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Managerial ownership and corporate performance in Slovenian post-privatisation period

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Abstract

The Slovenian post-privatisation period has been characterised by a decline in the ownership by non-managerial owners (employees) and state-controlled funds. On the other hand, domestic and foreign non-financial firms, Privatisation Investment Funds and managers have been increasing their holdings. The latter, namely the growing managerial ownership, is likely to feature in future ownership dynamics in Slovenia. In fact, in 2002 the desired (optimal) ownership stakes estimated by Slovenian managers were 10.8 percentage points higher than their actual stakes. The aim of our paper is to describe the main trends in the ownership of Slovenian corporations in the post-privatisation period and to provide an answer to the basic economic question: what is the influence of the ongoing consolidation of managerial ownership on the performance of Slovenian firms. The empirical analysis testing this relationship is based on a panel of 182 Slovenian firms in the 1995-99 period and does not provide relevant evidence of any positive effects of the increasing managerial control on Slovenian firms' performance. If any, a positive incentive effect is only observed in those firms whose managers' holdings exceed 10-percent, only with regards to firms' financial performance (but not total factor productivity) and only in firms that are not listed on the capital market. Further, the negative effect of the current gap between the desired and actual managerial ownership seems to exceed any positive incentive effect arising out of managerial ownership

JEL Classification: G30

Keywords: managerial ownership, ownership consolidation, corporate performance, corporate governance, transparency

1. Introduction

The Slovenian Law on Ownership Transformation (1992) introduced the change from social[3] to private ownership through a combination of voucher and cash privatisation; it provided for the allocation of 20 percent of firms' shares to insiders, 20 percent to the Development Fund for further sale to Privatisation Investment Funds (PIFs), 10 percent to the Pension Fund and 10 percent to the Restitution Fund[4]. Workers' councils in the firms were then empowered to allocate the remaining 40 percent to either firm insiders (through insider buy-outs) or outsiders (through a public tender). More than 90 percent of firms undergoing privatisation opted for the first alternative (insider privatisation); inside owners ended up holding about 40 percent of the social capital subject to privatisation, 25 percent went to Privatisation Investment Funds, 22 percent to the Pension and Restitution Funds, while the remaining 13 percent was publicly sold in exchange for ownership certificates[5]. Insider ownership prevailed

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[3] That is, the ownership of capital and infrastructure by society as a whole.
[4] The Slovenian Pension Fund (or Capital Fund) and the Slovenian Restitution Fund are often referred to as state-controlled funds.
[5] About 2,000,900 ownership certificates of a total value of 9.4 billion German marks (40 percent of the total estimated book value of social capital) were distributed to the citizens of the Republic of Slovenia. The certificates were not transferable and could only be used for acquiring shares in internal distribution, internal buy-outs, and public offerings of shares and/or in the exchange for the shares of Privatisation Investment Funds.

mostly in smaller firms; inside owners obtained at least 60 percent of the voting rights in about 24.4 percent of firms, while their ownership did not exceed 10 percent in about 6.3 percent of (mostly large) firms (Report of the Agency for Privatisation, 1999). Hence, Slovenia's privatisation brought about two large groups of owners: inside owners (employees, including managers, former employees and their relatives) and outside owners (Pension and Restitution Funds, Privatisation Investment Funds). Within the group of insiders, managers ended up holding only minority stakes (3.86 percent) with the support of the employees as the main mechanism for ensuring their discretionary power and fighting the influence of outsiders (Prasnikar and Gregoric, 2002; Gregoric, 2003).

Due to the shrinking employee ownership and hence the reduction of the 'hidden' support for managers in the post-privatisation period, Slovenian managers have started strengthening their power by expanding their ownership stakes[6]. These increases have been most prominent in non-listed firms in which the transfer of ownership involves relatively low prices and mostly remains undisclosed to the public. Further, the remaining dissatisfaction of managers (at the end of 2002 the optimal or desired ownership stake of the average Slovenian manager exceeded their actual ownership stake by 10.8 percentage points[7]) clearly indicates that the trend of rising managerial ownership in Slovenian firms will also continue in the future. The accumulation of ownership in the hands of managers is further motivated by the relatively low level of transparency of ownership transfers in Slovenia[8]. In any case, it is not the aim of this paper to discuss the fairness of the observed redistribution of privatised capital, nor to deal with the importance of such redistribution for the preservation of domestic ownership[9] but to provide an answer to the basic economic question, namely what is the impact of the observed increases in managerial ownership on the performance of Slovenian firms. While similar empirical studies mostly estimate the relation between managerial ownership and firm performance in developed market economies, this study adds important evidence on the efficiency of managerial ownership in transition countries. Our data set also enables us to clearly differentiate between managerial and non-managerial (insider) ownership. Moreover, we are the first to take into account the 'non-optimality' of the ownership structure, which resulted from privatisation, and to consequently distinguish between the desired (optimal) and actual ownership structure through the so-called ownership gap.

We start in the second section with an overview of managerial ownership as a corporate governance mechanism in developed market economies; the section further provides evidence on the role of managerial and insider ownership in transition economies. Section 3 discusses the characteristics and the dynamics of the managerial and insider ownership in Slovenia. The fourth section states the main hypotheses on the

[6] If managers prefer insider control, they will buy shares from the employees. This approach to entrenching their position may arise in particular when directors have been appointed before privatisation and are less optimistic about their employment prospects in the external managerial market and/or are less skilled. These arguments suggest the persistence of insider control in transition countries but with a reduction in employee shareholdings and a corresponding increase in managerial holdings (Wright et al., 2003; also see Blanchard and Aghion, 1996).

[7] See Figure 3.1.

[8] The lack of transparency still characterises Slovenian ownership dynamics despite the recently proposed amendments to the Takeovers Act. See the proposed amendments to the Takeovers Act (31 July, 2003), currently undergoing parliamentary discussion (EVA 2003-2111-0051).

[9] For more on this issue, see Stiblar (2003).

influence of managerial ownership on firm performance in Slovenia. The main empirical models underlying the analysis of the relationship between managerial ownership and a firm's economic efficiency and financial performance are presented in the fifth section. The sixth section sets out the main empirical results and the last section concludes.

2. Managerial ownership as a corporate governance mechanism

The influence of managerial ownership[10] on enterprise performance is related to the view that a firm's value depends on the distribution of ownership between managers and other owners, as first underlined by Berle and Means (1932) and, later on, Jensen and Meckling (1976). Within this context and the so-called 'incentive argument', giving managers corporate shares makes them behave like shareholders. In an extreme case (Jensen and Meckling, 1976), we would have a firm with a single owner-manager and hence a complete alignment of the manager's and owner's incentives (no equity-related agency costs). The superior performance of firms with substantial managerial ownership could also be due to psychological reasons.[11] The theory of entrepreneurship, for example, promotes the idea that managers who are also large shareholders better perceive new business opportunities; as such, this theory complements the incentive theory somewhat since it provides an explanation of the positive effect of managerial ownership in firms with a relatively dispersed ownership structure. Bull (1989), for example, finds that due to this 'entrepreneur effect' firms that have been subject to a management buy-out normally perform better. After taking over the firm, managers in fact tend to concentrate on the maximisation of the cash flow rather than on the mere maximisation of current profits.

However, the relationship between managerial ownership and firm performance might not be monotonic since beyond certain levels equity incentives may lead to the expropriation (rather than improvement) of the firm's value. By increasing their ownership and voting stakes, managers in fact gain the opportunity to expropriate some corporate funds on their own behalf and at the expense of other shareholders, namely to gain some 'private benefits of control'. According to Barclay and Holderness (1991), the private benefits of control are one of the main reasons for the existence of blockholders around the world. If the desire to obtain these benefits overrules the incentive effect, managerial ownership could actually reduce a firm's value ('the entrenchment effect'). Excessive managerial ownership can also reduce the probability of a successful takeover and lead to 'positional conflicts[12]' (Stulz, 1988). Holderness and Sheehan (1988) report that firms with majority managerial ownership pay more compensation to their managers than firms where the majority of shares are held by outside owners.

