X WOA
Cagliari, 29-30 aprile 2009

TRACK 03

La corporate governance nei modelli di family business.
Assetti, relazioni e strumenti.

Corporate governance and CEO turnover
in insider dominated systems. Are family firms different?

Daniel Pittino
pittino@uniud.it
Massimo Baù
bau@uniud.it

Dipartimento di Scienze Economiche
Università di Udine
Via Tomadini 30/a 33100

Abstract

The goal of this paper is to assess the degree of engagement of insider shareholders by analyzing the relationship between short term performances and CEO turnover in insider controlled firms.

In particular we checked whether family firms represent a special typology of insider controlled firms and exhibit higher level of engagement, i.e. a higher understanding of the dynamics of the industry and the company and a lower emphasis on short term economic performance, resulting in long term commitment to professional relationships with non family executives.

The results seem to support our assumptions: family owners appear to be less sensitive to short term performance and less prone to dismiss non controlling CEOs after poor short term performances.

Introduction

The current financial crisis has put the grounds for a revival of the traditional debate on systems of corporate governance. The first round, during the 1990s, appeared to have been won by the outsider system, enriched with a number of tools to limit the well known problems of managers' short termism (for example the employment of stock options) and opportunistic behaviour (through the presence of external directors in the company boards and other monitoring tools). Insider systems were generally criticised for the apathy of the market for corporate control, the infrequent substitution of ineffective top managers, the scarce liquidity of the stock markets and consequent underdevelopment of venture capitalism and the frequent extraction of value from the minority shareholders by the majority ones (see for example Franks et al. 1995).

The second round started at the turn of the new millenium, when the debate abandoned the universalistic perspective to adopt a more contingent one: there is not a one best system of corporate governance, but systems that pursue different goals (maximization of the value for the shareholders, maximisation of the value for a larger coalition of stakeholders), all equally worth, and perform differently in different areas. Plus, it has been noticed, each system of corporate governance combines with various declinations of the same institution (for example the labour market, the degree of coordination among companies) to create different models of capitalism.

Tylecote and Visintin (2008), for example, group the eleven countries they study in four main forms of capitalism, resulting from the combination of the system of corporate governance, the characteristics of the labour market, and the degree of coordination among companies:

"We come out with four categories: Outsider-dominated economies – aka liberal market economies, with labour market primacy: the English-speaking countries. We can name this category "Shareholder Capitalism", for obvious reasons. Insider-dominated economies with business coordination and employee inclusion: the Germanic/Nordic countries and Japan. This category is

"Stakeholder Capitalism", as employees and other (related) businesses are major stakeholders in firms. Insider-dominated economies with government co-ordination and strong employee protection: France and Korea. This is "State-led Capitalism": while the extent of state ownership varies greatly, the extent of state intervention is distinctive. (Or it was; these two countries' FCG systems changed earlier and faster than most others.). Insider-dominated economies with strong employee protection and varying degrees and types of business co-ordination: Italy, Spain, Greece,

Portugal. This category has to be described, rather clumsily, as Family/State capitalism. The paucity of large privately-owned business largely accounts for the relatively high degree of state ownership.

The central state is not strong or effective enough to provide government co-ordination." (p. 230). Of particular interest for today's crisis is the argument put forward by Tylecote and Visintin (2008) that informed long-term investors, called by the authors "engaged shareholders", not particularly influenced by the short-term performance, and with a good understanding of the industry and company dynamics, can play a fundamental role in the long term success of the company, particularly as far as innovativeness is concerned. These shareholders can be single investors, other companies, banks or other financial institutions who detain a large percentage of the shares, are not interested in pursuing speculative strategies and as such are not subject to the insider trading legislation. They can therefore acquire sensitive information about the company and comprehend and assess its investment strategies. A larger presence also in the outsider systems of engaged shareholders would have probably limited the current financial crisis, first as a consequence of a more active monitoring and second because we would have expected a more limited selling of shares.

"The moral for the insider systems, then, is clear. Do not hurry to get rid of the old insiders: not at least until you have found new insiders, or at least new major shareholders who will engage actively with management. Finding or creating them is the challenge. Private equity firms, domestic or foreign, are one new form of engaged shareholder, and more likely to be part of the solution than to be the dangerous predator they have been painted by some in Germany. The venture capital part of private equity can play a particularly positive role. The state can very usefully complement this role, by providing

loans (as in the USA) or 'sleeping equity' (as more recently in France and Germany) to firms which have already attracted private venture capital. But the major source of new capital and new engagement, with industry-wide and cross-sectoral expertise, must be new institutional shareholders buying into listed firms" (p.287).

But are the "old insiders" all equally engaged? Or are there strong differences also among the insiders? To answer this question, particularly as far as family firms are concerned, we use as a proxy the importance of short term economic indicators on CEO turnover, assuming that an engaged shareholder would consider other types of information to assess the real value and performance of the top executives.

