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THE INFLUENCE OF MANAGEMENT TURNOVER ON ENTERPRISE PERFORMANCE AND CORPORATE GOVERNANCE: THE CASE OF SLOVENIA

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Abstract: The study looks at the influences of corporate governance issues on management turnover in Slovenia and compares them to similar topics in other developed and transitional economies. We gathered data through a questionnaire of 200 of the largest Slovenian companies. The biggest impact on management turnover was a change in the owners, however when companies perform better this also influences management's tenure. Yet there is a lack of proper corporate governance as reflected by the low effects of Supervisory Board composition and ownership concentration. The changes in management are more a consequence of the ongoing transition process than of proper owners effectively controlling the companies.

Key words: Management turnover; Corporate governance; Principal-agent theory; Slovenia; Transition economies.

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1. INTRODUCTION

The theoretical background to CEO turnover stems from the research on executive compensation and firm performance using the principal-agent theory (Lausten, 2002). Agency theory (Jensen and Meckling, 1976) examines the problems, partial solutions and the principal-agent relationship in which one party – the principal – delegates decision-making responsibilities to another party – the agent – who is paid compensation.

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The problems addressed in agency theory arise from two fundamental assumptions: goal incongruence and information asymmetry (Chakravarty and Zajac, 1984). Goal incongruence refers to the partly conflicting objectives of the principal and the agent (both seek to maximise their utility functions). Informational asymmetry concerns the problems of adverse selection and moral hazard. The first of these refers to the rudimentary amount of information available to the principal about various characteristics of the agent, and the second to the lack of transparency in the actions and decisions of the agent. This last concept is particularly important when discussing the relationship between CEO turnover and company performance.

The basic aim of this paper is to examine whether there is a relationship between the replacement of Management Board members and a company's corporate performance. The study is comparable to similar studies in both developed economies, e.g. to the study by Lausten (2002) on a sample of Danish companies or Brunello (2000) on a sample of Italian companies, and to studies in transitional economies, e.g. the study by REB Monitoring (2003) on a sample of Russian companies. We perform an analysis of Management Board turnover in relation to performance, ownership structure, Supervisory Board composition and management characteristics on panel data set for a sample of 204 Slovenian companies in the 1998 to 2002 period.

The paper's biggest contribution involves its re-examination of the influence of corporate governance on management turnover and the finding that in transitional countries these influences are similar to those in developed economies. In Russia REB Monitoring (2003) found that the managers' entrenchment is positively related to insider ownership and negatively to a firm's performance; thus the probability of being replaced is higher for poorly performing top executives than for well performing top executives. We found similar results for Slovenia, although most replacements of managers can be attributed to personal reasons. Notably, the results also indicate a lack of proper corporate governance in Slovenia as shown by the small effect of Supervisory Board composition and ownership concentration on the likelihood of a management change.

We start the paper with existing evidence on management turnover in developed and transition countries. A description of corporate governance in Slovenia follows. In the third section we describe the data while the fourth section continues with a description of the methodology and hypotheses to be tested. The results of the empirical analysis are presented in the fifth section; while conclusions are drawn in the sixth section.

2. THEORETICAL PERSPECTIVES ON CEO TURNOVER – THE EXISTING EVIDENCE

The current evidence on management turnover shows that top executives' turnover is associated with poor performance and that there is an inverse relationship between the probability of a CEO being replaced and a firm's performance. In the existing studies

one can find no generally accepted measure for assessing a company's performance. To measure a company's performance authors mostly use market measures related to the market price of the company's share, while other authors apply accounting measures from financial statements and still others use a third approach that involves the use of both measures to evaluate a company's performance.

Irrespective of the company performance measure actually used, studies show that there is a difference in management (or specifically CEO) turnover sensitivity and companies' performances within countries. Examining samples of American companies, Warner et al. (1988) Weisbach (1988), Jensen and Murphy (1990), Murphy and Zimmerman (1993), Denis and Denis (1995) concluded that a company's performance is significantly related to the probability of management turnover. For a sample of Danish companies Mette Lausten (2002) concludes there is an inverse relationship between management turnover and a company's performance. Giorgio Brunello et al. (2000) and Kaplan (1994) on a sample of Italian and German companies came to almost the same conclusions. Kiang and Shivadasani (1995) and Kaplan (1994) analysed the probability of management turnover and company performance on a sample of Japanese companies. In both studies they found there is no significant relationship between the two variables in the present time period, however there is a negative relationship between delayed results in company performance and management turnover. For a sample of Russian companies REB Monitoring (2003) found that the replacement of top executives is more likely to occur in poorly performing companies.

Ownership concentration influences management turnover and the efficiency of a company's performance. Concentrated ownership should provide efficient management control, the maximisation of shareholders' interests and the availability of external sources for financing the company (Shleifer and Vishny, 1997). Bral and Means (1932) said that controlling block holders are more efficient monitors of a company's performance than a large number of stockholders. So the probability of turnover in the case of concentrated ownership is higher and opposite. However, when the controlling block holder's share is high enough this enables the stockholder to exert a direct influence on the decision-making process leading to the possibility of an expropriation of the company's assets and reduced company performance. In the case of dispersed ownership, the question of management control arises.

The probability of managers being replaced is also influenced by the owner's identity. The possibility of executive managers being turned over is positively related to the presence of external owners (Denis et al. 1997). These results point out that external owners are better controllers than internal owners, especially managers. Demsetz (1986) concluded that management ownership is a structured endogen with the aim of efficient internal control of the company. Management ownership increases the defensive behaviour of management because of the turnover threat, especially when an incompetent manager is in a leading position in the company. Mikelson and Partch (1996), and Denis

et al. (1997) found a negative relationship between management turnover and management ownership of a company. The authors found that sensitivity to management turnover is inversely related to management's ownership share of the company. Contrary to these results, in his research Weisbach (1988) could not confirm the relationship between management ownership and the probability of turnover. In Russia, inside ownership exerts a negative impact on management turnover while outside ownership has a positive one (REB Monitoring, 2003).

Different theories have been formed on the influence of the ownership structure on a company's performance. Concerning Jensen's hypothesis on the convergence of interest, managerial shareholding helps align the interests of shareholders and managers (principals and agents). With regard to this hypothesis, as the proportion of managerial equity grows the company's performance improves as well (Jensen, 1993). De Angelo and De Angelo (1985) also found that it is reasonable for owners to motivate the managers. They should invest in the company and share their faith with other company shareholders.

An ownership change is usually connected with management turnover. In these cases there is greater higher probability that the management turnover is not connected with the poor performance of the company but is caused by the ownership change (hostile or friendly takeover). Empirical researches (Holderness and Sheeham, 1985; Barclay and Holderness, 1991) show that the probability of a management turnover rises after a company has been taken over. In Russian companies the occurrence of a top executive replacement is positively related to the gross intensity of share redistribution, i.e. changes in the management team are usually preceded by substantial alterations of ownership structures (REB Monitoring, 2003).