[10] With regard to managerial ownership, the literature mostly refers to inside owners. However, given the specifics of the Slovenian privatisation and the substantial share of non-managerial owners (employees, former employees and their relatives) in the capital of Slovenian firms, we use the term 'insider ownership' when referring to the ownership of all inside owners, while we use the term 'managerial ownership' when referring exclusively to the shares held by managers.

[11] For example, Mueller, E. and Spitz, A. (2002) argue that a manager as a sole owner might feel more involved with the company and hence perform better.

[12] Managers try to protect their jobs even when they are inefficient. Shultz (1988) further finds that in firms with majority managerial ownership the probability of a hostile takeover equals 0.

In terms of the influence of the stated effects, empirical studies of market economies mostly evidence a non-monotonic relationship between managerial ownership and a firm's performance. Mork, Shleifer and Vishny (1988) find that firm performance (measured with the Tobin Q) rises as managerial ownership increases up to 5%, falls up to the 25% level and then slightly rises again.[13] McConnell and Servaes for 1,173 (1976) and 1,093 (1986) firms listed on the NYSE and AMEX find a similar relation (even when controlling for the firms' size, industry and outliers); the performance rises up to 37% of shares, decreases between 37% and 50%, while afterwards the relation becomes less clear. Similarly, Hubbard and Palia (1999) also report a quadratic form of the relation between ownership and performance with the maximum at 58%, while for a sample of smaller firms in Germany, Mueller and Spitz (2002) report a positive effect of managerial ownership up to an 80-percent level. Again, other authors (e.g., Demsetz and Lehn, 1985) argue that there is no relationship between managerial ownership and firm value since the ownership structure is an endogenous outcome of competitive selection in which various cost advantages and disadvantages are balanced out to arrive at an equilibrium organisation of the firm. Moreover, managers' ownership is not exogenous but is an endogenous variable determined by different variables reflecting the business environment, firm characteristics, differences in the managerial contracting environment and, most importantly, the firm's performance itself (Demsetz and Lehn, 1985; Cho, 1987). Empirical studies based on a framework of simultaneous equations, which take into account the endogeneity of the managerial ownership (Agrawal and Knoeber, 1996; Hubbard and Palia, 1999; Mueller and Spitz, 2002), find no strong support for the notion that managerial ownership positively affects firm performance.

Due to the specifics of transition and the specific function of insider and managerial ownership[14] the effect of managerial ownership on firm performance in transition is more complicated[15]. Empirical studies in transition countries mostly report a negative (Earle and Estrin, 1997; Carlin et al. 1995; Frydman et al., 1999; Claessens and Djankov, 1998) relationship between insider (or managerial) ownership and firm performance. Wright et al. (2002), for example, observe that firms with relatively high managerial ownership are more reluctant to dismiss employees; the latter is, according to the authors, a reflection of the managers' effort to gain support from the employees and hence preserve and further strengthen their privileged position. Firms with higher managerial ownership are characterised by lower managerial turnover and lower efficiency with respect to firms with more usual share of inside or outside ownership. The inefficiency of managerial ownership in Russian firms, corruption, political motives and incentives to expropriate the private benefits of control are also been reported as being related to managerial ownership by other studies (e.g. Boycko et al., 1994 and 1996).

[13] The authors perform a piecewise linear regression and control for factors that might jointly influence board ownership and firm value (R&D expenditures, advertising expenditures, debt-to-asset ratio, replacement cost of assets, industry effect).

[14] Managerial ownership in transition often acts as a tool to induce a desired change in ownership rather than as an incentive to increase enterprise performance. For more, see Claessens and Djankov, 1998.

[15] For the efficiency of insider ownership and managerial ownership with regards to firm restructuring and sales to outsiders, also see Blanchard O., Aghion, P.(1996).

For a sample of 706 Czech firms, Claessens and Djankov (1998) find no significant relation between managerial incentives and firm performance; the entry of new, skilled managers (managerial turnover) seems to be more important for corporate performance than the equity incentives themselves. As argued by the authors, due to a weak market for general managers and hence little scope for managerial turnover, the value of incumbency benefits to incumbent managers becomes more important and can easily exceed the value of benefits from equity ownership. Further, with limited trading in equity shares the ability of managers to obtain the true value of their equity is reduced. Last but not least, in cases where incumbent managers received equity holdings for free they tend to undervalue their holdings, use them to further entrench their positions and continue operating as before (Claessens and Djankov, 1998).

3. Managerial and insider ownership in the Slovenian post-privatisation period

Slovenian managers and employees in most cases fully exploited the opportunity to buy firm shares through buy-outs and obtained substantial capital stakes, especially in smaller firms; in larger firms large shareholdings were obtained by institutional investors (the state-controlled Pension Fund and Restitution Fund, Privatisation Investment Funds) and outside minority investors. With regards to the importance of the insider versus outsider distribution of shares and the rules of secondary share transactions, we mostly refer to two different groups of firms:

- Public (listed) firms whose shares are listed on the Stock Exchange since they were partly distributed to the public. There are currently about 140 listed firms in Slovenia; these firms are subject to detailed regulation regarding transparency and minority investors' protection; and
- Non-public (unlisted) firms whose shares are not listed on the Stock Exchange and which did not opt for the public sale of shares while privatising. We further divide these firms into firms where insiders gained the majority share (insider firms) and firms where insiders gained less than a majority share (outsider firms). While inside owners control the decision-making in insider firms, they do not have such power in outsider firms but normally retain enough strength to oppose the most important decisions (sale of the firm to strategic investors, listing on the Stock Exchange etc.). In the latter, inside owners mostly have the willingness but lack the funds to buy out the outside owners (the Funds), while the outsiders stay passive in the area of governance or, when active, are largely opposed by the insiders.

The ownership structure at the end of privatisation and the emerging characteristics of Slovenian privatisation are shown in Table 3.1, namely[16]:

1. The percentage of capital in the hands of strategic owners is quite limited (2.3 percent in all firms);

[16] The data refer to the study by Simoneti et al. (2001).

2. Foreign owners have somehow been excluded from the privatisation process (0.33 percent share in all firms);
3. The state and state-controlled funds on average obtained 30 percent of firm capital (7.75 percent held directly by the state, 21.6 percent indirectly through state-controlled funds). The state keeps playing a relatively important role in the governance of Slovenian firms and, through the state-controlled funds, in some firms it remains the largest shareholder;
4. Outside minority investors who gained ownership during the public sale of shares represent a significant investor group only in a small number of firms listed on the Stock Exchange;
5. The two main investor groups (inside owners and institutional outside owners) ended up with similar capital stakes; inside owners prevail in the insider firms, while state-controlled funds and PIFs prevail in the outsider firms;
6. Institutional investors are not a homogeneous group since there are large differences between state-controlled funds and the privately managed Privatisation Investment Funds;
7. Inside owners include employees (on average, they gained 29.23 percent of firms' capital), former employees (11.05 percent) and management (3.86 percent). This group of owners was relatively homogeneous, at least at the beginning of privatisation. We do not expect the group to be stable over time; former employees are most likely to exit while managers are probably going to increase their controlling power, especially in those firms where their interests do not coincide with the interests of employees.