The paper is structured as follows. In Section 1 we review the literature and report the hypothesis on the relationships between performance and CEO turnover in insider systems. In Section 2 we report the methodology and in Section 3 we carry out the statistical analysis. Section 4 concludes.

1. Insider shareholders, short term performance and CEO turnover . The hypotheses.

The study of the determinants of top executives' turnover is a classic one, especially within the traditional agency-based perspective on corporate governance. The threat of dismissal has always been assumed by non-engaged shareholders as one of the main control mechanisms to encourage the management to pursue value creation strategies, avoiding opportunistic behaviours.

Control by direct monitoring is indeed not an option for investors employing speculative strategies. A large amount of studies on this topic shows that in outsider systems, particularly in the U.S., a significant factor that has an impact on CEO turnover is the company short-term performance, although the economic significance of the relation is quite small, since several studies find that moving from the top to bottom decile of performance increases the probability of CEO turnover in publicly traded firms by about 4 percent (Brickley, 2003). However the inverse correlation of turnover to firm's performance, assessed both in terms of share value and financial indicators, is always confirmed.

For example Weisbach (1988) finds a negative relationship between turnover and performance measured through changes in earnings. Murphy and Zimmerman (1993) find relations of turnover with both market adjusted stock returns and changes in earnings, the relation being strongest for the earnings-based performance measure. Denis and Denis (1995) present evidence that

forced CEO changes follow large and significant declines in firm performance, using stock price performance, market-adjusted returns, and the ratio of operating income over total assets.

Performances relative to the industry or period confirm the negative relationship between CEO turnover and firm performance (Barro and Barro, 1990; Jensen and Murphy, 1990; Gibbons and Murphy, 1990; Denis and Denis, 1995; Parrino, 1997; DeFond and Park, 1999).

More recently, Minton and Kaplan (2006) showed that in latest years the relation of turnover to performance has increased with reference to three indicators, namely: performance relative to industry, industry performance relative to the overall market, and performance of the overall stock

market.

A smaller number of studies explores the relationship between short term performance and turnover of CEOs in insider systems.

For example, Kaplan (1994a) examines German firms and finds that the turnover of the management board is significantly negatively related to current and lagged stock price performance.

However, the turnover of the chairman is not significantly related to poor stock performance. The same author (Kaplan, 1994b) finds that the turnover of the top three to five executives in Japanese firms is significantly related to stock returns. Similar results were found by Brunello et al (2003), Volpin (2002) and Barucci et al., 2006) on samples of Italian listed companies. Also interviews with financial analysts confirm that companies' ratings are hardly ever produced on the basis of long-term investment strategies both because of a lack of technical expertise among the analysts and because of issues of industrial secrecy (Ramirez and Tylecote, 2004).

Being insider, therefore, is not synonymous of being engaged, since probability of dismissal in some cases is driven by short term results. But in what insider shareholders do not behave as engaged shareholders? And do family shareholders differ from the other insiders? Let's first try to answer to the first question. Why would an insider not be an engaged shareholder?

It is obvious that not being engaged in an insider system means something completely different from an outsider system context. An insider shareholder might not be engaged for several reasons. The insider shareholder can be the state (frequent in the state and family-state systems, such as France or Italy) and decisions on the CEO turnover might be connected to political reasons rather than actual economic performance. Typical is the situation in Italy where CEOs of state owned enterprises move from one company to the other following a stereotypical spoil system. Another frequent type of insider can be a bank (this was more frequent in Germany and Japan rather than in the other

insider systems). In this case, the representative of the bank in the board of directors is probably specialised in financial issues but might not have the industry specific expertise to assess the long term strategies of the company. An insider can even be another company, the holding of a group or a third company of the group itself. Groups of firms are usually built to control several companies with a minimum amount of money. The "indirect" majority shareholder usually has a large majority stake in one company of the group (in pyramidal groups usually the industrial or financial holding) and through a chain of shareholding controls the remaining companies, while the rest of the capital is collected from the market. When groups are large and diversified, it is difficult for the indirect majority shareholder to have a clear and competent understanding of the prospects of all the companies in the group, especially when they have become part of the group as a consequence of other strategic acquisitions (i.e. one group acquires another one for the strategic importance of one company, and some of the companies might be totally unrelated to the former group) or for financial purposes. The insider ownership may also be represented by a coalition of shareholders, who could have different goals and sometimes may find it difficult to negotiate and find agreements on corporate strategies; therefore, in these settings, the importance of easily observable results as a basis for consensus among the shareholders may increase.