Further, the probability of a turnover of management is influenced by the structure and size of the Supervisory Board. The structure and function of Supervisory Boards differs significantly between countries. Some countries have introduced a one-tier corporate governance system, others have a two-tier one, while still others have introduced both systems of corporate governance. The difference between the two systems lies in the forming of an intermediate body (Supervisory Board) between the shareholders (the Shareholders Assembly) and the management (Management Board) in the two-tier corporate governance system. In the one-tier corporate governance system the Management Board is appointed by representatives of the shareholders and members of the Management Board. In a two-tier system the Supervisory Board represents shareholders' interests and its main roles are to control and appoint the Management Board. The one-tier system is found in most developed countries (Great Britain, the USA, Belgium, France, Italy etc), while the two-tier system we can be found, for example, in Germany and the Netherlands. Due to such differences in corporate governance systems it is very hard to generalise the significance of the Supervisory Board's composition and size for management turnover.

The connection between management turnover and a company's performance depends on the capabilities of the supervisor to evaluate the managers' performance. Theoretical and empirical literature mostly focuses on (researches into) questions connected with the Supervisory Board's composition, specifically the share of internal and external members on the board of directors in the one-tier system and the share of employees and owners on the Supervisory Board in the two-tier system. Besides that, factors influencing management turnover are the role and size of the Supervisory Board; the number of independent members on the board of directors and the way members are selected.

The composition of the Supervisory Board (in a two-tier system) or board of directors (in a one-tier system) has a significant influence on reducing agency costs. Where there is a greater share of external members on the Board (especially in the one-tier system) this increases the supervision of a company's performance. External members contribute to company performance through their expert evaluation of strategic decisions (Brickley and James, 1987; Byrd and Hackman, 1992; Lee et al., 1992) and through efficient Management Board monitoring (Weisbach, 1988). For a sample of American companies Wiesbach found that the probability of management turnover and companies' performance is more significant if there is a majority of outside experts on the board of directors. Borokovich concluded similarly to Weisbach. It is common for insiders to be entrenched by the current management and their business policy, which makes them poor monitors (Conyon, 1998). Jensen, on the other hand, questions the actual level of external experts' efficient control if we consider that managers do not usually share all information with the monitors.

In the privatisation process most Slovenian firms opted to form a joint-stock firm and introduced the two-tier system of governance with a Supervisory Board, composed of representatives of the owners (shareholders) and employees. Prašnikar and Gregorič (2002) found that the presence of employees on the Supervisory Board erodes the power of management to introduce a growth strategy and to internationalise the company.

With regard to the influence of the Supervisory Board's size on a company's performance, the researches conducted so far yield different results. Some claim that a smaller Supervisory Board (or board of directors) is more efficient (Shaw, 1981; Jewel and Reitz, 1981; Olson, 1982; Gladstein, 1984; Lipton and Lorsch, 1992; Jensen and Meckling, 1976), while others claim something different (Yermack, 1996; Eisenberg et al., 1998).

Another question arising here is the method of selecting Supervisory Board (board of directors) members. In the majority of European countries the controlling block holders are in charge of selecting Supervisory Board members because they are further representing their interests. The influence of the Supervisory Board's composition on management turnover is similar in this case to the influence of the ownership structure. In the USA external members of the board of directors are usually selected on the basis of management's recommendations (Hart, 1995).

Management's characteristics have a significant influence on the probability of management turnover. There is no theoretical background to shed some light on the relationship between management's tenure and the probability of management turnover. Empirical results differ; some authors claim that among the variables there is a negative and significant relationship (Puffer and Weintrop, 1991;Dennis et al. 1997) whereas others claim there is no significant relationship (Kim, 1993).

The second characteristic that influences management turnover is managers' age. The probability of management turnover grows and is very high among managers aged between 60 and 65 years of age. The reason for management turnover here is mainly a manager's retirement and not so much a reflection of the company's performance. Jensen and Murphy (1990) confirmed the hypothesis that the probability of management turning over because of poor company performance increases among younger managers. According to them, it is harder to replace older managers in their position because they are waiting to retire.

Debt is another mechanism of management control, especially in companies with a dispersed ownership structure (Hart, 1995). The management-creditor relationship often leads to the moral hazard problem. Creditors' power to influence business decisions in the company arises from the many controllers' rights belonging to them when the company does not fulfil all of its responsibilities. In extraordinary cases when a company goes into bankruptcy, control is transferred from the owners to the creditors. High business risk and low liquidity raise the probability of a company going into bankruptcy, which in the end leads to management turnover. Empirical studies confirm the significance of indebtedness as a variable that influences management turnover. Numerous studies (Hotchkiss, 1995; Betker, 1993; Gilson and Vetsuypens, 1993) have shown that among bankrupt companies the management turnover rate is high.

3. CORPORATE GOVERNANCE IN SLOVENIA

Before privatisation Slovenian and other ex-Yugoslav firms were traditionally socially-owned, which meant that society at large owned them but in practice government officials, managers and workers shared the control. Legally, enterprise decisions were made through a complicated interplay of four institutions: the 'Self-Management', the 'Operational Management', 'Socio-political Organisations and 'Socio-political Communities'.[1] The task of self-management was to make basic policy decisions within their firms; these decisions were made at the BOAL (basic organisations of associated labour) level, the smallest possible units that produced an identifiable and hence potentially

[1] We are referring here to the so-called period of integrally planned self-management (1971-88) with less market orientation and more divisionalisation of and bargaining among economic units, which was introduced after the collapse of the market self-management model (1961-70) (Prasnikar and Svejnar, 1991).

tradable product. The operational management undertook day-to-day management decisions at the level of the WOAL (working organisation of associated labour), a unit that was composed of the constituent BOALs and that corresponded most closely to the Western concept of a firm. The system also permitted BOALs in one or several WOALs to voluntarily form a 'composite organisation of associated labour' (COAL) as a means of fostering vertical integration and providing a counterpoise to a large capitalist firm.

The Privatisation Law (1992) was the legal framework for the privatisation of socially-owned companies in Slovenia. The Privatisation Law (1992) defines privatisation as a combination of voucher and cash privatisation. The Law allocated 20 percent of a firm's shares to insiders (workers), 20 percent to the Development Fund that auctioned the shares off to investment funds, 10 percent to the National Pension Fund, and 10 percent to the Restitution Fund. The remaining 40 percent of company shares was given over to the workers' council or board of directors (if one existed) to allocate them for sales to insiders (workers) or outsiders (through a public tender). Based on the decision on the allocation of this remaining 40 percent of shares, firms can be classified as being privatised to insiders (internal privatisation) or outsiders (external privatisation).

After privatisation, the Slovenian legal framework for corporate governance was introduced by the Companies Act in 1993. The Companies Act allowed companies to introduce both one- and two-tier corporate governance systems. Exceptions were the joint-stock firms involving a public gathering of capital and firms listed on the official or free markets of the Ljubljana Stock Exchange. For these firms, the two-tier system is compulsory. As most privatised Slovenian firms opted for the form of a joint-stock firm, they also introduced the two-tier system of governance with a Supervisory Board (Gregorič et al., 2000).