Table 3.1: Ownership structure at time of completed privatisation (N=183)

Group of owners	All companies	Listed	Insider	Outsider
The state	**7.75%**	**6.78%**	**2.02%**	**11.92%**
Restitution and Pension Funds	21.60%	20.49%	21.28%	22.19%
PIFs (privatisation funds)	19.38%	17.65%	14.88%	22.99%
ALL Funds	**40.98%**	**38.14%**	**36.17%**	**45.18%**
Inside owners - managers	3.86%	1.40%	4.98%	3.95%
Inside owners – current employees	29.23%	21.88%	38.08%	25.80%
Inside owners – former employees	11.05%	7.48%	14.60%	9.89%
ALL Inside	**44.14%**	**30.77%**	**57.66%**	**39.65%**
Financial investors - domestic	4.80%	22.37%	0.63%	1.61%
Financial investors – foreign	0.03%	0.08%	0.00%	0.02%
ALL Financial	**4.83%**	**22.45%**	**0.63%**	**1.64%**
Strategic investors – domestic	2.00%	1.86%	3.55%	1.01%
Strategic investors – foreign	0.30%	0.00%	0.00%	0.60%
ALL Strategic	**2.30%**	**1.86%**	**3.55%**	**1.61%**
TOTAL (all groups)	**100.00%**	**100.00%**	**100.00%**	**100.00%**

Source: Survey MEOR & CEEPN- 2000

3.1 Ownership dynamics in the post-privatisation period

The figures in Table 3.2 reveal the intensity of the decline in the number of shareholders in listed and unlisted firms in the 1999-2001 period. Most prominent in the first year after privatisation is the decline in the number of shareholders (including inside owners) in listed companies; the transfer of shares in these firms was in fact relatively easy and transparent. Shareholders in unlisted firms were more active in selling their shares in the years following 1999; the decline in the number of shareholders in these firms was mostly due to the sale of shares by employees in non-transparent (black) markets.

Table 3.2: Dynamics of the number of shareholders in the years following privatisation (non-weighted averages)

	At the time of completed privatisation		1999		2000		2001	
Unlisted	100%	481	75%	360	64%	308	55%	265
- insider	100%	470	71%	333	59%	276	51%	241
-outsider	100%	492	79%	387	69%	340	59%	288
Listed	100%	7,497	61%	4,576	54%	4,085	49%	3,653
Total	**100%**	**2,820**	**63%**	**1,765**	**56%**	**1,567**	**49%**	**1,394**

Sources: KDD and Privatisation Agency

Table 3.3: Changes in the ownership structure since the end of privatisation to the end of 1999 (in percentage points)

Group of owners	All companies	Listed	Insider	Outsider
The state	**-4.69**	**-3.98**	**-1.47**	**-7.09**
Restitution and Pension Funds	-9.02	-6.49	-9.16	-9.78
PIFs (privatisation funds)	-2.13	1.37	-0.31	-4.54
ALL Funds	**-11.15**	**-5.13**	**-9.47**	**-14.32**
Inside owners - managers	5.17	1.45	4.09	7.16
Inside owners – current employees	-2.19	-6.54	-4.52	0.85
Inside owners – former employees	0.35	-1.69	-1.39	2.21
ALL Inside	**3.33**	**-6.78**	**-1.82**	**10.22**
Financial investors - domestic	3.73	1.71	3.92	4.29
Financial investors – foreign	0.15	0.06	0.30	0.09
ALL Financial	**3.88**	**1.77**	**4.22**	**4.38**
Strategic investors – domestic	7.90	13.68	8.01	5.85
Strategic investors – foreign	0.72	0.44	0.52	0.96
ALL Strategic	**8.62**	**14.12**	**8.53**	**6.81**

Sources: Survey MEOR & CEEPN-2000

There have also been changes in the ownership structure of privatised firms (see Table 3.3). Employees' ownership has been shrinking in the listed firms (-6.78 percent)17, while inside owners in outsider firms have been increasing their stakes (+10.22 percent) and aiming to achieve the majority. In insider firms, insiders are mostly retaining majority stakes.

Most evident within the group of inside owners is the increase in managerial ownership (+5.17 percent), while employee ownership has been decreasing (-2.19 percent). The largest is the growth of managerial ownership in outsider firms (+7.16 percent) and insider firms (+4.19 percent), while this trend is much slower in listed firms (+1.45 percent).

3.2 The desired ownership structure from the managerial perspective

The estimation of the desired (optimal) ownership structure is based on the responses of Slovenian managers to our questionnaires about the optimal ownership structure of their firms. Similarly to other transition countries (Claessens and Djankov, 1998), managers have mostly been guiding the ongoing changes in terms of controlling Slovenian corporations. Hence, we expect the actual ownership structure to approach the desired level in the future years.

The analysis of both trends up to 1999 and the desired ownership structure (see Table 3.4.) leads to the following conclusions:

1. The main trends characterising the first years after privatisation (up to the end of 1999) are expected to continue in the future: the ownership share of Funds will decline, mostly on account of an increase in the ownership of strategic investors (up to 23.4 percent) and managers (up to the stated 21.8 percent);
2. The PIFs will accompany the state-controlled funds (whose share declined most in the first period) in existing firms in the second period;
3. While former employees kept their average stake in the first period (up to 1999), they are expected to sell their shares in the future (the expected decrease of their proportion of shares is from 11.4 percent to 4.8 percent); and
4. Foreigners are expected to appear among strategic investors in the second period (after 1999); their share in the capital of privatised firms is expected to rise from 1.02 percent to 6.21 percent.

There is a high level of dissatisfaction associated with the degree of actual ownership seen at the end of privatisation. The actual share obtained by managers (3.86 percent) is well below the desired average level (21.8 percent)[18]; with regards to the

[17] In these firms, it is very difficult for the employees to gain the majority share. Moreover, they can sell their share at transparent prices and on the organised capital market.

[18] The average level of managerial ownership is also relatively low with respect to other market and transition economies. For example, managers of corporations listed in the USA normally hold between 20 and 40 percent of the voting rights and actively participate in the firm's decision-making (Becht, 2001; Holderness and Sheehan, 2001). Board members of firms listed on the London Stock Exchange, for instance, represent the second most important group of blockholders and on average hold 11

latter, the reported desired (or optimal) level of managerial ownership varied among different firm groups (14.47 percent in listed firms, 20.54 percent in insider firms and 25.14 percent in outsider firms).

Table 3.4: The ownership structure of privatised Slovenian firms: the actual ownership structure at the end of privatisation, at the end of 1999 and the desired ownership structure

(N=183)

Group of owners	At the time of privatisation	End of 1999	Optimal	Change between Privatisation and End of 1999	Optimal vs. Privatisation	Difference between End of 1999 and Optimal
The state	**7.75%**	**3.06%**	**1.55%**	**-4.69**	**-6.20**	**-1.51**
Restitution and Pension Funds	21.60%	12.58%	4.86%	-9.02	-16.73	-7.72
PIFs (privatisation funds)	19.38%	17.25%	6.44%	-2.13	-12.94	-10.81
ALL Funds	**40.98%**	**29.84%**	**11.31%**	**-11.15**	**-29.67**	**-18.53**
Inside owners – managers	3.86%	9.03%	21.80%	5.17	17.94	12.77
Inside owners – current employees	29.23%	27.04%	29.48%	-2.19	0.25	2.44
Inside owners – former employees	11.05%	11.40%	4.80%	0.35	-6.25	-6.60
ALL Inside	**44.14%**	**47.47%**	**56.08%**	**3.33**	**11.93**	**8.61**
Financial investors – domestic	4.80%	8.53%	7.31%	3.73	2.51	-1.22
Financial investors – foreign	0.03%	0.18%	0.61%	0.15	0.59	0.43
ALL Financial	**4.83%**	**8.71%**	**7.93%**	**3.88**	**3.10**	**-0.78**
Strategic investors – domestic	2.00%	9.90%	16.92%	7.90	14.92	7.03
Strategic investors – foreign	0.30%	1.02%	6.21%	0.72	5.91	5.19
ALL Strategic	**2.30%**	**10.92%**	**23.14%**	**8.62**	**20.84**	**12.22**
TOTAL	**100.00%**	**100.00%**	**100.00%**			