Following this line of reasoning, at first we want to test whether in insider systems, the presence of engaged shareholders is the rule rather than the exception. Thus, the basic hypothesis is the following:

Hypothesis 1: In insider controlled firms the CEO turnover is negatively related to short term performance

However, the presence of engaged shareholders would diminish if not eliminate such relationship. The extreme case is when the CEO is also a controlling shareholder. Our second hypothesis is therefore:

Hypothesis 2: Sensitivity of turnover to short term performance is lower when the CEO is also a controlling shareholder

Let's now move on the second question: why would family firms differ from other insider systems? And in what way?

As extensively reported in the literature, family firms tend to have a longer-term perspective as the time horizon is that of the family, generation after generation (for example, Casson, 1999; Guzzo and Abbot, 1990; James, 1999; Tagiuri and Davis, 1992), and to pursue non economic goals, such as,

for example, the full employment of the members of the family or an influential position in the society. (for example; Lee and Rogoff, 1996; Sharma, Chrisman, & Chua, 1997) The members of the family have a strong industry-specific expertise as they have known the dynamics of the sector for years and have a clear understanding of the technological evolution of products and processes.

They also have a deep knowledge of the company as starting from the second generation they have heard speaking daily at the dinner table about problems, prospects and future strategies and learned the family's orientation about the relationship with employees, customers, suppliers and often financers. Even though the successors might not have the entrepreneurial gene of the founder, they are very likely to have the necessary knowledge and personal interests (due to the large undiversified equity positions) to monitor and assess the management team. In addition to the above, it has been shown that the managers of a family business develop frequently a stewardship attitude, i.e. a commitment to the firm that aligns their interests towards the survival and development goals of the organization. The empirical evidence shows that owners and managers may often share the wish to make a contribution to the organization's mission, longevity, and stakeholders (Davis et al., 1997, 2000), therefore, "they invest to strengthen the firm and its people" (Miller, Le Breton-Miller, 2006).

The above considerations would lead us to expect a weaker relationship between top managers turnover and short term financial performance in family firms than in the other insider companies as family shareholders are more likely to exhibit a higher level of engagement and/or trust in the management.

Our third hypothesis is therefore the following:

Hypothesis 3: Sensitivity of CEO turnover to short term performance is lower when the firm is family controlled both if the CEO is a controlling shareholder (hypothesis 2) and when he/she is not.

We recognize, however, that there is a reverse side of the coin: the weaker relationship can also derive from the well known inefficiencies of the family firm. Indeed, it has been shown that contrary to Jensen and Meckling argument in favour of large majority stakes, their existence, particularly if in the hands of families, releases the firms from the discipline imposed by the market for corporate control, increases the risk of entrenchment and poses an agency threat. Schulze et al. (2001), for example, show that family firms face larger cases of adverse selection (…). Moreover, altruism towards family

managers alters the incentive structure of family-managed firms such that many of the agency benefits gained are offset by self-control and moral hazard problems. These problems result in agency costs both for the controlling family/coalition and the minority shareholders.

To check for this effect however, one should have insider information and check, case by case, the outcomings of the long-term strategies, taking into account several contingiency variables, such as the industry performance, the occurrence of technological or commercial paradigm shifts and so on, which goes behind the scope of this paper.

2. Methodology

Data

Data are collected on an unbalanced panel of observations over a sample of 95 firms listed on the Italian stock market over the period 2000-2007. Starting from the population of 276 companies listed at 31 december 2007, to ensure a better comparability between family and non family firms, we excluded from this group the firms belonging to sectors where family firms are not present: banks, insurance companies, public utilities. We obtained a balanced panel of 760 observations. Since data are collected at firm level and in Italy is common to have firms with more than one CEO, to accurately assess the impact of CEO ownership on the relationship turnover-performance, we excluded from the panel the observations of firms with more than one CEO contemporaneously in charge in a given year. In other words, we limit our attention to turnover episodes which involve the replacement of a "sole CEO" with another "sole CEO". The final sample is an unbalanced panel of 469 observations; each one refers to firm "i" at the year "t".

Sources of the panel data are:

1. The company fillings with Consob, the Italian Securities and Exchange regulator, for the CEO turnover and ownership/control structure of the companies.

2. Osiris, a comprehensive database of listed companies around the world, for the data on economic performance.

3. The Calepino dell'Azionista, an annual publication on Italian listed companies for the data on age of the company and additional data on ownership structure.

4. Company documents from the database of the Italian system of Chambers of Commerce, for the CEO age and for additional data on CEO ownership (when not evident from the fillings with Consob). When needed, other data on CEO ownership and control and firm's ownership/control structure

were retrieved from different sources (The Italian financial news paper- il Sole 24 ore and financial information on specialised websites).

