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Ownership or Performance:

What Determines Board of Directors' Turnover in Italy?

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Summary

This paper analyzes the turnover of board of directors members on a sample of companies listed on the Milan Stock Exchange in the period 1988-1996. Our aim is to investigate if board members change more frequently when company performance is poor, as the literature suggests, if this relationship is similar for C.E.O.s and other board members, and if and how the ownership structure of Italian companies affects these relationships. We use three different measures of board of directors turnovers: turnover A is the turnover of all board members; turnover B is the turnover of the President, Vice-President, C.E.O. and General Manager; finally turnover C is the turnover of C.E.O.s only. We find that changes in ownership affect turnover and that the relationship between turnover and performance is stronger in companies that have experienced a change in the controlling shareholder.

Key words: Board of Directors, Corporate Governance, Financial Agency

JEL: G34, J63.

Non Technical Summary

Corporate governance issues have recently received large attention in Italy from the policy makers and from the public. However, to a large extent, this interest has not been accompanied by academic studies on the functioning of the Italian mechanisms of corporate governance. In particular little research has been devoted to study the roles of board of directors in the Italian system of corporate governance.

There is a large literature on the relationship between firm performance and top management turnover in the U.S. Recently a few studies have investigated this relationship in countries with different corporate governance mechanisms, like Japan and Continental European countries. These studies have found that top executives turnover is negatively related to both stock performance and accounting-based firm performance measures in all these countries. The relationship between ownership variables and turnover is instead less understood and qualitatively different among countries.

This paper analyzes the turnover of board of directors members on a sample of companies listed on the Milan Stock Exchange. Our aim is to investigate if board members are removed more frequently when company performance is poor, as the literature suggests, and if and how the ownership structure of Italian companies affects these relationships. We use three different measures of board of directors turnovers: turnover of all board members; turnover of the President, Vice-President, C.E.O. and General Manager; turnover of C.E.O.s only.

Our main hypotheses are the followings: (1) we expect a weak relationship between turnover and performance since the agency problem between top managers and controlling shareholders is small. (2) turnover should be sensitive to ownership changes given that board members are often controlling shareholders or they have strong ties with them. (3) we expect that family-controlled companies have a lower turnover. (4) since the main task of Italian directors is strategic planning rather than independent monitoring of the C.E.O., we would expect similar turnover-performance sensitivity for the C.E.O. and other directors.

Our findings support Hypothesis 1, 2 and 4, but not Hypothesis 3: C.E.O. turnover in family-controlled companies is not statistically different from C.E.O. turnover in other companies. Another important result is that the relationship between turnover and performance is very different in firms that experienced at least one change in ownership and firms that did not have any ownership change. C.E.O. turnover is (strongly) statistically related to firm performance in the first group of companies while there is no statistically significant relation in the other group. This indicates that the weak turnover-performance found above is the result of very different turnover-performance sensitivities among the firms in our sample.

1. Introduction

Corporate governance issues have recently received large attention in Italy from the policy makers and from the public, in light of the privatizations, a sweeping reform of corporate law¹, and the integration of the European capital markets. However, to a large extent, this interest has not been accompanied by academic studies on the functioning of the Italian mechanisms of corporate governance. In general, little is known about the way the Italian corporate governance deals with the agency problems arising from management/ownership separation.² In particular little research has been devoted to study the roles of board of directors in the Italian system of corporate governance.

This paper analyzes the turnover of board of directors members on a sample of companies listed on the Milan Stock Exchange. Our aim is to investigate if board members are removed more frequently when company performance is poor, as the literature suggests, if this relationship is similar for C.E.O.s and other board members and if and how the ownership structure of Italian companies affects these relationships. We use three different measures of board of directors turnovers: turnover of all board members; turnover of the President, Vice-President, C.E.O. and General Manager; turnover of C.E.O.s only.

To preview our main findings, changes in ownership affect turnover and the relationship between the three measures of turnover and performance is much stronger in companies that have experienced changes in the controlling shareholder.

The rest of the paper is organized as follows. Section 2 reviews the related literature on ownership structure and board turnover. Section 3 describes the main features of Italian capitalism that affect board of directors turnover. Section 4 describes

¹ A major reform on corporate governance matters became law in July 1998.

² As Zingales (1998) points out the very term “corporate governance” is recent. Some of the first studies of corporate governance matters in Italy have been Brioschi et al. (1990), Barca (1994), Zingales (1994) and Caprio et al. (1994). Brunello, Graziano and Parigi (1998) study the implications of the Italian system of corporate governance on managerial incentives in sample of Italian firms.

the data. Section 5 provides some summary statistics about the directors and the companies in our sample. In Section 6 we report the results of the regressions of turnover against directors and firms characteristics. Section 7 offers some concluding remarks and points to some extensions.

2. Related Literature

Two related strands of literature are relevant for this paper: the literature on the relationship between firm performance and board of directors turnover and the literature on the relationship between ownership structure and top management incentives.

Board Turnover

There is a large literature on the relationship between firm performance and top management turnover in the U.S. (see among others Coughlan and Schmidt 1985, Warner, Watts and Wruck 1988, Denis et al. 1997). These studies are largely based on the first-generation agency theory of the firm where managers are agents of dispersed shareholders. Among the many findings two are most relevant for the present paper.³ First, top executives turnover is negatively related to both stock performance and accounting-based firm performance measures (earnings, sales etc.). This relationship is stronger when the board is dominated by outside directors (Weisbach 1988) or in firms with a block shareholder (Denis et al. 1997).