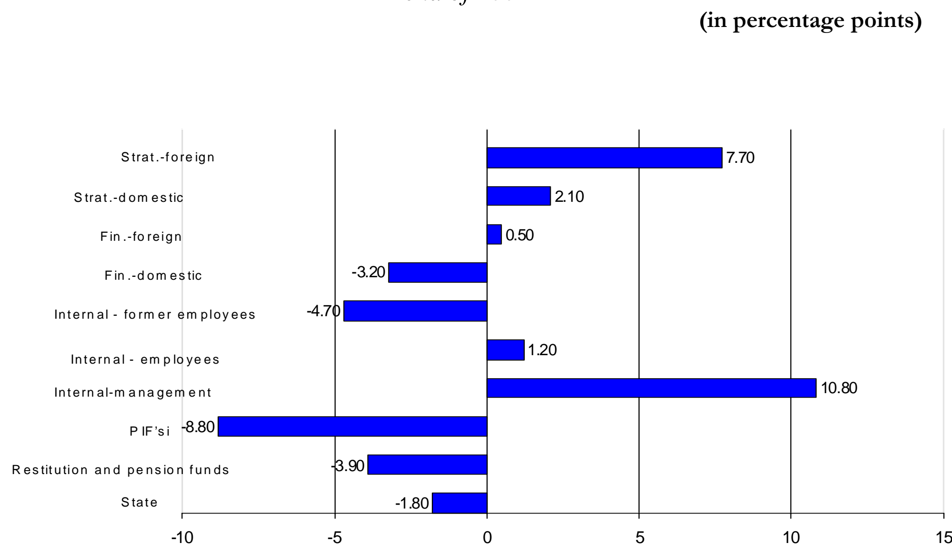
Sources: Survey MEOR & CEEPN - 2000

percent of voting rights; about 65 percent of these shares are held by chief executives (Goergen and Reeneboog, 2001). Estrin et al. (1997) report a 17-percent managerial ownership, while substantially lower stakes (2.5 percent) have been reported for Czech Republic (Claessens and Djankov, 1998).

At the end of 1999, the difference between the actual and desired level of managerial ownership remained high (14.3 percent for outsider firms, 11.48 percent for insider firms, 11.62 percent for listed firms); the high level of dissatisfaction of Slovenian managers with the current ownership structure is further confirmed by our latest survey (end of 2001). As shown in Figure 3.1, Slovenian managers want their own stakes and the stakes of strategic investors to be higher (10.83 percentage points more for managers, 7.7 percentage points more for strategic investors), while the Funds (state-controlled funds and PIFs) are expected to further decrease their participation in firms' capital and control. Figure 3.1 clearly shows that Slovenian managers intend to boost their controlling power by increasing their own ownership stakes rather than by simply relying on the support of other inside owners. Managerial support for insider distribution and buy-outs as privatisation methods may well have been guided by the fact that managers perceived the insider (employee) ownership as a transitional phase, resulting in pure managerial ownership in the period following privatisation. Given that most of the stated changes have been going on in unlisted firms, the transparency of share transfers is crucial for shares to be transferred at 'fair' prices as well as for the efficiency of managerial ownership and its impact on firm performance in the future.

Figure 3.1: Privatised firms: the desired ownership changes as reported by managers at the end of 2001

(in percentage points)



4. Managerial ownership and firm performance in Slovenia: the main hypotheses

The observed increases in managerial ownership raise the question of the impact of these changes on firm performance in Slovenia in the 1995-1999 period. The growing ownership blocks could, on one hand, provide managers with incentives to maximise firm value; providing the right incentives to managers becomes even more important when considering the rent-seeking behaviour of outside, institutional investors and the relatively dispersed ownership structure that characterised Slovenian firms at the end of privatisation (see Prasnikar and Gregoric, 2002; Gregoric et al.; 2000; Nuti, 1997). In this regard Prasnikar and Gregoric (2002), for example, find that firms with stronger

managers are better at promoting the internationalisation of their activities, are most successful in exploiting market niches, developing new products and assign greater importance to financial goals; managers successfully balance the interests of different interest groups, while their power increases with the shares of inside owners. However, with large ownership stakes the desire to expropriate the private benefits of control might outweigh any incentive effect associated with managerial ownership. The desire for entrenchment could be particularly strong in Slovenia due to the importance of managers as stakeholders prior to transition (see Prasnikar and Svejnar, 1991), managers' position in society, the low managerial turnover (see Knezevic et al., 2004) and the absence of an active managerial labour market. Given that employee ownership often represents 'hidden' support for managers (Gregoric, 2003), the entrenchment effect might prevail with relatively low managerial stakes. Hence, the following hypotheses emerge:

H1: Managerial ownership on average has a positive impact on firm performance.

H2: However, this relationship is non-monotonic since at some point entrenchment effects might prevail over the incentive effect. Due to insider support of managers, the absence of a managerial market and low executive turnover, the entrenchment effect might prevail already at low levels of managerial ownership.

We further estimate the effects of managerial ownership with regards to the desired (optimal) level of ownership – the one aligning the ownership of each of the different stakeholder groups with their importance for the firm's success and the one balancing the positive and negative effects of ownership. Here we assume the desired (optimal from the managerial point of view) ownership structure differs from the ownership structure resulting from privatisation; there was neither time nor the political willingness to search for the 'optimal' owners during privatisation. As a consequence, firms ended up with bigger or smaller differences between the actual and desired (optimal) ownership structure, namely with the so-called 'ownership gap'. The estimated average 'ownership gap' and hence the estimated frustration with the actual ownership for the 182 firms in our sample is reported in Figure 3.1. The same figure could be drawn for any individual firm in our sample, with larger deviations from the optimal structure leading to higher managerial frustration (dissatisfaction) and hence worse firm performance.[19] Given the 'management control bias' in Slovenian firms after privatisation and hence the limited incentives stemming from the direct equity holdings of managers, we expect the frustration with managerial ownership to be most important with regard to its impact on firm performance[20]. In this respect, we can draw the following hypotheses:

H3: The optimal ownership structure, which ensures a high level of firm performance, is endogenous and determined (among other things) by the initial firm performance, firm size, industry, investment risk, sales' variability, institutional and economic framework in which the firm operates.

[19] Here we use a simple quantitative measure of the gap as the average difference between the optimal and actual ownership stake in percentage points for the different owner groups. For the 10 groups shown in Figure 3.1, this difference varies between 0 and 20 percent.

[20] Managerial frustration is measured by the difference between the optimal and actual managerial ownership stake, in percentage points (varying between 0 and 100 percent for the firms in our sample).

H4: The Slovenian mass privatisation created a gap between the desired (optimal) and the actual ownership structure (ownership gap), which negatively influences firm performance. The larger the ownership gap (and hence the frustration with ownership) the worse the firm performance.

The latter hypothesis implicitly means that increases in managerial ownership up to the desired ownership shares should have a positive impact on firm performance since they reduce managers' dissatisfaction with the current ownership structure. On the other hand, increases of ownership that are above the desired ownership share should have a negative impact on firm performance. Hence,

H5: Given the relatively high employee ownership (in relation to the desired level), we expect to observe a negative relationship between insider ownership and firm performance. On the other hand, given the relatively low initial managerial ownership we expect that increases in managerial ownership leading towards the optimal share will have a positive impact on firm performance.