After the privatisation process was completed, the ownership structure of Slovenian companies was dispersed and most companies were privatised to insiders. Internal privatisation took place in approximately 80 percent of companies[2] (Jaklin, 1995). Based on data from 2002[3], the average share of insider ownership was 31.16 percent, with a management share of 3 percent. The most important individual owners were investment funds (on average 18.12 percent) and state funds (on average 16.81 percent). The trend shows decreasing insider ownership (the trend reveals a decreasing ownership share in the hands of workers and an increasing ownership share in the hands of managers) and the concentration of ownership of individual owners, investment and state funds (Gregorič, Prašnikar, 2000). Results of researches show (Prašnikar and Gregorič, 2002) that insider ownership positively and significantly influences management power. In insider owner-

[2] Large companies chose the external privatisation model primarily because of their size.

[3] The sample of 130 companies included those responding to the questionnaire within the research 'Post-privatisation behaviour of companies' carried out at the Research Centre of the Faculty of Economics, Ljubljana.

ship higher ownership shares are in the hands of current and former employees. Employees are usually passive owners and managers manage their ownership share through proxy voting and they thereby increase their power in the companies (Gregorič, 2003). Mramor, Groznik and Valentinčič (1999) concluded that because of these passive insider and outsider owners managers are managing companies and pursuing their own interests and the interests of the insider owners.

The supervision of external owners is weak while membership on the Supervisory Board of a company is possible with a small (insignificant) ownership share (Pahor, Ferligoj and Prašnikar, 2000). Insiders on average have approximately 35 percent of the membership on the Supervisory Board (Prašnikar, Domadenik, Svejnar, 1999). In general, the management turnover rate in Slovenia is low. At the end of 1996, 75 percent of managers had been in the same position for five years (Zupan and Ograjenšek, 1999), which confirms the statement that managers in Slovenia have a longer tenure.

4. DATA DESCRIPTION

The data used in this analysis came from two separate sources. The main database is structured as a panel dataset collected from questionnaires addressed to firms. The research was performed by the Institute for South-East Europe (ISEE) in August and September 2003. The variables from the questionnaire we used comprised information on the ownership structure (total ownership by separate groups of owners), an evaluation of the influence of separate groups of owners, composition of the Supervisory Board (in Slovenia the two-tier system is mandatory for most companies), questions on the characteristics of the Management Board: the educational and personal characteristics of managers, tenure, managerial turnover (with an indication of express reasons for any replacement), annual managerial pay (fixed, variable amounts in tolars or percentage of total pay) in the period from 1998 to 2002.

In our sample 204 questionnaires were returned. This left us with a sample of approximately 1000 observations[4] in 204 firms. In the sample 9.7 percent were small companies (up to 50 employees), 76 percent were medium-sized companies (51-1000) and 14.3 percent large companies (above 1000). The interviewed companies represented 19.5 percent of the sales and assets of all Slovenian companies and employed 20.1 percent of all employees in 2002.

Financial data (balance sheet, income statement) were made available by the Bank of Slovenia under a special contract. The Bank of Slovenia's database contains data on more than 38,000 companies. From this data we composed a second database containing

[4] The panel is unbalanced, for different reasons there are some missing values (e.g. the company was established after 1998), so the actual number of observations differs from analysis to analysis.

balance sheet and income statement data for the 204 firms in our sample, namely those companies that co-operated and returned the questionnaire.

Turnover variable is a dummy variable which takes the value of 1 if a CEO (or some other manager from the management board) is replaced, and 0 otherwise. In the questionnaire there was no direct question on CEO turnover so we computed this variable from the data on CEO tenure. However, since there were questions on the number and reasons for a change in the management board, we decided to use a couple of dependent variables representing management turnover.

Table 1 shows that on average 5.6 percent of CEOs (CEO_TURN) left their position during the sample period (1998–2002).[5] The next dependent variable we used is MBM_TURN, which reports the turnover of at least one manager from the Management Board considering all reasons for turnover (unsatisfactory company performance, unsatisfactory performance of the manager, leaving for a different position and retirement). Variability in this case is higher, as on average in 14.4 percent of observations in sample period there was a change in the Management Board. Further, we excluded the turnover of a Management Board member due to retirement (MBM_TURN_1*), and on average in 10.3 percent of cases the managers were replaced for reasons other than retirement. Whole Management Board turnover (M_B_TURN) took place in 53 companies or, put differently, on average 6.7 percent of observations (or more than 25 percent of companies in the sample) reported the turnover of their whole Management Board.

TABLE 1: Management turnover in the sample period (1998-2002)

Variable	N	Frequency	Mean	Std. Dev.
CEO_TURN	1478	83	0.056	0.23
MBM_ TURN	1051	151	0.144	0.35
MBM_TURN_1*	1049	108	0.1029	0.3040
M_B_TURN	782	53	0.067	0.25

Source: questionnaire data and own calculations.

Table 2 shows the averages of individual characteristics of Management Board members in the sample. On average, the Management Board of a Slovenian company has 2 members (minimum 1, maximum 11), the Management Board member is on average 47

[5] It is noted that this is the lower estimate of turnover one can get from the tenure. Due to the relatively short period involved we do, however, firmly believe that this is a reliable estimate.

years old, has approximately 9 years of tenure in the firm and has been employed on average for 14 years in the company.

TABLE 2: Management characteristics in the sample period (1998-2002)

Variable	N	Mean	Std. Dev.	Minimum	Maximum
NUM_OF_MBM	815	2.02454	1.714768	1	11
MBM_AGE	775	47.65469	7.032364	30	60
MBM_TENURE	782	9.373708	7.202299	0	30
NUM_OF_MBM_Y_IN_C	782	14.7359	9.157447	0	30

Source: questionnaire data and own calculations.

Turning to the measures of firm performance, we followed several previous studies and used accounting-based variables ROA, ROE and the logarithm of total sales (LTS). As economic measures, we used value added per employee in SIT[6] (VA_EMPL (v SIT)) and total sales growth (DTS). We also included indebtedness (debt to assets) (D_A) as another mechanism of management control. Market-based variables were not used because not all the companies in our sample are listed on the official or free markets of the Ljubljana Stock Exchange. The average values of accounting and economic estimators of companies' performance are shown in Table 3.

TABLE 3: Accounting and economic measures of companies' performance in the sample period (1998–2002)

Variable	N	Mean	Std. Dev.	Minimum	Maximum
ROA	1248	.0420783	0.0953129	-.9338509	1.290028
ROE	1249	.0508661	0.4328771	-1	13.12499
LTS	1240	14.74601*	1.522027	8.019613	18.73802
DTS	1010	0.1136257	.2363725	-.9996545	2.223158
VA_EMPL (v SIT)	1235	7397.51	23699.2	21288.46	-634432
D_A	1247	.4082891	.2430491	.0001668	1

* Based on this, the geometric mean of TS is SIT 2.54 billion (EUR 11 million).

Source: accounting data from the BS and own calculations.

[6] In this text we use SIT as the abbreviation for the Slovenian currency – the tolar.