5. Lexis – Nexis Database, Il Sole 24 Ore database and information on specialised websites for data on the existence of particular reasons for CEO turnover (death, illness, retirement, other offices in companies belonging to the same group)

Variables
The following variables are drawn or constructed from the panel data:

CEO turnover: is a dichotomous variable that assumes value 1 when the CEO leaves the company at t-1, for reasons not explicitly identified as death, illness, retirement, other job positions in companies belonging to the same group, 0 when the CEO remains in the company or quits for one of the above reasons.

Performance: is the measure of short term results on the basis of the accounting value of EBITDA (Earning Before Interest Taxes Dividends and Amortization). We choose this measure to ensure comparability with previous studies (for example, Volpin, 2002, Brunello et al., 2003, Kaplan, 1994a, Weisbach, 1988); We follow Brunello et al. (2003) in defining performance at year t as the difference between EBITDA at year t-2 divided by firm sales, and EBITDA at year t-1 divided by firm sales.

Performance QUAD: is the quadratic specification of performance, obtained by multiplying the value of performance by its absolute value

Family Control: is a dichotomous variable which assumes value 1 when a family holds an amount of shares sufficient to exercise control on the firm. More in detail, we identified the owner as a family if: 1. a group of individuals with family ties holds shares of the company; 2. a single individual holds shares in the company as a result of a process of transmission of ownership across family generations and/or one or more members of the next generations of individual owner's family (for example sons, or nephews) are involved in the company. The family, in the sense specified in points 1 and 2 controls the company if: 1. holds the majority of shares with voting rights; 2. holds an amount of shares which is sufficient to control the decisions at the shareholder annual meeting. This "sufficient" amount of shares is identified case by case. For example, it can be a significant participation in a situation of disperse ownership or a dominant position (for example the relative majority of shares)

in a coalition of owners (tied together through informal and formal agreements, for example, voting syndicates).

CEO control: is a dichotomous variable assuming value 1 when the CEO holds an amount of shares sufficient to control the firm, in the sense specified for the case of controlling family, or is member of a controlling family.

CEO age: is the age of firm's CEO at time t

Firm's age: is the year of establishment of the company

First Shareholder: is a measure of ownership concentration and represents the percentage of ownership stakes held by the first shareholder

Control change: is a binary variable assuming value 1 when the company experiences a change of controlling owners in the year t-1

Multiple CEOs: identifies the firms which have more than one CEO in charge simultaneously in one or more years in the period. As explained above, observation on these years were dropped from the sample, therefore, this variable identifies also the firms with missing observations in the panel.

We constructed also 20 industry dummies and 7 year dummies to control for sector specific and time dependent effects.

Interaction variables are also computed, interacting quadratic and linear specifications of performance with: 1. CEO control, 2. Family Control, 3. The interaction CEO control X Family control.

Estimation Model
We employed a Binary Logistic Regression model to evaluate the probability of CEO dismissal. We excluded form the estimation observations with performance exceeding the absolute value of 10. We estimated four models which include different combinations of the variables and interaction terms. On the basis of the estimated model we also computed the probabilities of CEO dismissal at given levels of performance, and the discrete changes of these probabilities, in specific firm's control settings. In this, we followed the methodology employed, among others, by Weisbach (1988), Denis et al. (1997), Brunello et al. (2003), to allow the comparability of results.

3. Empirical analysis

Descriptive statistics

Descriptive statistics for the main variables are reported in table 1.

CEO turnover episodes occur in the 17% of the observations. Mean value of the change in EBITDA is –0.05. 68,2% of the observation refer to family controlled firms and in 31% of the cases CEO controls the firm through ownership stakes, either directly owning the majority of stakes or belonging to the family or coalition that controls the company. During the period, 4% of the firms has been interested by a change in the controlling owner.

Table 1. Descriptive statistics

Variable	Observations	Mean	Standard deviation	Min	Max
CEO turnover	469	0.172	0.378	0	1
Performance	469	-0.054	1.753	-11.08	11.39
CEO age	462	54.3	9.09	33	81
CEO controlling owner	468	0.31	0.46	0	1
Family control	469	0.683	0.47	0	1
Largest shareholding	469	47.15	16.89	8.003	84.122
Firm's age (Year of establishment)	469	1960	36.07	1852	2000
Control change	469	0.042	0.202	0	1

Table 2 displays the differences in the variables according to the type of control. Family firms exhibit a lower rate of CEO turnover. As one can expect, family controlled firms have a more concentrated ownership structure and a higher percentage of CEOs who are also controlling owners.