H6: The opportunities for gaining the private benefits of control are larger for managers than for other owner groups. Hence, we expect the managerial frustration with the actual ownership structure to have more prominent negative effects on firm performance.

Given the characteristics of listed and unlisted firms (see Chapter 3.1), the reasons for share buying by management are expected to be quite varied. In listed firms, with limited under-pricing, managers are willing to increase their stake only when they expect the firm's performance (and consequently their share value) to increase in the future. In unlisted firms, with substantial under-pricing, management can realise capital gains even if there are no positive effects on firm performance.

H7: Since the managers of listed firms have been buying shares at market prices and in a transparent way and since in these firms their reliance on insider support is relatively limited, the positive relationship between managerial ownership and firm performance should be stronger than in unlisted firms where share transfers are often motivated by under-pricing and speculative reasons.

While successfully acquiring shares in their firms, managers in this transition period are unwilling to damage the firm's long-term performance and economic efficiency. This, however, might not be true with regard to the firm's financial performance since these results are short-term and have to be shared with the owners who are about to exit the firm. By lowering firm financial results, managers also lower the price of shares they acquire. In the absence of outside financing, managers might actually effectively expropriate corporate funds in order to finance share acquisitions (e.g. debt financing of the acquisition of a firm's own shares; cross-ownership arrangements; cross-financing of management share increases among related firms etc.). These negative effects on a firm's financial performance are realised ex ante, namely prior to the actual increase of managerial ownership. Hence,

H8: Managerial dissatisfaction (frustration) with the ownership share has a negative impact on the short-term, financial performance of firms, while no such effects are expected with regard to firms' long-term economic efficiency.

H9: In the transition period (while approaching the optimal structure), a firm's financial performance can be better explained by the planned increases in managerial ownership (which has a negative impact) than the actual increases in managerial ownership (which create incentives and hence positively effect the firm's financial performance).

5. The empirical model and data

The hypotheses on managerial ownership are tested on a sample of 182 firms in the period 1995-99. A detailed description of the firms in the sample is provided in Simoneti et al. (2001). Hypotheses on economic efficiency are tested with the Total Factor Productivity Model (TFP model) with estimations of the marginal production function constructed by regressing the 5-year cumulative changes in the employment of labour and capital on the 5-year cumulative increase in sales, while adding variables reflecting managerial ownership and controlling for industry. We therefore try to detect whether the changes in output which are not due to changes in capital or labour can be attributed to managerial ownership.

The analysis of financial performance in the 1995-1999 period is based on the EBITDA/SALES ratio in 1999, regressed on initial financial performance, industry dummies and selected ownership variables. The EBITDA (an approximation of a firm's operational cash flow) is a better measure of a firm's financial performance (than, for example, profits) since it is most reliable and allows little accounting discretion[21]. Similarly, the total sales value seems to be a more reliable measure than the value of firms' capital or total assets. The initial firm performance is included in order to correct for the initial differences in firm performance. The main question is hence whether ownership characteristics, besides the initial performance levels and industry differences, contribute anything to explaining the differences in firm performance at the end of 1999.

A description of the variables used in the empirical analysis is provided in Tables 5.1 and 5.2. Before testing the two models (TFP and financial performance) in our sample of 182 firms we tested the same 5-year cumulative models on a larger sample of firms. The results for the basic model (column 1) and for the models including dummies for privatisation methods (column 2) are presented in Table 5.3. The significant negative sign for insider and outsider firms confirms that, on average, listed firms perform better (both with regard to economic efficiency and financial performance), while correcting for initial firm performance (endogeneity of the selection of privatisation method). Similar results with respect to privatisation methods in Slovenia are reported by Simoneti et al. (2003a) using annual data for the same period, which confirms the validity of both models including when applied to 5-year data. In order to test the stated

[21] Financial measures based on net profits are particularly problematic in Slovenia due to the peculiarities of the country's accounting system, namely the treatment of the revaluation (revalorisation) of balance sheet items, which directly affect firms' profits. Up until amendments to the Companies Act (2001) and the introduction of new Accounting Standards (SAS, 2002,) Slovenian firms stated their assets, claims, liabilities and capital at their actual values, revaluated on the basis of the retail index or, in the case of short-term investments and long-term investments in loans or liabilities, on the basis of an agreement with their creditors or debtors. Normally, this 'revaluation' reduced firms' profits and caused an under-valuation of Slovenian firms with respect to Western firms (International Accounting Standards only provide for this kind of revaluation in a hyperinflation scenario) and provided firms with a large amount of discretion in drawing up their financial statements.

hypotheses on managerial ownership, we proceed by replacing the privatisation dummies with other ownership variables on our sample of 182 firms.

Table 5.1: Description of the variables used in TFP model and financial model

Δ sales	Change in output expressed as the difference of logarithms of sales for 1999 and 1995. In analysing economic efficiency in the TFP model, the marginal production function was estimated on differences of logarithms (the estimated coefficients thus represent growth rates for a 5-year period).
Δ labour	Change in employed labour in the 1995-99 period.
Δ capital	Change in employed capital in the 1995-99 period.
Y=EBITDA/SALES	Financial performance in the final year (1999) expressed as the ratio of operational cash flow (EBIT plus depreciation of assets) to sales (in %).
Y_0	Initial financial performance at the time of privatisation (1995).
m1	Initial managerial ownership in privatisation (in %).
m2	Final managerial ownership in 1999 (in %).
n1	Initial insider ownership (managers, employees, former employees) in privatisation (in %).
n2	Final insider ownership in 1999 (in %).
$(m1)^2$, $(m2)^2$, $(n1)^2$, $(n2)^2$	Squares of the ownership shares, included to test for non-linearity between performance and ownership of managers and inside owners.
L, I, E	Dummies for listed companies (L = 1), internal unlisted companies (N = 1) and external unlisted companies (E = 1).
lamp1, lamp2, lamp3	Correction factors to eliminate initial differences in performance across ownership groups of companies: L, I, E (so-called Mills' ratios).
P1, P2, P3, P4	Dummies for the level of legal protection of managers as shareholders: P1: $m \leq 10\%$, small shareholders P2: $10\% \leq m < 25\%$, minority shareholders without veto power P3: $25\% \leq m < 50\%$, minority shareholders with veto power P4: $50\% \leq m$, majority shareholders

Table 5.2: Description of the ownership gap variables for all groups of owners, for managers and for inside owners in the 1995-99 period

GAP 1	Initial ownership gap in privatisation, expressed as the average absolute difference between the desired and actual ownership share for all 10 groups of owners (in %).
GAP 2	Final ownership gap in 1999, expressed as the average absolute difference between desired and actual ownership share for all 10 groups of owners (in %).
GAP 3	Change in ownership gap 1995-99, expressed as the difference between GAP1 and GAP2 (in %).
mGAP1	Initial managerial ownership gap expressed as the difference between the desired and actual ownership share for managers in 1995 (in %).
mGAP2	Final managerial ownership gap, expressed as the difference between the desired and actual ownership share for managers in 1999 (in %).
mGAP3	Change in managerial ownership gap 1995-99, expressed as the difference between mGAP1 and mGAP2 (in %).
nGAP1	Initial insider ownership gap (managers, employees, former employees) expressed as the difference between the desired and actual ownership share for inside owners in 1995 (in %).
nGAP2	Final insider ownership gap, expressed as the difference between the desired and actual ownership share for inside owners in 1999 (in %).
nGAP3	Change in insider ownership gap 1995-99, expressed as the difference between nGAP1 and nGAP2 (in %).