Ownership of the firm is divided into four categories: ownership of the state and privatisation investment funds (OWN_FUNDS); internal ownership (employees, former employees, retired persons and their relatives) (OWN_INTERNAL); management ownership (managers – top, middle, low managers) (OWN_MANAGEMENT); and ownership of foreign and domestic companies (legal entities; banks excluded) (OWN_D_F_COMP). Compared to the initial situation immediately after privatisation, the data show a shrinking of the ownership shares of the state and investment funds as well as insiders, while foreign and domestic companies and management are expanding their ownership shares. These findings support the research results of Gregorič and Prašnikar, 2002.

Data on the identity and ownership stakes of the largest shareholders were not included in the questionnaires since they had already been obtained from the official Shareholders' Register kept and updated by the Central Clearing Securities Corporation. With regard to that data, the largest owners (C1) in companies in the sample has an average share of 34.7 percent, while the first five owners (C5) have on average 61.3 percent. If large shareholders play an important monitoring role, turnover and turnover-performance sensitivity should be stronger the larger the controlling shareholder. In the case of Slovenian companies, based on the average ownership share of the largest shareholder we can conclude that it is not a controlling shareholder.

TABLE 4: Ownership structure and concentration in the sample period (1998–2002)

Variable	N	Mean	Std. Dev.	Minimum	Maximum
OWN_FUNDS	1136	28.52	26.75343	0	100
OWN_D_F_COMP	1135	32.8617	37.20512	0	100
OWN_INTERNAL	1135	17.39432	22.12241	0	100
OWN_MANAGEMENT	1135	4.011274	13.40791	0	100
C1	562	34.70509	20.15121	5.978	99.773
C5	556	61.30509	20.66918	10.000	100

Source: questionnaire data and own calculations

In terms of Supervisory Board composition, in Slovenia an important share is reserved for insiders. Representatives of managers and employees (employees' representatives of the internal owners and employees nominated by the workers' council) (SB_INTER) on average make up 38.89 percent of Supervisory Board members. Representatives of the state and privatisation investment funds (SB_FUNDS) have a 20.48 percentage share of Supervisory Board composition, while independent experts (SB_INDEP) take an active part in the Supervisory Board composition with a 24.8 percent share. Representatives of

banks (banks as creditors and banks as shareholders) (SB_BANKS) have on average just 0.82 of a representative on Supervisory Boards, while representatives of non-financial companies (SB_NON_FIN) have on average 9.6 percentage of representatives in Supervisory Board compositions. The average Supervisory Board in Slovenia has 2.5 members (minimum 0, maximum 17)[7].

TABLE 5: Size and structure of Supervisory Boards in the sample period (1998–2002)

Variable	N	Mean	Std. Dev.	Minimum	Maximum
SB_SIZE	945	4.843386	2.539272	0	17
SB_BANKS	905	.8236429	4.541034	0	33.33333
SB_FUNDS	905	20.48298	22.66854	0	100
SB_NON_FIN	905	9.623736	20.91144	0	100
SB_INTER	905	38.89083	21.97612	0	100
SB_INDEP	905	24.82122	27.33509	0	100

Source: questionnaire data and own calculations.

5. METHODOLOGY AND HYPOTHESES

Turnover is defined as a dichotomous variable (the dependent variable equals zero if a member of the Management Board, the whole Management Board or CEO were still in their previous year's positions, while the dependent variable has a value of one if management turnover took place), the model management turnover is specified as a logit model. The logit model is specified as follows[8]:

Ln (P(Management turnover)/(1 – P(Management turnover))) = f (Performance measure variables, Ownership structure variables, Supervisory Board variables, Management variables characteristics and Debt) + ε.

Although the data are panel data, an OLS estimation of model was used as in the panel (random effects) specification of the model the rho test of the significance of the panel component was not significant, indicating that there was no need to use a panel specification. The prevailing reasons for management turnover give an indication of why the turnover does not really depend on the company. To control for the specific

[7] The legal requirement for companies that are required to have a supervisory board (based on size and number of owners) is three members, however, not all companies in the sample are required to have one.

[8] We decided not to include variables of companies' characteristics in the model because such variables were insignificant due to the sample size.

properties of companies, we did include certain initial properties of the company in some specifications of the model.

The principal aim of this paper is to analyse the following hypotheses:

H1: The relationship between management turnover and company performance is expected to be inverse. The worse the performance of a firm, the greater the probability of the turnover of Management Board members. This hypothesis is consistent with agency theory whereby principals should monitor their agents' actions and react in the event of poor performance.

H2: Increases in the internal ownership share of the company reduces the probability of Management Board member turnover. Management turnover falls along with increasing ownership shares of insider (managers and workers). Employees in Slovenia are usually passive owners and managers manage their ownership shares through proxy voting.

H3: A greater share of foreigners' and domestic companies' ownership increases the probability of Management Board member turnover.

H4: The Supervisory Board's composition has an influence on the probability of Management Board member turnover. The higher the concentration of employees on the Supervisory Board the lower the probability of Management Board member turnover (proxy voting).

H5: Older managers with a longer tenure have a lower probability of turnover. As seen in the existing evidence on management turnover, it is expected that the longer a manager has held their position the less likely it is that the manager will be replaced. Older managers with a longer tenure usually hold their positions until retirement.

6. RESULTS AND EMPIRICAL ANALYSIS

6.1 Logit model predicting management turnover

We base our prediction on two types of models.

In the first model we included as independent variables: performance measures variables, ownership structure variables, gross intensity of inter-group redistribution of shareholdings M[9], Supervisory Board variables, and management variable characteristics. We extended

[9] Gross intensity of inter-group redistribution of shareholdings, M, is defined as:

$$M(t) = 1/2\Sigma_i |d_{ij}(t) - d_{ij}(t-2)|,$$

where $d_{ij}(t)$ and $d_{ij}(t-2)$ are shares of group i in the equity capital of enterprise j in the years t and $t-2$ and N is the total number of surveyed enterprises.

the basic model by adding two groups to the control variables. The first group of control variables is the cost of the companies' characteristics (performance measures, size, number of employees etc.) in 1997. By including these control variables we wanted to control the basic characteristics of the companies in the sample at the beginning of the panel. We realise that the best solution would be to include the data on company characteristics before the privatisation process. Unfortunately, such data are unavailable and we thus decided on the second-best solution. In the second group of control variables are ownership concentration variables. We included these control variables in the model in order to control for the ownership concentration associated with better internal monitoring.

In the second basic model we excluded the ownership structure's gross intensity of the inter-group redistribution of shareholdings, **M**, and instead included changes in the ownership structure. Changes are tracked in four ownership categories: ownership of the state and privatisation investment funds, internal ownership, management ownership and the ownership of foreign and domestic companies. All other independent variables remain the same. The basic model is extended by the previously defined control variables: companies' performance from 1997 and ownership concentration.

So we tested six models (two basic and four with the inclusion of the control variables) for the following dependent variables: turnover of at least one manager from the Management Board considering all reasons for turnover (see Appendix 1), turnover of at least one manager from the Management Board considering all reasons for the turnover (see Appendix 2), CEO turnover (see Appendix 3) and turnover of the whole Management Board (see Appendix 4).