Table 2. Descriptive statistics. Comparison between Family and non family controlled firms

Variable	Family Control	Non family control
Percentage of observations	68.2	31.8
CEO turnover*	0.14	0.21

Performance	-0.02	-0.13
CEO age	54.3	54.3
CEO controlling owner***	0.39	0.16
Largest shareholding***	50.3	40.4
Firm's age (Year of establishment)***	1956	1969
Control change	0.036	0.064

*, **, *** *denote differences significant at .10, .05, .01 level respectively.*

Correlations among variables are displayed in table 3.
Correlation table suggests that there is a risk of multicollinearity for some of our explanatory variables. Tolerance index and VIF check, however, indicate that the multicollinearity problem in the estimation is rather low(maximum VIF values are around 2, being the critical value usually set at 4).

Table 3. Pairwise correlations among the main variables

	1	2	3	4	5	6	7	8
1.CEO turnover	1							
2. Performance	-0.1610*	1						
3.CEO age	0.0338	0.04	1					
4.CEO controlling owner	-0.16**	-0.00	0.12*	1				
5.Family control	-0.07	0.02	0.00	0.22*	1			
6.Largest shareholding	-0.03	0.01	0.00	0.10**	0.26*	1		
7.Firm's age (Year of establishment)	-0.09*	-0.07*	-0.00	0.05	-0.17***	0.01	1	
8. Control change	0.15*	-0.11*	-0.02	-0.05	-0.06	-0.12	-0.10*	1

*, **, *** *denote correlation significant at .10, .05, .01 level respectively.*

Estimations

Our estimation of the relationship between short term performance and CEO turnover in a single firm and in a given year assumes the form of the following baseline model:

CEO turnover = k + b1 Performance + b2 Performance QUAD + b3 CEO age + b4 CEO controlling + b5 Family control + b6 Largest shareholding + b7 Firm's age + b8 Control change + Xc + ε

In addition to the variables defined above, we included in the model a quadratic specification of the performance. According to previous empirical analyses we assume that the marginal effect of the performance on the probability of turnover decreases with the absolute value of performance change (Kaplan, 1994a, Warner et al., 1988) The quadratic expression is obtained by multiplying the value of performance by its absolute value.

 Xc is a vector of control variables including year dummies, industry dummies, natural logarithm of firm size and a dichotomous variable which controls for significant differences between firms which have had multiple CEOs in one or more years in the period (since observations on these years were dropped) and firms with a sole CEO over the entire period.

Further specifications of the model include interaction terms between Performance, linear and quadratic, CEO controlling and Family control.

We estimated the model and its specifications using a binary logistic regression. Results of the estimations are reported in table 4 and in table 5.

Table 4. Binary logistic estimations of the dependent variable CEO turnover. Models 1 and 2. Industry and year dummies are included in the regressions but coefficients are not displayed

	(1)				(2)			
	B	S.E.	Sig.		B	S.E.	Sig.	
Variable								
1. Constant	9.285	7.272	0.202		13.536	7.315	0.064	(**)
2. Performance	-0.447	0.18	0.013	(**)	-0.783	0.211	0.000	(***)
3. Performance QUAD	0.024	0.021	0.255		0.052	0.024	0.027	(**)
4. CEO age	0.02	0.015	0.182		0.017	0.015	0.266	
5. CEO controlling	-1.063	0.355	0.003	(***)	-0.967	0.369	0.009	(***)
6. Family control	-0.183	0.298	0.539		-0.209	0.303	0.491	
7. Largest Shareholder	0.005	0.008	0.535		0.006	0.008	0.457	
8. Firm's age	-0.007	0.004	0.068	(*)	-0.009	0.004	0.018	(**)
9. Control change	0.964	0.522	0.065	(*)	0.833	0.471	0.071	(*)
10. Size	0.043	0.07	0.536		0,033	0,071	0,641	
11. Companies w/ multiple CEOs	0.513	0.302	0.089	(*)	0,52	0,305	0,088	(*)
12. CEO con-					1.454	0.558	0.0	(***)

					09
trolling X Performance					
13. CEO controlling X Performance QUAD			-0.138	0.091	0.1 29
-2 Log likelihood	335.827		327.650		
Model Chi-square	83.280		91.502		
Model Significance	0.000		0.000		
Cox & Snell R-Square	0.165		0.189		
Nagelkerke R-square	0.277		0.301		

*, **, *** *denote correlation significant at .10, .05, .01 level respectively.*

The basic estimation model (1) provides support to hypothesis 1. Performance variable is negatively and significantly related to the CEO turnover. This means that negative changes in short term performance have a positive impact on the likelihood of CEO turnover, but the result is significant only for the linear specification of change in EBITDA.

The negative relationship between performance and EBITDA is consistent with a large number of empirical works that examine the topic in different corporate governance settings, and also with previous studies on Italian listed companies. The subsequent specifications of our model will analyze in more detail the relationship, offering also insights for comparisons between corporate

The presence of a CEO who is also controlling owner has a negative and significant influence on the turnover episodes; in this first specification the effect is independent from short term performance. This provides a first support to the entrenchment hypothesis: it's unlikely that a controlling CEO leaves his office under any condition.