Table 5.3: Estimation of the basic 5-year cumulative models on a large sample before including the managerial (insider) ownership variables

	TFP Model		**Financial Model**	
	(1)	**(2)**	**(1)**	**(2)**
Δ capital	0.39 (7.741)***	0.409 (8.20)***		
Δ labour	0.75 (18.579)***	0.74 (18.178)***		
Y_0			0.590 (9.183)***	0.638 (9.268)***
I		-0.597 (-2.379)**		-20.702 (-2.266)**
E		-0.711 (-2.533)**		-11.185 (-1.085)
Sector dummies?	*YES*	YES	*YES*	YES
Correction for selection		YES		YES
Constant	YES	YES	YES	YES
Adj R^2	0.6285	0.6410	0.2340	0.269
F-stat	28.48	24.89	5.96	6.10
No. of observation	407	389	407	389

*t-statistics in parentheses; ***, ** and * indicate the statistical significance of coefficients at 1, 5 and 10 percent, respectively*

6. Managerial ownership and firm performance. Empirical results

The main results of the models testing the relationship between managerial (insider) ownership and firm performance are summarised in Table 6.1. The following conclusions can be drawn:

1. Managerial ownership usually has a positive effect on firm financial performance, while no such effect is observed for economic efficiency or total factor productivity growth. The hypothesis *H1* hence holds true only for financial performance, which is mostly short-term oriented and a less important indicator of long-term firm performance;
2. The effect of managerial ownership on firm financial performance is positive and significant for unlisted firms, while this relation is not significant for firms listed on the Stock Exchange. Hence, managerial ownership in Slovenia does not seem to result from the alternative mechanisms of agency problem solving in firms with dispersed ownership (which is mostly the case for listed firms). One possible explanation is that the pressures of other outside owners in listed firms by themselves ensure good financial performance, while in unlisted firms (with passive outside owners) performance improves only with a higher managerial stake. The observed positive effect in unlisted firms

somewhat contradicts the *H7* that managers in unlisted firms acquire shares (in the black market) only for speculative reasons and not for economic reasons;

3. The positive effect of managerial ownership is confirmed only for stakes exceeding 10 percent. The incentives for good financial performance for those managers holding below 10 percent of shares are probably too small to outweigh the private benefits of control that can be, given the relatively passive outside owners and the insiders' support, gained irrespective of their ownership shares;
4. The finding stated in 3 above confirms the nonlinear relationship between managerial ownership and firm performance (consistent with H2). Contrary to developed market economies where managerial ownership first has a positive effect and the entrenchment effect prevails above a given share of managerial ownership, we observe an U-shape relationship for Slovenia. The estimated coefficients (-2.7 for m2 and 0.084 for (m2)2) indicate that the function reaches its minimum at 16 percent ownership, at which incentive effects (positive effects) prevail over entrenchment effects (see Figure 6.1). Hence, the standard explanation of managerial ownership as one of the mechanisms reducing the agency problem does not seem to fit into the Slovenian story. Here, we must bear in mind that due to passive outside owners (funds) and, on the other hand, passive and supportive inside owners, Slovenian managers already enjoyed substantial power at the end of privatisation, despite their relatively limited ownership shares. Hence, the private benefits of control that accrued to the managers are not directly linked to their ownership stakes but to the passivity of other owners. Hence, managers start behaving like real owners (and consequently are concerned about the firm's financial performance) only when they reach a determinate ownership share; it is only at this point that their share is high enough for the incentive effect to prevail over the entrenchment effect;
5. The influence of insider ownership on firm financial performance is less clear; when significant, the relation is negative. When below 25 percent, insider ownership has a negative and significant impact on firm economic efficiency (TFP). With minority stakes, inside owners have no substantial power in corporate decision-making (e.g. the right of veto) and hence they find it more difficult to identify with the firm;
6. The negative influence of insider ownership is significant for listed companies, while no such effect is observed for unlisted firms. This is consistent with the finding in point 5 above since insider ownership tends to be lower in listed firms. Hence, private benefits prevail in the case of inside owners even with the higher investor protection in listed firms. In fact, inside owners share substantial decision-making power in Slovenian firms regardless of their actual ownership share; hence, with minority stakes employees have a low level of motivation to behave like owners and end up exploiting their ownership in order to consolidate their position in the firm's decision-making.

Table 6.1: Significance of managerial and insider ownership variables in TFP models and financial models, 1995-99

(n=180)

	TFP Model	**Financial Model**
Management Ownership		
m1		
m2		(+)*
Δm		
Listed (J=1); m2		
Non-listed (J=0); m2		(+)**
[0%-10%] (P1=1); m2		
[10%-25%] (P2=1); m2		(+)*
[25%-50%] (P3=1); m2		
[50%-100%] (P4=1); m2		
m1, $(m1)^2$		
m2, $(m2)^2$		(-)** , (+)***
Insider Ownership		
n1		
n2		
Δn		
Listed (J=1); n2		(-)*
Non-listed (J=0); n2		
[0%-10%] (P1=1); n2	(-)***	
[10%-25%] (P2=1); n2		
[25%-50%] (P3=1); n2		
[50%-100%] (P4=1); n2		
n1, $(n1)^2$		
n2, $(n2)^2$		

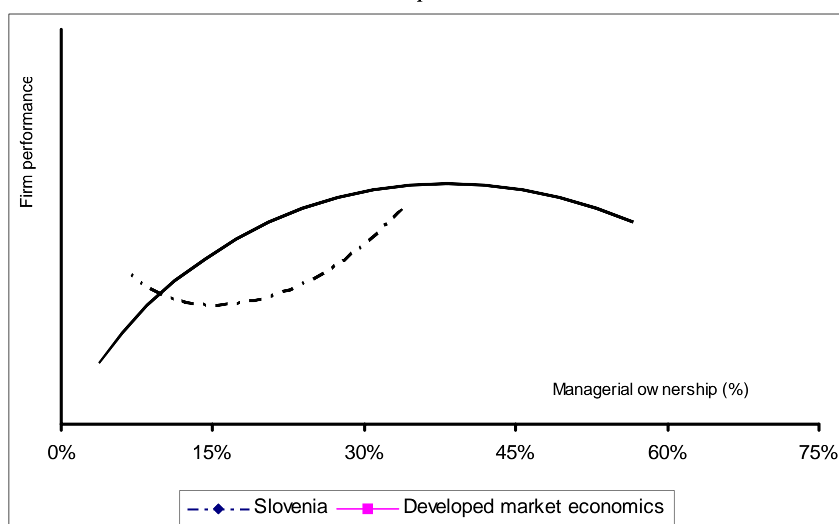
****, ** and * indicate the statistical significance of coefficients at 1, 5 and 10 percent, respectively*

Table 6.1: Significance of managerial and insider ownership variables in TFP models and financial models, 1995-99 *(n=180)*

	TFP Model	Financial Model
Management Ownership		
m1		
m2		(+)*
Δm		
Listed (J=1); m2		
Non-listed (J=0); m2		(+)**
[0%-10%] (P1=1); m2		
[10%-25%] (P2=1); m2		
[25%-50%] (P3=1); m2		(+)*
[50%-100%] (P4=1); m2		
m1, $(m1)^2$		
m2, $(m2)^2$		(-)** , (+)***
Insider Ownership		
n1		
n2		
Δn		
Listed (J=1); n2		(-)*
Non-listed (J=0); n2		
[0%-10%] (P1=1); n2	(-)***	
[10%-25%] (P2=1); n2		
[25%-50%] (P3=1); n2		
[50%-100%] (P4=1); n2		
n1, $(n1)^2$		
n2, $(n2)^2$		

****, ** and * indicate the statistical significance of coefficients at 1, 5 and 10 percent, respectively*

Figure 6.1: The non-linear relationship between firm performance and managerial ownership:



comparing Slovenia and developed market economies

In order to take into account the distribution of power between different stakeholders and the discrepancy between the actual and desired ownership structure, we perform further regressions with ownership gaps as explanatory variables. The results for both models are presented in Table 6.2 and may be summarised as follows:

1. The ownership gap has no significant effect on economic efficiency (TFP growth), while the effect on financial performance is negative and statistically significant, consistent with *H8;*
2. Managerial frustration has stronger negative effects on financial performance than the frustration of inside owners and the overall ownership frustration. The coefficients corresponding to the initial and final difference between optimal and actual managerial ownership are negative and highly significant. This is consistent with *H6;* the opportunities for expropriating the private benefits of control for unsatisfied managers are highest due to the initial 'manager control bias', which does not arise from managerial ownership but from the passivity of other outside owners;
3. We further confirm *H8*; while managerial frustration exerts a negative effect in the short-term, managers seem to behave rationally and do not jeopardise the firm's long-term performance (TFP growth);
4. Two main tendencies can be observed when comparing Table 6.1 and Table 6.2: i) the actual managerial share is positively related to firm financial performance (see the row corresponding to m2 in Table 6.1); and ii) the planned increase in managerial ownership has a negative effect on firm financial performance (see the row corresponding to mGAP1 and mGAP2 in Table 6.2). In fact, our *H9* predicts that the negative effect prevails during the transition towards the optimal managerial share. The hypothesis is confirmed by the results presented in Table 6.3, which includes the actual managerial ownership share (column 1), the planned increase in the managerial ownership (column 2) and both (column 3) as explanatory variables. When including both variables, the negative effect linked to the planned increases in managerial ownership (mGAP2) outweighs the positive incentive effect associated with the actual managerial ownership shares (m2);
5. A more detailed analysis (see columns 4 and 5 in Table 6.3) shows that the negative effect only prevails when managers hold less than 10 percent of firm capital, while the positive effect prevails in those firms whose managers hold more than 10 percent. Hence, the ownership ambitions of managers with minority stakes are so high that this leads to lower financial performance. The latter may reflect the managers' attempts to influence the value of the firm's shares or real factors, e.g. the consequences of the direct or indirect financing of share acquisitions out of corporate funds.

Table 6.2: Significance of ownership gap variables in TFP models and financial models, 1995-99

	TFP Model	Financial Model
All Group of Owners		
GAP1 – initial gap		(-)*
GAP2 – final gap		(-)**
Managers		
mGAP1 – initial gap		(-)***
mGAP2 – final gap		(-)***
Inside Owners		
nGAP1 – initial gap		

Table 6.3: Financial models with actual managerial ownership (m2) and/or planned increase in managerial ownership (mGAP2) as explanatory variables

	(1)	(2)	(3)	(4) m<10%	(5) m ≥10%
Y_0	0,476 (4,227)***	0,655 (3,998)***	0,551 (5,076)***	0,560 (4,386)***	0,614 (1,818)*
m2	0,171 (1,709)*		0,0586 (0,593)	0,287 (0,795)	0,701 (2,414)**
mGAP2		-0,377 (-4,223)***	-0,188 (-3,707)***	-0,263 (-4,098)***	0,0375 (0,519)
Cons.	4,24 (1,272)	8,402 (1,617)	6,941 (2,138)**	7,663 (2,074)*	-11,925 (-1,365)
Sector Dummies?	Yes	Yes	Yes	Yes	Yes
Adj R2	0,1996	0,3181	0,2816	0,2857	0,4964
F stat	2,78	2,73	3,65	3,20	2,66
No. observations	151	150	150	122	28

*t-statistics in parentheses; ***, ** and * indicate the statistical significance of coefficients at 1, 5 and 10 percent, respectively*

7. Conclusions

The empirical analysis of managerial ownership and firm performance in the Slovenian post-privatisation period does not provide any support for the conclusion that managerial ownership positively influences the long-term economic efficiency of

Slovenian firms (measured as total factor productivity growth). The percentage of firm capital in the hands of managers does however have some positive impact on the firm's financial performance; the later is in any case outweighed by the negative effect associated with the planned increases in managerial ownership, especially in those firms where managerial frustration with the ownership structure is still relatively high. Poorer financial performance might have no real foundations and could simply be led by managerial efforts to reduce the value of firm shares; however, it is real when it results from managers' expropriation of corporate funds for financing their share acquisitions.

The first empirical results indicate that we can expect managerial ownership to have a positive effect (and hence create incentives) on firm financial performance, in particular in unlisted firms and in those firms whose managers hold more than 10 percent of the capital. We find the main reasons for the nonlinear relationship between managerial ownership and firm performance in the initial management control bias, associated with the passivity of other owners rather than with the managerial ownership stakes. While this initial power provides managers with great possibilities to extract the private benefits of control, the incentive effect only seems to prevail when the managerial share exceeds the 10-percent threshold. On the other hand, the non-transparent increase seen in managerial ownership in unlisted firms fortunately seems to have no negative effect on the economic efficiency and hence the long-term performance of Slovenian firms[22].

References:

Agraw, A., Knoeber, C., R. (1996), 'Firm Performance and Mechanisms to Control Agency Problems between Managers and Shareholders', *Journal of Financial Quantitative Analysis*, **31**, 377-397.

Barclay, M. J. and Holderness, C. G. (1991), 'Negotiated Block Trades and Corporate Control', *Journal of Finance,* **46**, 861-878.

Barnhart, Sc. W., and Rosenstein, St. (1998), 'Board composition, managerial ownership, and firm performance: An empirical analysis', *Financial Review*, **33**, 1-16.

Becht, M. (2001), 'Beneficial Ownership in the United States', in Becht, M., and Barca, F. (eds.), *The Control of Corporate Europe,* Oxford University Press.

Blanchard, O., Aghion, P. (1996), 'On insider privatisation', *European Economic Review,* **40**, 759-766.

Boycko, M., Shleifer, A., Vishny, R., W. (1994), 'Voucher Privatization', *Journal of Financial Economics,* **35**, 249-266.

Boycko, M., Shleifer, A., and Vishny, R., W. (1996) "A Theory of Privatization", *The Economic Journal*, **106**, 309-230.

Bull, I. (1989), 'Financial Performance of Leveraged Buyouts: An Empirical Analysis', *Journal of Business Venturing*, **4**, 263-79.

Cho, Myeong-Hyeon (1988), 'Ownership structure, investment, and the corporate value: An Empirical Analysis', *Journal of Financial Economics,* **47***,* 103-121.

[22] Further estimations and corrections for the endogeneity of managerial ownership (FEM and REM, SYS-GMM, annual data with figures for 2000 and 2001) are necessary in order to provide stronger support for our results. These are clearly issues for our further research.

Chung, K., H., Pruitt, S., W. (1996), 'Executive ownership, corporate value, and executive compensation: A unifying framework', *Journal of Banking and Finance*, **20**, 1135-1159.

Claessens, S., Djankov, S. (1998), 'Managers, Incentives and Corporate Performance: Evidence from the Czech Republic', World Bank, *mimeo*.

Claessens, S., Djankov, S. (1998*), Politicians and firms in seven Central and Eastern European countries. Washington*: The World Bank (*mimeographed)*.

Demsetz, H. and Lehn, K. (1985), 'The structure of corporate ownership: Causes and consequences', *Journal of Political Economy*, **93**, 1155-1177.

Denis, D., J., and Denis, D., K. (1994), 'Majority owner-managers and organizational efficiency', *Journal of Corporate Finance*, **1**, 91-118.

Denis, D., J., Denis, D., K. and Sarin A. (1998), 'Agency Problems, Equity Ownership and Corporate Diversification', *Journal of Finance*, **52**, 135-160.

Dewatripont, M. and Roland, G. (1995). 'The design of reform packages under uncertainty', *American Econonic Review*, **85**, 1207-1223.