6.2 Turnover of at least one manager from the Management Board considering all reasons for the turnover

A strong and significant effect of performance on the probability of change of at least one manager on the Management Board considering all reasons for the turnover is consistent with the principal-agent theory and confirms our first hypothesis that the relationship between management turnover and company performance is highly negative. The coefficient of ROA is negative and significant (at a 5-percent significance level) in all tested models, except those models in which we included ownership concentration as a control variable. The likelihood of a management turnover increases when a company's performance measure ROA is negative. A negative and significant (at a 10% significance level in most models) coefficient of total sale growth (A_TS), an alternative measure of performance, means that along with growth in total sales the probability of a management turnover decreases.

With regard to ownership changes, the gross intensity of the inter-group redistribution of shareholdings, **M**, is positive and significant in the basic model and in the model in which we included the control variable company performance from 1997. This is

consistent with previous researches; the probability of management turnover rises in the event of an ownership change. We also tested the influence of different ownership group changes. The results support our hypothesis that an increasing share of foreign and domestic companies' ownership (ΔOWN_D_F_COM) raises the probability of Management Board member turnover. We believe these results arise from the fact that domestic and foreign companies are active owners and they mostly become owners in the takeover process, which boosts the probability of management turnover.

In relation to Management Board member characteristics, in all the tested models the average number of years (NUM_OF_MBM_Y_IN_C) Management Board members have worked within the company was slightly negative and significant (at 5% and 10% significance levels). This finding shows that Management Board members who have been with the company for a longer time have a lower probability of being replaced. The variable number of managers on the Management Board (NUM_OF_MBM) is positive and significant (except in the model including ownership concentration as a control variable); the higher the number of managers on a Management Board the greater the likelihood of management seeing at least one manager being replaced.

All of the variables representing the composition and size of the Supervisory Board were non-significant.

6.3 Turnover of at least one manager from the Management Board, excluding retirement as a reason for turnover

When excluding those managers who left their positions on a Management Board due to retirement, several effects of independent variables become significant. The relationship between Management Board member turnover and company performance is still inverse (ROA coefficients are negative and significant in all tested models except those models that included ownership concentration as a control variable, while total sale growth coefficients (Δ_ TS) are negative and significant in all tested models).

The gross intensity of inter-group redistribution of shareholdings, M, was positive and significant in all tested models. It is interesting that in the first basic model with ownership concentration as controlling variables, ownership of the state and privatisation investment funds (OWN_FUNDS) has a positive and significant coefficient (10% significance level), pointing out that the increasing share of ownership by funds raises the likelihood of Management Board member turnover. Internal ownership (OWN_INTERNAL), on the other hand, has a negative and significant coefficient confirming our hypothesis that the internal ownership share in the company reduces the probability of Management Board member turnover. With regard to the influence of different ownership group changes, the results are the same as for management turnover considering all reasons (positive and significant coefficients of foreign and domestic companies' ownership change (ΔOWN_D_F_COM).

It is interesting that in those models including this dependent variable a few Supervisory Board characteristics were significant. The larger the Supervisory Board the greater the probability of management turnover. The influence of representatives of the state and of privatisation investment funds on the Supervisory Board (SB_FUNDS) on management turnover was significant, but with opposite signs in two models (see Appendix 2).

The influence of management characteristics on turnover was the same as in the case of the first dependent variable tested.

6.4 CEO turnover

The results for CEO turnover were different The probability of a CEO being replaced is not significantly correlated with companies' performance as shown through the ROA accounting measure, however CEO turnover is significantly and negatively correlated with the economic measures of companies' performance as seen in total sales growth (Δ_TS). So in relation to the business measures of companies' performance we cannot reject our basic hypothesis.

Several CEO characteristics that we included in the model were significant. CEO tenure (CEO_TENURE)[10] was in almost all the tested models negative and significant as was the CEO's age (CEO_AGE) (not significant in the case of including ownership concentration controlling variables in the model). This confirms our hypothesis that an older CEO sitting on boards with a longer average tenure has a lower probability of being replaced. The number of years a CEO worked in the company also has a negative and significant coefficient.

The gross intensity of the inter-group redistribution of shareholdings, **M**, was positive and significant in two tested models (non-significant in the model that includes ownership concentration controlling variables). Other influences of the ownership structure on CEO turnover are not reported.

Interesting findings were discovered on the influence of the Supervisory Board's composition on CEO turnover. The results show that the higher the share of independent experts (SB_INDEP) in the Supervisory Board's composition the greater the likelihood of a CEO change, indicating that independent experts are good monitors.

6.5 Whole Management Board turnover

The replacement of the whole Management Board is negatively related to a company's performance (ROA, negative and significant in all tested models, excluding models with

[10] Note that because of the way CEO turnover was computed, the average tenure of a member of the Management Board was used instead of the actual CEO tenure.

ownership concentration as a control variable; total sales growth (Δ_TS) is negative and significant in basic models). Among management characteristics, the number of managers on the Management Board and number of years managers from the Management Board have worked in the company are significant and negatively related to the turnover of the whole Management Board.

7. CONCLUSIONS

This paper analyses Management Board members' turnover for a panel of Slovenian companies in the 1998 to 2002 period. The main results confirm existing evidence for other countries. Management Board members' turnover is associated with performance and there is an inverse relationship between them. This is consistent with the principal-agent theory where the threat of turnovers ensures that members of the Management Board act in the best interests of the shareholders.

We tested the probability of turnover for four dependent variables: turnover of at least one manager from the Management Board considering all reasons for the turnover; turnover of at least one manager from the Management Boars excluding retirement as a reason for the turnover; CEO turnover; and a whole Management Board turnover. To measure firm performance, we followed several studies and used the accounting-based variables ROA and ROE. We also used value added per employee in SIT and total sales growth as economic measures of firms' performance. ROA and sales growth were significant and negative. A strong and significant effect of performance (ROA) is tracked in all the tested models, except in the case of CEO turnover where the coefficient was insignificant. In addition, the effect of sales growth was negative and significant in all tested dependent variables.

With regard to the ownership structure we conclude that the probability of management turnover rises in the event of an ownership change. The change in individual groups of owners was not significant in most cases; the exception here was an increase in the share of domestic and foreign companies that positively and significantly influenced Management Board members' turnover.

The composition and size of the Supervisory Board was insignificant in most cases; the exception being CEO turnover where the results show that the higher the share of independent experts on the Supervisory Board the greater the likelihood of the CEO changing.

Among Management Board members' characteristics tested, the average number of years Management Board members have worked within the company was negative and significant. Age and tenure were negative and significant only in the case of CEO turnover, meaning that an older CEO sitting on the board with a longer average tenure

has a lower probability of being replaced. The difference between the specification of a change for any reason and the one excluding retirement points to the start of a change of generations in Slovenian management which is, however, slow.

