non-fin. outsider	Finance outsider	Foreign	State	Total start	change
Managers	10 ^{*)}	2	3	0	0	0	15	33%
Employees	17	22	21	6 ^{**)}	1	1	68	68%
Non-fin. outsiders	9	4	25	5	1	1	45	44%
Financial outsiders	2	1	2	4	1	2	12	67%
Foreign	0	0	0	0	1	0	1	0%
State	0	1	5	0	0	5	11	55%
Total (end)	38	30	56	15	4	9	152	56%

^{*)} for 2 firms share of managers and workers were equal in the beginning

^{**)} for 1 firm share of workers, financial outsiders and state were equal at the end

Table a-5. Russia 1999-2003 with average concentration on first largest owner

1999 \ 2003	Dominant Shareholders (end)						Total (start)
Dominant Shareholders (start)	Managers	Employees	Non-fin. outsiders	Financial outsiders	Foreign	State	Total (start)
Managers	10 ^{*)} (30/37)	0	2 (20/37)	0	0	0	12 (29/37)
Employees	5 (14/28)	10 (15/14)	3 (11/21)	0	0	0	18 (14/19)
Non-financial outsiders	7 (30/57)	2 (11/21)	19 (31/40)	3 (54/54)	1 (20/51)	0	32 (32/44)
Financial outsiders	0	0	2 (61/68)	3 (41/50)	0	0	5 (49/57)
Foreigner	0	0	0	0	0	0	0
State	0	0	2 (64/21)	0	0	3 (87/68)	5 (76/49)
Total (end)	22 (26/41)	12 (15/15)	28 (32/38)	6 (48/52)	1 (20/51)	3 (87/68)	72 (31/38)

Average size (%) of the first largest block (beginning /end) in parenthesis.

^{*)} for 1 firm share of managers and workers were equal in the beginning

Table a-6. Determinants of ownership, 1997-2003, Russia (Multinomial logit)

	Managers versus Employees ^{a)}		Outsiders versus Employees ^{b)}		Managers versus Outsiders ^{b)}	
	Start	End	Start	End	Start	End
(123 observations)						
financial outcome: profit, t-1	-1.48 [*] (0.76)	0.12 (0.63)	-1.83 ^{***} (0.31)	-0.82 ^{**} (0.40)	0.10 (0.72)	0.93 [*] (0.50)
Order book level, t-1	2.92 ^{**} (1.09)	1.13 (0.95)	1.29 ^{**} (0.61)	0.11 (0.83)	1.72 [*] (.99)	1.02 (0.76)
Ln no. of employees t-1	-0.69 [*] (0.41)	-0.33 (0.29)	-0.11 (0.22)	0.13 (0.26)	-0.59 (0.39)	-0.46 ^{**} (0.23)
Wage (deviation from years' mean) t-1	0.89 (1.01)	-0.38 (0.67)	0.75 (0.60)	-1.16 [*] (0.63)	-0.14 (0.96)	0.78 (0.56)
Industry	Yes	Yes	Yes	Yes	Yes	Yes
Region	Yes	Yes	Yes	Yes	Yes	Yes
Constant	2.17 (2.45)	2.15 (1.95)	1.66 (1.53)	1.16 (1.75)	-0.51 (2.31)	0.99 (1.57)

1997-2003 combined year to year changes, 165 observations	Change from employee to managers vs continuing employee ^{a)}	Change from employee to outsiders vs continuing employee ^{b)}	Continuing managers vs continuing employee ownership ^{c)}	Continuing outsiders vs continuing employee ownership ^{c)}	Change from outsiders to insiders vs continuing outsider ^{d)}
financial outcome, t-1	-1.99* (1.04)	-0.30 (0.56)	0.24 (0.63)	-2.11*** (0.66)	-0.56 (0.63)
financial outcome change: loss to profit	-0.68 (1.23)	1.03 (1.18)	1.38 (1.50)	-0.92 (0.97)	-0.16 (1.07)
financial outcome change: profit to loss	0.92 (1.35)	-0.36 (1.12)	-1.30 (1.18)	1.41* (0.80)	-0.94 (0.86)
Order book level, t-1	0.06 (1.77)	-0.62 (1.21)	2.31* (1.17)	-0.41 (0.99)	2.03* (1.15)
Order book level, changes	-1.31 (1.82)	-1.92 (1.67)	0.82 (2.07)	-0.13 (1.27)	-0.53 (1.19)
Ln number of employees, t-1	0.06 (0.30)	0.92*** (0.37)	-0.07 (0.35)	0.50* (0.26)	-0.19 (0.29)
Number of employees, index	3.64 (2.59)	1.98 (1.71)	1.95 (1.77)	2.29 (1.58)	0.57 (0.63)
Wage, t-1 (deviation from years' mean)	-0.01 (0.95)	-4.20*** (2.01)	0.01 (0.90)	-0.83 (0.68)	0.21 (0.70)
Wage, index	-0.65 (0.50)	-1.09*** (0.50)	-1.04** (0.44)	-0.33 (0.36)	0.24 (0.31)
Industry (dummy)	Yes	Yes	Yes	Yes	Yes
Regions (dummy)	Yes	Yes	Yes	Yes	Yes
Years (dummy)	Yes	Yes	Yes	Yes	Yes
Constant	4.00 (2.76)	-3.46 (2.95)	-0.20 (3.06)	1.99 (2.25)	-0.14 (2.03)