Djankov, S. and Murrel, P. (2000), *Enterprise restructuring in transition: A quantitative survey,* Washington: The World Bank *(mimeographed).*

Domadenik, P., Prasnikar, J., and Svejnar, J. (2000), 'Prestrukturiranje slovenskih podjetij v razmerah nepopolno razvitih trgov', in Prasnikar, J. (ed.), *Internacionalizacija slovenskega podjetja,* Ljubljana, Finance.

EBRD Transition Report, EBRD, 1998.

Faccio, M., Lasfer, M., A. (2000), 'Managerial ownership, board structure and firm value. The UK evidence', mimeo.

Frydman, R., Gray, C., W., Hessel, M. and Rapaczynski, A. (1997), 'Private ownership and corporate performance: Evidence from transition economies', *Research Report,* New York University Press.

Goergen, M. and Reeneboog, L. (2001), 'Strong Managers and Passive Institutional Investors in the United Kingdom', in Becht, M., and Barca, F. (eds.), *The Control of Corporate Europe,* Oxford University Press.

Gregoric, Aleksandra (2003), 'Corporate Governance in Slovenia: An International Perspective", *Ph.D. Dissertation*, Ljubljana, Faculty of Economics, University of Ljubljana.

Gregoric, A., Prasnikar, J. and Ribnikar, I. (2000), 'Corporate Governance in Transitional Economies: The Case of Slovenia', *Economic and Business Review,* **2,** 183:207.

Himmelberg, C., P., Hubbard, R., G., Palia, D. (1999), 'Understanding the determinants of managerial ownership and the link between ownership and performance', *Journal of Financial Economics*, **53**, 353-384.

Holderness, C., G., Kroszner, R., S., Sheehan, D., P. (1999), 'Were the Good Old Days That Good? Changes in Managerial Stock Ownership Since the Great Depression', *The Journal of Finance*, **54**, 435-469.

Holderness, C. and Sheehan, D., P. (2000), 'Constraints on Large-Block Shareholders', in Mork, R., K. (ed.), *Concentrated Corporate Ownership,* The University of Chicago Press, 139-177.

Jensen, M., C. and Warner, J., B. (1988), 'The distribution of power among corporate managers, shareholders, and directors', *Journal of Financial Economics*, **20**, 3-24.

Jensen , M. C., and Meckling, W. H. (1976), 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure', *Journal of Financial Economics,* **3**, 305-360.

Kalmi, P. (2001), *On the (In)Stability of Employee Ownership: Estonian Evidence and Lessons for Transition Economies, Ph.D. Dissertation,* Copenhagen Business School Ph.D. Series 10.02.

Knezevic, L., Pahor, M. (2004), 'The Influence of Management Turnover on Enterprise Performance and Corporate Governance: The Case of Slovenia', *Working Papers*, No. 153, Faculty of Economics, University of Ljubljana, Slovenia.

Kole, Stacey, R. (1995), 'Measuring managerial equity ownership: a comparison of sources of ownership data", *Journal of Corporate Finance*, **1,** 413-435.

Loderer, C., Martin, K. (1997), 'Executive stock ownership and performance. Tracking faint traces', *Journal of Financial Economics*, **45**, 223-255.

McConnell, J., J., Servaes, H. (1990), 'Additional evidence on equity ownership and corporate value', *Journal of Financial Economics*, **27**, 595-612.

Mikkelson, W. H.and Partch, M., M. (1989), ' Managers' Voting Rights and Corporate Control', *Journal of Financial Economics,* **25**, 263-290.

Morck, R., Shleifer, A., and Vishny, R., W. (1988), 'Management ownership and market valuation', *Journal of Financial Economics*, **20**, 293-315.

Mueller, E. and Spitz, A. (2002), 'Managerial Ownership and Firm Performance in German Small and Medium-Sized Enterprises', mimeo.

Nuti, D.M. (1997), 'Employeeism: Corporate Governance and Employee Share Ownership in Transition Economies', in Skreb, M., *Macroeconomic Stabilisation in Transition Economies,* Cambridge University Press, Cambridge.

Pagano, M., Volpin, P. (2002), 'Managers, Workers and Corporate Control', *ECGI Finance Working Paper*, 1/2002.

Peklar L.F., and Podbevsek, G. (2002). "Manager naj bo lastnik. Cetrtinski". *Manager*, Ljubljana, 6/2002.

Pohl, G., Anderson, E., R., Claessens, S., and Djankov, S. (1997), 'Privatization and restructuring in Central and Eastern Europe – Evidence and policy options', *The World Bank Technical Papers 368*, Washington: The World Bank.

Prasnikar, J. (ed.) (1999), *Poprivatizacijsko obnasanje slovenskih podjetij*, Ljubljana: Gospodarski vestnik

Prasnikar, J. and Svejnar, J. (1991), 'Workers' Participation in Management vs. Social Ownership and Government Policies: Yugoslav Lessons fro Transforming Socialist Economies', *Comparative Economics Studies,* **33**, 27-46.

Prasnikar, J. and Svejnar, J. (1998). 'Investment and wages in the Slovenian firms during the transition', *Working paper,* The William Davidson Institute at the University of Michigan Business School.

Prasnikar, J. and Gregoric, A. (2002), 'The Influence of Workers' Participation on the Power of Management in Transitional Countries', *Ann. Public Coop. Economics,* June, 2002, **73**, 269-297.

Simoneti, M.; Böhm, A., Damijan P., J., Majcen, B., Rems, M., and Rojec, M. (2001), *Spremembe v strukturi in koncentraciji lastnistva ter poslovanje podjetij po razdelitveni v Sloveniji v razdobju 1995-99: Empiricna in institucionalna analiza;* Ljubljana, CEEPN Raziskave.

Simoneti, M., Böhm, A., Rems, M., Rojec, M., Damijan, J., P. and Majcen, B. (2003a), 'Firms in Slovenia Following Mass Privatization', In Blaszczyk B., I. Hoshi and R. Woodward (eds.) *Secondary Privatization in Transition Economies: The Evolution of Enterprise Ownership in the Czech Republic, Poland and Slovenia*, Palgrave, Basingstoke.

Simoneti, M., Damijan P., J., Rojec, M., and Majcen, B. (2003b): 'Efficiency of mass privatization vs. gradual privatization: Owner and seller effects on performance of companies in Slovenia', *GDN Research Medal Paper.* 4th GDN Annual Global Conference on Globalization and Equity (January), Cairo.

Simoneti, M., Rojec, M., and Gregoric, A. (2003c), 'Privatization, restructuring and corporate governance of the enterprise sector in Slovenia', in M. Mrak, M. Rojec and C. Silva-Jauregui (eds, 2004), *Slovenia: From Yugoslavia to the European Union*, The World Bank.

Smith, S., Vodopivec, M. and Cin, B., C. (1997), 'Privatization incidence, ownership forms and firms performance: Evidence from Slovenia', *Journal of Comparative Economics*, **25**, 158-179.

Stulz, R. (1988), 'Managerial control of voting rights. Financing policies and the market for corporate control', *Journal of Financial Economics,* **20**, 25-54.

Stiblar, F. (2003). 'Solastnistvo managementa je zazeleno: ce preprecimo MBO, je to skodljivo: ce ne postavimo pravil, je ravno tako''. *Manager, No.3, Ljubljana*, 44-47.

Wright, M. Buck, T. and Filatotchev, I. (2003), 'Post-Privatisation Effects of Management Employee Buyouts', *mimeo*.

Walsh, P., P., and Whelan, C. (2001). 'Firm performance and the political economy of corporate governance: survey evidence for Bulgaria, Hungary, Slovakia and Slovenia'. *Economic Systems*, **25**, 85-112.