In summary, we may conclude that in the observation period the biggest impact on management turnover was that of a change in the owners, particularly if linked to takeover processes. The better performance of companies does however influence management tenure – in better performing companies (financially as well as economically) managers have less probability of being replaced. However, there is a lack of proper corporate governance as shown by the low (or even zero) effects of Supervisory Board composition and ownership concentration. The changes observed in management are therefore more a consequence of the ongoing transition process (now in the phase of concentration and consolidation of ownership) and certain random changes than of proper owners effectively controlling the companies.

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APPENDIX

Appendix 1: Results of the logit models

Dependent variable - MBM_TURN- Turnover of at least one manager from the Management Board considering all reasons for turnover

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
NUM_OF_MBM	**0.2756**	**0.320**	0.145	**0.250**	**0.312**	0.128
	(0.073) *	**(0.082)** *	(0.160)	**(0.074)** **	**(0.080)** *	(0.172)
MBM_AGE	-0.004	-0.015	-0.013	-0.017	-0.019	0.003
	(0.015)	(0.022)	(0.042)	(0.021)	(0.022)	(0.040)
MBM_TENURE	-0.095	-0.008	-0.006	-0.006	-0.006	0.001
	(0.023)	(0.025)	(0.055)	(0.024)	(0.025)	(0.052)
NUM_OF_MBM_Y_IN_C	**-0.059**	**-0.059**	**-0.068**	**-0.062**	**-0.061**	-0.067
	(0.018) **	**(0.019)** **	**(0.041)** ***	**(0.019)** **	**(0.019)** **	(0.042)
OWN_FUNDS	0.114	0.008	0.018			
	(0.008)	(0.009)	(0.015)			
OWN_D_F_COMP	0.004	0.006	-0.005			
	(0.006)	(0.007)	(0.015)			
OWN_INTERNAL	-0.005	-0.002	0.007			
	(0.009)	(0.010)	(0.020)			
OWN_MANAGEMENT	-0.003	-0.002	0.048			
	(0.018)	(0.019)	(0.031)			
M	**0.168**	**0.015**	0.043			
	(0.008) **	**(0.008)** ***	(0.016)			
Δ_ OWN_FUNDS				0.001	-0.001	-0.004
				(0.012)	(0.012)	(0.030)
Δ_ OWN_D_F_COMP				**0.021**	**0.021**	**0.063**
				(0.011) **	**(0.011)** ***	**(0.029)** **
D_ OWN_INTERNAL				0.010	0.013	**0.103**
				(0.012)	(0.012)	**(0.042)** **
Δ_ OWN_MANAGEMEN				0.004	0.004	0.097
				(0.030)	(0.030)	(0.078)
SB_SIZE	-0.079	-0.061	-0.229	-0.038	-0.057	-0.190
	(0.071)	(0.076)	(0.184)	(0.069)	(0.073)	(0.175)
SB_BANKS[11]	0.003	0.006		-0.001	0.007	
	(0.027)	(0.030)		(0.028)	(0.030)	
SB_FUNDS	0.004	0.006	-0.010	0.009	0.009	0.006
	(0.009)	(0.011)	(0.018)	(0.009)	(0.010)	(0.016)
SB_NON_FIN	0.006	0.010	0.008	0.007	0.011	-0.004
	(0.008)	(0.010)	(0.018)	(0.008)	(0.010)	(0.018)
SB_INDEP	-0.001	0.001	-0.016	0.001	0.002	-0.018
	(0.008)	(0.009)	(0.018)	(0.008)	(0.009)	(0.019)
SB_INTER	-0.002	-0.003	-0.010	-0.002	-0.003	-0.012
	(0.008)	(0.009)	(0.019)	(0.008)	(0.009)	(0.019)

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
ROA	**-3.031**	**-3.960**	-0.790	**-3.289**	**-3.973**	-1.589
	(1.402) **	**(1.773)** **	(2.470)	**(1.359)** **	**(1.731)** **	(2.222)
ROE	0.062	0.139	-1.939	0.075	0.142	-1.363
	(0.575)	(0.645)	(1.476)	(0.581)	(0.650)	(1.484)
D_A	-0.441	0.735	-0.909	-0.544	0.849	-1.078
	(0.577)	(0.949)	(1.200)	(0.581)	(0.945)	(1.211)
VA_EMP	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
L_TS	**0.175**	-0.033	**0.480**	**0.186**	-0.052	0.400
	(0.105) ***	(0.217)	**(0.286)** ***	**(0.109)** ***	(0.224)	(0.286)
Δ_TS	**-1.397**	-1.146	-1.892	**-1.249**	-0.977	**-2.352**
	(0.599) **	(0.726)	(1.240)	**(0.601)** **	(0.717)	**(1.269)** ***
B_LTS		0.300			0.366	
		(0.301)			(0.310)	
B_ROA		0.964			0.909	
		(1.510)			(1.530)	
B_D_A		**-1.714**			**-1.870**	
		(0.970) ***			**(0.958)** ***	
B_VA_EMP		-0.129			-0.153	
		(0.197)			(0.197)	
C1		-	-0.002			-0.004
			(0.021)			(0.021)
C5		-	0.010			0.008
			(0.024)			(0.021)
OWN			-0.058			-0.100
			(0.049)			(0.067)
Δ_C1			0.002			0.003
			(0.023)			(0.023)
Δ_C5			-0.035			-0.019
			(0.030)			(0.028)
Cons	**-3.615**	-3.805	-6.691	-2.925	-3.790	-5.329
	(1.828) **	(2.459)	(4.595)	(1.809)	(2.362)	(4.445)

* Significant at the 0.1% level.
** Significant at the 1% level.
*** Significant at the 5% level.

[11] Bank representatives were not present on the Supervisory Boards of the companies in which management turnover took place, therefore they were excluded from the regression.

Appendix 2: Results of the logit models

Dependent variable - MBM_TURN_ 1*- Turnover of at least one manager from the Management Board considering all reasons for turnover, except retirement