Family control per se has also a negative influence on the likelihood of turnover, but the coefficient is not significant. This result is probably due to the significance and strength of CEO control effect, since a large proportion of family firms is led by CEOs who are also controlling owners.

Among the other variables in model 1 firm's age and control change have respectively a negative and positive effect on turnover; both parameters are weakly significant. Younger firms are more likely to be founder led and their strategies are largely influenced by the entrepreneurial role of the leader; thus, even if the founder does not have controlling shares, his firm specific human capital strengthens his position at the top of the company.

Table 5. Binary logistic estimations of the dependent variable CEO turnover. Models 3 and 4. Industry and year dummies are included in the regressions but coefficients are not displayed

	(3)				(4)			
	B	S.E.	Sig.		B	S.E.	Sig.	
Variable								
1. Constant	11.709	7.129	0.100	(*)	17.778	10.744	0.098	(*)
2. Performance	-0.903	0.288	0.002	(***)	-1.323	0.369	0.000	(***)
3. Performance QUAD	0.071	0.032	0.026	(**)	0.112	0.039	0.004	(***)
4. CEO age	0.02	0.015	0.179		0.037	0.02	0.067	(*)
5. CEO controlling	-1.095	0.357	0.002	(***)	-2.19	1.825	0.23	
6. Family control	-0.083	0.309	0.787		0.545	0.494	0.27	
7. Largest Shareholder	0.004	0.008	0.614		0.012	0.01	0.214	
8. Firm's age	-0.008	0.004	0.027	(***)	-0.013	0.005	0.011	(***)
9. Control change	1.145	0.559	0.041	(**)	1.078	0.608	0.076	(*)
10. Size	0.048	0.07	0.499		0.178	0.106	0.091	
11. Companies w/ multiple CEOs	0.528	0.301	0.079	(*)	0.267	0.383	0.485	
12. CEO controlling X Family control					0,987	1,879	0,599	
13. CEO controlling X Performance					3.317	3.384	0.327	
14. CEO controlling X Performance QUAD					-0.038	1.401	0.978	
15. Family control X Performance	0.69	0.366	0.002	(***)	1.149	0.476	0.016	(**)
16. Family controlX Performance QUAD	-0.077	0.045	0.001	(***)	-0.142	0.059	0.006	(***)
17. CEO controlling X Family control X Performance					-3.247	3.451	0.347	
18. CEO controlling X Family control X Performance QUAD					0.097	1.406	0.945	
-2 Log likelihood		329.822				315.677		
Model Chi-square		89.330				32.416		
Model Significance		0.000				0.000		
Cox & Snell R-Square		0.176				0.201		
Nagelkerke R-square		0.295				0.337		

*, **, *** denote correlation significant at .10, .05, .01 level respectively.

Control change has a positive effect on turnover: when the controlling owner changes, top executives representing the previous ownership leave their position.

Firm age and control change remain significant in all the specifications of the model.

The measure of ownership concentration, ownership stakes held by the first shareholder, has a slightly positive effect on the likelihood of turnover, but is never significant.

In model 2 we introduced the interaction effect of the variables Performance and CEO Control. We interacted with CEO control both the linear and quadratic specification of performance. In the model with interactions the quadratic specification of Performance becomes significant; the sign of Performance QUAD is positive, in line with previous empirical results and confirming the assumption that the marginal increase in probability of turnover given a marginal difference in performance change is negatively related to the absolute dimension of performance change.

Interaction term between CEO control and linear specification of performance variable is positive and significant; interaction with the quadratic term has the opposite sign (consistent with the decreasing marginal effect assumption), but is not significant. The sign of interaction terms provides arguments in favor of hypothesis 2. On the basis of the signs and the magnitude of the coefficients of the interacted variables, we observe that the control by the CEO offsets the impact of performance on the likelihood of turnover.

In model 3 we introduced the interaction effect of the variables Performance and Family Control. As we explained in the previous sections we are interested in evaluating the family control effect separately from the CEO control effect, since in insider controlled companies there are several cases of non family firms where CEOs are controlling owners and several cases of family firms where CEOs do not belong to the controlling family.

Interaction terms both with linear and quadratic specifications are significant and the signs are as expected, confirming that the marginal effect of performance on CEO turnover decreases if the company is family controlled.

To discover whether this effect is distinct from the CEO control effect, we estimated a model (4) that includes all the interaction terms referred both to CEO control and Family control. This specification allows us to explore the existence of significant differences in the sensitivity of turnover to performance for non controlling CEOs between family controlled firms other typologies of insider controlled firms.

In the fourth specification, signs of interactions effect remain unchanged, but only interactions with Family control are significant. This seems to indicate that the "family firm effect" is more important than the simple CEO control effect in influencing the sensitivity of turnover to performance.