*** significant at 1%, ** at 5% and * at 10%. Robust standard errors in parenthesis

a) employee dominated firms as base category, b) outsider dominated firms used as base category

c) continuing dominant employee as base category, d) continuing dominant outsider base category

*** significant at 1%, ** at 5% and * at 10%.

Table a-7. Ownership transition matrix for Slovenia 1998-2003 (first/last years recorded)

1998 \ 2003	Dominant Shareholders (end)							Total start	change
Dominant Shareholders (start)	Managers	Employee s	Non-fin. outsider	Finance outsider	Foreign	State			
Managers	1	0	1	0	0	0	2	50%	
Employees	3	23	24	14	3	7	74	69%	
Non-fin. outsiders	0	0	17	0	1	1	19	11%	
Financial outsiders	0	1	5	17	0	0	23	26%	
Foreign	0	1	0	0	3	0	4	25%	
State	0	1	4	5	2	12	24	50%	
Total (end)	4	26	51	36	9	20	146	50%	

Employees include (few) former employees, Non-financial outsiders = domestic firms and individuals, Financial outsiders = Privatization Investment Funds (PIFs) + one bank, State = state funds+other (state).

Table a-8. Slovenia 1998-2001 with average concentration on first largest owner

1998 \ 2001	Dominant Shareholders (end)							Total (start)
Dominant Shareholders (start)	Managers	Employees	Non-fin. outsiders	Financial outsiders	Foreign	State		
Managers	2 17/17	1 12/20	0	0	0	0	3	15/18
Employees	1 12/10	25 23/22	17 27/49	15 27/38	3 23/66	8 24/36	69	25/35
Non-financial outsiders	0	0	16 40/49	0	0	1 18/20	17	39/47
Financial outsiders	1 50/40	1 12/13	3 21/38	16 34/42	0	0	21	32/40
Foreigner	0	1 28/21	0	0	3 52/67	0	4	46/55
State	0	1 74/19	5 38/47	2 22/40	2 37/31	12 60/51	22	50/46
Total (end)	4 24/21	29 24/22	41 33/48	33 30/40	8 37/58	21 45/44	136	32/39

Table a-9. Determinants of Ownership Structure, Slovenia (Binary Logits)

	1998	2002
	Employee vs. Outsider	Employee vs. Outsider
LnK/L _{t-1}	-0.26	0.49*
Fixed capital per labor	(0.35)	(0.27)
LnEmployees _{t-1}	-0.48	-0.53**
number of employees	(0.36)	(0.26)
Average Labor Costs	0.49	1.31**
	(0.80)	(0.60)
LnLaborProd _{t-1}	-0.34	-0.24
Laborproductivity (sales per labor)	(0.28)	(0.20)
Constant	6.0	-12.5**
	(8.06)	(5.8)
Industry	yes	yes
Number of observations	86	119

1998-2002	Change from Employees to Outsider vs Continuing Employee Ownership	Change from Employees to Outsider vs Continuing Outsider Ownership	Continuing Employee vs. Continuing Outsider
LnK/L _{t-1}	-14.7***	-0.16	0.70***
Fixed capital per labour	(0.41)	(0.26)	(0.26)
LnEmployees _{t-1}	0.51**	-0.12	-0.34
number of employees	(0.23)	(0.27)	(0.25)
Average Labour Costs	1.39*	-0.0013	0.27
	(0.74)	(0.65)	(0.68)
LnLaborProd _{t-1}	0.44**	-0.32	-0.48**
Sales per labor	(0.2)	(0.25)	(0.20)
Growth in	-3.95	-1.21	0.59
Fixed capital per labor	(2.75)	(1.14)	(0.78)
Growth Employment	-5.87*	-2.20	-0.59
	(3.24)	(1.45)	(1.16)
Growth in Average Labour Cost	2.6	1.15	0.43
	(1.99)	(0.94)	(0.67)
Growth Labour Productivity	-2.23	-1.19	-0.98**
	(1.43)	(0.79)	(0.42)
Constant	-4.41	2.43	-3.32
	(5.06)	(6.8)	(6.28)
Industry	Yes	Yes	Yes
Time Dummy	yes	Yes	Yes
Number of observations	154	243	331

*** significant at 1%, ** at 5% and * at 10%. Robust standard errors in parenthesis