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
NUM_OF_MBM	**0.318**	**0.368**	**0.414**	**0.274**	**0.337**	0.208
	(0.089) *	**(0.097)** *	**(0.209)** **	**(0.085)** **	**(0.094)** *	(0.213)
MBM_AGE	-0.026	-0.029	-0.032	-0.034	-0.039	-0.036
	(0.025)	(0.027)	(0.052)	(0.025)	(0.027)	(0.051)
MBM_TENURE	0.004	0.008	-0.133	0.004	0.008	-0.044
	(0.030)	(0.031)	(0.106)	(0.030)	(0.031)	(0.086)
NUM_OF_MBM_Y_IN_C	**-0.089**	**-0.091**	-0.057	**-0.090**	**-0.091**	-0.062
	(0.024) *	**(0.025)** *	(0.053)	**(0.024)** *	**(0.025)** *	(0.057)
OWN_FUNDS	**0.019**	0.016	**0.044**			
	(0.010) ***	(0.011)	**(0.023)** ***			
OWN_D_F_COMP	0.012	0.014	-0.005			
	(0.008)	(0.009)	(0.023)			
OWN_INTERNAL	0.000	0.001	**-0.056**			
	(0.012)	(0.013)	**(0.029)** ***			
OWN_MANAGEMENT	-0.036	-0.039	-0.010			
	(0.035)	(0.037)	(0.062)			
M	**0.022**	**0.021**	**0.049**			
	(0.009) **	**(0.010)** **	**(0.021)** **			
Δ_ OWN_FUNDS	-			0.004	0.000	0.000
				(0.015)	(0.015)	(0.040)
Δ_ OWN_D_F_COMP	-			**0.029**	**0.028**	**0.075**
				(0.013) **	**(0.013)** **	**(0.039)** ***
Δ_ OWN_INTERNAL	-			0.016	0.019	**0.171**
				(0.014)	(0.015)	**(0.061)** **
Δ_ OWN_MANAGEMENT	-			-0.011	-0.013	-0.025
				(0.036)	(0.038)	(0.209)
SB_SIZE	0.085	-0.038	**-0.634**	-0.040	-0.045	-0.260
	(0.085)	(0.091)	**(0.270)** **	(0.081)	(0.086)	(0.225)
SB_BANKS	0.030	0.031		0.017	0.029	
	(0.030)	(0.034)		(0.030)	(0.033)	
SB_FUNDS	0.011	0.017	**-0.052**	0.016	**0.022**	-0.006
	(0.011)	(0.013)	**(0.026)** **	(0.010)	**(0.012)** **	(0.018)
SB_NON_FIN	0.010	0.017	-0.011	0.010	0.019	-0.014
	(0.010)	(0.013)	(0.022)	(0.010)	(0.012)	(0.021)
SB_INDEP	0.010	0.007	-0.055	0.002	0.009	-0.037
	(0.010)	(0.012)	(0.026)	(0.010)	(0.012)	(0.025)
SB_INTER	0.010	0.003	-0.055	0.001	0.004	-0.037
	(0.010)	(0.012)	(0.027)	(0.010)	(0.012)	(0.025)
ROA	**1.621**	**-5.533**	-0.951	**-3.853**	**-5.382**	-2.849
	(1.621) **	**(2.286)** **	(2.761)	**(1.515)** **	**(2.099)** **	(2.428)

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
ROE	0.663	0.134	-3.427	0.047	0.011	-2.168
	(0.663)	(0.730)	(2.078)	(0.650)	(0.703)	(1.768)
D_A	0.696	1.098	-0.926	-0.295	1.216	-1.049
	(0.696)	(1.166)	(1.576)	(0.672)	(1.144)	(1.488)
VA_EMP	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
L_TS	**0.131**	0.190	**0.784**	**0.313**	0.173	0.610
	(0.131) **	(0.275)	**(0.385)** **	**(0.129)** **	(0.279)	(0.377)
Δ_TS	**-2.085**	**-2.105**	**-3.262**	**-1.806**	**-1.763**	**-3.277**
	(0.756) **	**(0.954)** **	**(1.839)** ***	**(0.743)** **	**(0.921)** ***	**(1.619)** **
B_LTS		0.117			0.224	
		(0.362)			(0.371)	
B_ROA		3.885			3.507	
		(2.456)			(2.406)	
B_D_A		-1.846			**-2.133**	
		(1.157)			**(1.137)** ***	
B_VA_EMP		-0.095			-0.126	
		(0.230)			(0.230)	
C1			-0.041			-0.022
			(0.031)			(0.029)
C5			-0.024			0.013
			(0.033)			(0.028)
OWN			-0.103			-0.111
			(0.069)			(0.076)
Δ_C1			0.029			0.028
			(0.030)			(0.032)
Δ_C5			-0.007			-0.012
			(0.040)			(0.036)
Cons	**2.237**	**-5.789**	-1.586	**-4.741**	**-5.567**	-4.788
	(2.237) **	**(2.956)** **	(6.272)	**(2.132)** **	**(2.858)** ***	(5.863)

* Significant at the 1% level.
** Significant at the 5% level.
*** Significant at the 10% level.

Appendix 3: Results of the logit models

Dependent variable - CEO_TURN - CEO turnover

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
NUM_OF_MBM	0.027	0.033	0.105	0.003	-0.007	0.100
	(0.147)	(0.164)	(0.509)	(0.142)	(0.156)	(0.527)
CEO_AGE	**-0.082**	**-0.087**	-0.025	**-0.091**	**-0.097**	0.015
	(0.033) **	**(0.035)** **	(0.070)	**(0.032)** **	**(0.034)** **	(0.062)
CEO_TENURE	**-0.172**	**-0.195**	-0.207	**-0.169**	**-0.190**	**-0.351**
	(0.064) **	**(0.066)** **	(0.172)	**(0.063)** **	**(0.065)** **	**(0.185)** ***
NUM_OF_CEO_Y_IN_C	**-0.059**	**-0.060**	**-0.160**	**-0.061**	**-0.062**	**-0.188**
	(0.032) ***	**(0.035)** ***	**(0.086)** ***	**(0.031)** ***	**(0.033)** ***	**(0.097)** ***
OWN_FUNDS	0.002	-0.002	-0.020			
	(0.012)	(0.014)	(0.029)			
OWN_D_F_COMP	0.004	0.007	-0.007			
	(0.010)	(0.011)	(0.027)			
OWN_INTERNAL	0.002	0.007	0.017			
	(0.016)	(0.016)	(0.037)			
OWN_MANAGEMENT	-0.041	-0.043	-0.079			
	(0.044)	(0.044)	(0.106)			
M	**0.032**	**0.033**	0.031			
	(0.011) **	**(0.012)** **	(0.022)			
Δ_ OWN_FUNDS	-			-0.018	-0.028	**-0.081**
				(0.017)	(0.019)	**(0.046)** ***
Δ_ OWN_D_F_COMP	-			0.006	0.003	0.004
				(0.014)	(0.015)	(0.035)
Δ_ OWN_INTERNAL	-			-0.029	-0.030	0.034
				(0.019)	(0.020)	(0.040)
Δ_ OWN_MANAGEMENT		-		-0.034	-0.053	-0.231
				(0.043)	(0.045)	(0.230)
SB_SIZE	-0.031	0.030	-0.261	-0.030	0.004	-0.262
	(0.122)	(0.127)	(0.355)	(0.116)	(0.121)	(0.350)
SB_BANKS	-0.047	-0.046		-0.052	-0.044	
	(0.058)	(0.063)		(0.058)	(0.064)	
SB_FUNDS	0.019	0.026	0.011	0.016	0.019	0.021
	(0.016)	(0.018)	(0.032)	(0.015)	(0.016)	(0.026)
SB_NON_FIN	0.010	0.015	-0.004	0.011	0.018	0.001
	(0.015)	(0.016)	(0.025)	(0.014)	(0.015)	(0.025)
SB_INDEP	**0.028**	**0.030**	0.029	**0.027**	**0.029**	0.049
	(0.015) ***	**(0.016)** ***	(0.036)	**(0.014)** ***	**(0.015)** ***	(0.037)
SB_INTER	0.004	0.007	-0.036	0.005	0.010	-0.028
	(0.015)	(0.016)	(0.039)	(0.014)	(0.015)	(0.040)
ROA	-0.175	0.010	13.380	-0.318	-0.234	**19.04**
	(1.876)	(2.330)	(9.762)	(1.786)	(2.138)	**(11.09)** ***