This result provides support to the hypothesis 3.

To quantify the differences in sensitivity of turnover to performances in various control settings, we estimated, using the coefficients in model 4, the discrete changes in probability of Turnover with Performance changing from the 25% to the 75% percentile of sample distribution. In this way we will be able to make comparisons with previous research results in similar and different corporate governance settings.

Table 6. Levels of probability and discrete changes in probability of turnover with performance at 25th to 75th percentile of the sample distribution

	CEO controlling = 1	CEO controlling = 0	CEO controlling = sample mean
Family control = 1			
25th percentile	0.008	0.194	0.010
75th percentile	0.005	0.173	0.009
Change in probability	0.003	0.021	0.001
Family control = 0			
25th percentile	0.002	0.277	0.220
75th percentile	0.001	0.174	0.150
Change in probability	0.001	0.103	0.069
Family Control = sample mean			
25th percentile	0.000	0.222	0.174
75th percentile	0.000	0.173	0.148
Change in probability	0.000	0.048	0.026

Percentages refer to the changes of the probability that turnover occurs in presence of changes in performance from 75th to 25th percentile of sample distribution.

Analysis of discrete changes in probabilities reveals that, in the situation with all the variables set at their sample means, the impact of performance on probability of dismissal is equal to 0,174 at the 25th percentile and to 0,148 at the 75th percentile. Probability of turnover seems therefore to increase rather slowly as performance gets worse. The discrete change is lower than the value found in Brunello et al. (2003) in a similar study (but on a different period) on Italian listed firms; but the absolute values of probability of dismissal at the 25th and 75th percentiles are higher. This is probably due to the fact that the average performance in our panel is lower.

Analysis shows that when the CEO is a controlling owner the probability of dismissal after poor performances is close to zero, both in family and non family firms. This result is in line with those obtained for example by Weisbach (1988) and Denis et al. (1997) for the U.S. , and by Volpin (2002), Brunello et al., (2003), Barucci et al. (2003) for Italy. These studies, however, do not distinguish among family and non family control and tend to identify the case of CEO ownership with the case of family control.

Our topic major interest is indeed the probability of dismissal for non controlling CEOs in different control settings with particular reference to the distinction between family control and other types of insider control. To test our hypothesis 3, we consider the cases of non controlling CEOs, comparing the sensitivity of turnover to performance in family and non family firms. In non family firms probability of turnover for non controlling CEOs is 0,277 and 0,174 respectively at 75th and 25th percentiles, implying a discrete change in probability of 0,103. These absolute levels and discrete changes are higher than the values calculated in the case of family control, where levels of probability are 0,194 and 0,173 with a discrete change of 0,021. Hypothesis 3 is therefore supported. Non controlling CEOs are less likely to be dismissed if they operate in family controlled firms, and the sensitivity of turnover to changes in short term performance is higher in non family firms.

Conclusions

In this paper we assessed the degree of engagement of insider shareholders by analyzing the relationship between short term performances and CEO turnover in insider controlled firms.

In particular we checked whether family firms represent a special typology of insider controlled firms and exhibit higher level of engagement, i.e. a higher understanding of the dynamics of the industry and the company and a lower emphasis on short term economic performance, resulting in long term commitment to professional relationships with non family executives.

The results seem to support our hypotheses: family owners appear to be a more engaged category of insider shareholders in comparison to other owners.

Arguments in favor of the higher level of engagement are provided by the analysis of sensitivity of non family/non controlling CEO turnover to short term performance. Family firms are much less prone to fire a non controlling CEO after poor performances than non family firms.

However this could also be interpreted as a sign of entrenchment: the permanence of CEO within the company could be related not to the engagement but to some sort fiduciary relationship that helps to cover opportunistic behavior by the family (for example, extraction of value from the minority shareholders).

In this perspective, to improve the analysis we would have to:

- Employ long term performance indicators (for example, investments in R&D, long term economic and financial indexes)
- Assess the personal characteristics of CEOs in terms, for example, of relationships with the controlling family and biographic information
- Employ qualitative methodologies to explore representative cases of non family CEO – controlling family relationships.

This future developments will also help us to overcome the major limitations of the paper, namely: (1) the absence in the estimation of CEO power and CEO biography data; (2) the use of dichotomous specification of family influence influence. It would be useful to distinguish between firms controlled by a sole family and firms controlled by a coalition of families or coalitions of family and non family owners; or between family firms with degrees of family involvement in the management; methologies like F-PEC scale (Klein et al., 2002) would be useful for this purpose; (3) the arbitrary exclusion from the sample of firms with more than one CEOs. Situation of multiple CEOs will be better handled in our perspective of research by collecting and organizing data at the level of single executive rather than at firm level. This will also allow us to consider other top executive position different from the CEO.