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
ROE	-0.891	-0.901	-4.952	-0.725	-0.727	**-6.620**
	(0.804)	(0.839)	(3.032)	(0.783)	(0.804)	**(3.268)** **
D_A	**-1.444**	1.152	**-4.018**	-1.392	1.269	**-5.708**
	(0.870) ***	(1.428)	**(2.149)** ***	(0.851)	(1.404)	**(2.575)** **
VA_EMP	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
L_TS	0.184	0.226	0.765	0.239	0.360	0.859
	(0.188)	(0.350)	(0.564)	(0.181)	(0.370)	(0.548)
Δ_TS	**-3.198**	**-3.725**	**-11.635**	**-3.082**	**-3.684**	**-13.165**
	(1.120) **	**(1.452)** **	**(4.138)** **	**(1.093)** **	**(1.437)** **	**(4.292)** **
B_LTS	-	0.530			0.494	
		(0.503)			(0.484)	
B_ROA	-	-0.997			-1.104	
		(1.930)			(1.909)	
B_D_A	-	**-3.373**			**-3.566**	
		(1.614) **			**(1.592)** **	
B_VA_EMP	-	**-0.754**			**-0.794**	
		(0.326) **			**(0.321)** **	
C1	-		**-0.080**			**-0.085**
			(0.044) ***			**(0.040)** **
C5	-		0.038			0.040
			(0.044)			(0.036)
OWN			-0.099			-0.109
			(0.091)			(0.092)
Δ_C1			0.035			0.038
			(0.034)			(0.036)
?_C5			-0.016			-0.007
			(0.045)			(0.044)
Cons	-0.909	-5.453	-5.980	-1.032	-5.705	-8.688
	(3.161)	(3.963)	(8.842)	(3.029)	(3.768)	(8.130)

* Significant at the 1% level.
** Significant at the 5% level.
*** Significant at the 10% level

Appendix 4 : Results of the logit models

Dependent variable: M_B_TURN - Turnover of a whole Management Board

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
NUM_OF_MBM	**-1.712**	**-1.950**	-0.525	**-1.615**	**-1.883**	-1.106
	(0.612) **	**(0.673)** **	(0.772)	**(0.594)** **	**(0.662)** **	(1.058)
MBM_AGE	-0.015	-0.014	-0.013	-0.022	-0.023	0.022
	(0.028)	(0.030)	(0.063)	(0.027)	(0.029)	(0.054)
MBM_TENURE	-0.020	-0.011	0.086	-0.015	-0.010	0.101
	(0.034)	(0.037)	(0.084)	(0.033)	(0.037)	(0.070)
NUM_OF_MBM_Y_IN_C	**-0.063**	**-0.064**	**-0.217**	**-0.066**	**-0.069**	**-0.194**
	(0.027) **	**(0.028)** **	**(0.078)** **	**(0.026)** **	**(0.028)** **	**(0.072)** **
OWN_FUNDS	**0.027**	**0.025**	0.036			
	(0.013) **	**(0.013)** ***	(0.023)			
OWN_D_F_COMP	0.012	0.012	-0.017			
	(0.011)	(0.012)	(0.023)			
OWN_INTERNAL	-0.010	-0.009	0.024			
	(0.016)	(0.017)	(0.028)			
OWN_MANAGEMENT	0.028	0.015	0.056			
	(0.027)	(0.029)	(0.042)			
M	0.014	0.011	**0.060**			
	(0.011)	(0.012)	**(0.024)** **			
Δ_ OWN_FUNDS	-			0.005	0.000	-0.008
				(0.017)	(0.019)	(0.037)
Δ_ OWN_D_F_COMP	-			0.020	0.015	0.050
				(0.015)	(0.017)	(0.037)
Δ_ OWN_INTERNAL	-			0.003	0.004	0.048
				(0.018)	(0.020)	(0.041)
Δ_ OWN_MANAGEMENT	-			0.032	0.019	0.085
				(0.043)	(0.042)	(0.097)
SB_SIZE	-0.132	-0.231	0.037	-0.152	-0.243	0.108
	(0.152)	(0.175)	(0.286)	(0.147)	(0.163)	(0.289)
SB_BANKS	-0.040	-0.029		-0.040	-0.030	
	(0.056)	(0.057)		(0.056)	(0.057)	
SB_FUNDS	-0.013	-0.008	-0.039	-0.001	0.001	0.002
	(0.015)	(0.016)	(0.027)	(0.012)	(0.014)	(0.021)
SB_NON_FIN	-0.004	0.002	-0.004	-0.004	0.000	-0.020
	(0.013)	(0.014)	(0.024)	(0.013)	(0.014)	(0.023)
SB_INDEP	-0.007	-0.010	-0.016	-0.008	-0.013	-0.022
	(0.013)	(0.014)	(0.028)	(0.013)	(0.014)	(0.027)
SB_INTER	-0.008	-0.006	-0.007	-0.010	-0.008	-0.006
	(0.013)	(0.014)	(0.029)	(0.013)	(0.014)	(0.027)
ROA	**-4.860**	**-7.136**	-0.316	**-4.566**	**-6.859**	-0.817
	(2.261) **	**(2.683)** **	(4.587)	**(2.218)** **	**(2.649)** **	(5.690)

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
ROE	-0.389	-0.091	**-4.961**	-0.454	-0.095	-3.920
	(0.903)	(0.933)	**(2.558)** ***	(0.894)	(0.904)	(2.959)
D_A	-0.545	0.819	-0.562	-0.504	1.204	0.011
	(0.860)	(1.483)	(1.997)	(0.834)	(1.429)	(1.911)
VA_EMP	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
L_TS	0.077	-0.951	-0.172	0.080	**-0.958**	-0.283
	(0.209)	(0.596)	(0.482)	(0.196)	**(0.547)** **	(0.466)
Δ_TS	**-2.142**	-0.518	-1.439	**-1.973**	-0.345	-1.899
	(0.968) **	(1.190)	(1.941)	**(0.978)** **	(1.162)	(1.964)
B_LTS	-	**1.391**			**1.559**	
		(0.684) **			**(0.643)** **	
B_ROA	-	3.083			2.666	
		(2.169)			(2.153)	
B_D_A	-	-1.105			-1.428	
		(1.576)			(1.514)	
B_VA_EMP	-	-0.268			-0.437	
		(0.371)			(0.360)	
C1	-		0.012			0.012
			(0.028)			(0.027)
C5	-		0.013			0.014
			(0.037)			(0.031)
OWN			-0.050			-0.043
			(0.071)			(0.084)
Δ_C1			0.028			0.014
			(0.031)			(0.030)
Δ_C5			**-0.095**			-0.066
			(0.048) ***			(0.044)
Cons	0.629	-2.831	0.981	1.870	-2.782	1.907
	(3.342)	(4.108)	(7.452)	(3.062)	(3.808)	(6.807)

* Significant at the 1% level.
** Significant at the 5% level.
*** Significant at the 10% level.