Starting from the point, supported by this research, that not all insiders behave in the same way, further developments will also address the differences between various typologies of insider investors, by evaluating their levels of engagement, measuring for example their degrees of firm specific expertise and involvement.

References

Barro, J.R., Barro, R.J., (1990) "Pay, performance and turnover of bank CEO's", *Journal of Labor Economics*, 8, pp.448–481

Barucci E.; Bianchi C., Frediani M., (2006), "CEO turnover in the Italian Financial Market". *Giornale degli Economisti e Annali di Economia*, 65(2), pp. 127 - 154

Brickley, J.A., 2003. "Empirical Research on CEO Turnover and Firm-performance: A Discussion", *Journal of Accounting and Economics*, 36, pp. 227-233.

Brunello, G., Graziano, C., & Parigi, B. M. , (2003), "CEO Turnover in Insider-Dominated Boards: The Italian Case", *Journal of Banking and Finance*, 27, pp. 1027-1051.

Carney, M. & Gedajlovic, E. (2003), Governance, inducements-contributions and organizational capabilities. *Paper presented at the Academy of Management Conference*, Seattle, WA.

Casson, M. (1999), "The economics of the family firm", *Scandinavian Economic History Review*, 47, (1), pp. 10-23.

DeFond, M.L., Park, C.W., (1999), "The effect of competition on CEO turnover", *Journal of Accounting and Economics*, 27, pp. 35–56.

Denis, D.J., Denis, D.K., (1995), "Performance changes following top management dismissals", *Journal of Finance*, 50, pp. 1029–1057.

DJ Denis, DK Denis, A Sarin, (1997), "Ownership structure and top executive turnover", *Journal of financial economics*, 45 (2), pp. 193-221.

Franks, J., C. Mayer and L. Renneboog, (1995), "The role of large share stakes in poorly performing companies", *mimeo.*

Gibbons, R., Murphy, K.J., (1990), "Relative performance evaluation for Chief Executive Officers", *Industrial and Labor Relations Review*, 43, pp. 30–51.

Guzzo, R., Abbott, S. (1990), "Family firms as utopian organizations", *Family Business Review*, 3 (1)pp. 23-33.

James, H. S. (1999), "Owner as manager, extended horizons and the family firm", *International Journal of the Economics of Business* 6 (1), pp. 41-55.

Jensen, M.C., Murphy, K.J., (1990), "Performance pay and top-management incentives", *Journal of Political Economy*, 98, pp. 225–264.

Kaplan, S.N., Minton, B.A., (2006), "How has CEO turnover changed? Increasingly performance sensitive boards and increasingly uneasy CEOs", *Working paper*, University of Chicago.

Klein S., Astrachan J., Smyrnios K. (2005) "The F-PEC scale of family influence. Construction, validation and further implications for theory", *Entrepreneurship Theory and Practice*, 29(3).

Lee, M. & Rogoff, E.G. (1996), "Comparison of small businesses with family participation versus small businesses without family participation: An investigation of differences in goals, attitudes, and family/business conflict", *Family Business Review*, 9, pp.423–437.

Murphy, K. J. and J. Zimmerman, (1993), "Financial Performance Surrounding CEO", *Journal of Accounting and Economics*, 16, pp. 273–316.

Parrino, R., (1997), "CEO turnover and outside succession: a cross-sectional analysis", *Journal of Financial Economics*, 46, pp. 165–197.

Ramirez P., Tylecote A., (2004), "Hybrid Corporate Governance and its Effects on Innovation: A Case Study of AstraZeneca", *Technology Analysis & Strategic Management*, 16 (1), pp. 97-119.

Schulze, W., Lubatkin, M., Dino, R., Buchholtz, A. (2001), "Agency relationships in family firms: Theory and evidence", *Organization Science*, 12, pp. 99–116.

Sharma, P., Chrisman, J. J.,& Chua, J. H. (1997) „Strategic management of the family business: Past research and future challenges" *Family Business Review*,10(1), pp. 1–36.

Tagiuri, R., Davis, J. A. (1992), "On the goals of successful family businesses", *Family Business Review* 5 (1), pp. 43-62.

Tylecote A., Visintin F. (2008), *Corporate governance, finance and technological advantage of nations*, London, Routledge.

Volpin, P.F., (2002), " Governance with poor investor protection: Evidence from top executive turnover in Italy", *Journal of Financial Economics* 64 (1), pp. 61–90.

Warner, J., Watts, R., Wruck, K., (1988), "Stock prices and management changes", *Journal of Financial Economics* 20, pp. 461–492.

Weisbach, M., (1998), "Outside directors and C.E.O. turnover", *Journal of Financial Economics* 20, pp. 431–460.