Second, boards with significant managerial ownership are more likely to behave in shareholders interests (Morck et al. 1988, Hermalin and Weisbach 1991). However, executive ownership may also cause managerial entrenchment, thus making it more difficult to remove an underperforming manager. Evidence on managerial entrenchment has been provided by Denis et al. (1997) that show that the relationship between firm

performance and executive turnover is weakened by managerial ownership. They find that, controlling for poor stock performance, the probability of top management turnover is negatively related to their equity ownership (See also Rosenstein and Wyatt 1997).

Recently a few studies have investigated whether countries with different corporate governance mechanisms have a similar negative relationship between top executives turnover and firm performance. The somehow surprising result is that executive turnover is negatively related to stock performance also in Japan and Germany, generally described as relationship-oriented systems in contrast with the market-oriented U.S. system. Poor stock performance as well as poor sales and earnings, increase the likelihood of executive turnover in Japan (Kaplan 1994a and Kang and Shivdasani 1995). The sensitivity of Japanese management turnover to the different measures of firm performance is not very different from the one found for the U.S.

The study by Kaplan (1994b) on a sample of large companies in Germany shows that turnover of the board of directors (management board) is negatively related with stock performance and earnings. Turnover of the supervisory board and new appointments to the board are also negatively related to stock performance. Kaplan tests also whether the turnover-performance relationship is a function of the concentration of shares or voting rights. If large shareholders play an important monitoring role, turnover-performance sensitivity should be stronger in firms with a controlling shareholder or with bank control. His finding is that the relation does not vary with ownership concentration or with bank voting power. However, a possible explanation of this result is that all the companies in the sample have similar ownership concentration and therefore similar monitoring. On the basis of these studies Kaplan concludes that "To roughly the same extent and significance, poor stock returns and income losses increase the likelihood of top management turnover in Germany, Japan and the U.S." (Kaplan 1994b, p.158).

³ Two comprehensive surveys of this literature are Kose and Senbet (1998) and Mayer (1998).

A negative relationship between performance and turnover is also found in other Continental European countries like Spain (Gispert 1998), Denmark (Lausten 1998) and Belgium (Renneboog 1996). Gispert (1998) uses a sample of large listed Spanish companies and finds that there is a statistically significant and negative relationship between board turnover and firm performance. This negative relationship is weakened by ownership concentration while the nature of the largest shareholder (financial companies, other firms, individuals etc.) does not influence the probability of turnover. Lausten (1998) focuses on C.E.O. turnover in a sample of medium and large-sized Danish firms. Her main result is that there is an inverse relationship between C.E.O. turnover and firm performance measured by pre-tax accounting profit relative to sales and that if the firm is family-controlled the probability of turnover is lower. Finally, Renneboog (1996) documents that poor performance of Belgian listed companies increases the probability of turnover of executive directors, of members of the management committee and of the C.E.O. In his study increased ownership concentration leads, *ceteris paribus*, to higher board turnover.

Summarizing, a variety of studies show that countries with different corporate governance systems exhibit a negative relationship between firm performance and C.E.O.s turnover. Hence, we can conclude with Kaplan that “the result strongly suggests that a successful or efficient governance system penalizes managers of firms with poor stock performance and with particularly poor current cash flows” (Kaplan 1994b, p.158). The relationship between ownership variables and turnover is instead less understood and qualitatively different among countries.

Ownership Structure

A more recent and growing body of research investigates the agency problems that arise from the different patterns of separation of ownership and control. On the theoretical side

several papers address the issue of the different roles of controlling and non-controlling shareholders and stress the monitoring role of large shareholders (e.g. Shleifer and Vishny 1986). However, ownership concentration in the hands of large shareholders may have costs because of lower market liquidity (Bolton and Von Thadden 1998), because large shareholders may exert excess monitoring (Pagano and Röell 1998), and because monitoring by large shareholders comes at the cost of managerial discretion (Burkart, Gromb, and Panunzi 1997). On the empirical side several studies have identified ownership patterns which substantially differs from that of the widely-held corporations controlled by unaccountable managers. In particular the cross country studies of La Porta et al. (1997, 1998) point out that ownership of large companies in the rich economies around the world is typically concentrated, that control is often exercised through pyramidal groups with a holding company at the top controlling one or more subsidiaries that, in turn, control other subsidiaries and so on, that families are often the controlling shareholders, and that the controlling shareholders are often actively involved in company management and sit in the board of directors.

Family control through pyramidal groups appears an *intermediate form between closely held family business and public companies*. On the one hand, the controlling shareholders generally take an active interest in company matters. This pattern is hardly an exception around the world where, according to La Porta et al. (1998), 69% of the times families that control the largest firms also participate in management. On the other hand, a strong leverage effect of the pyramid gives the shares of the controlling shareholders more votes than those of other shareholders (Shleifer and Vishny 1996, Barca 1996, Nicodano 1998) which guarantees control with a small fraction of the voting shares, as in public companies (La Porta et al. 1998). In this context, separation of ownership and control generates a two-level agency problem: between controlling shareholders and management, and between minority shareholders and controlling

shareholders. The first agency problem is mitigated by promotion, firing and incentive pay for managers, and, chiefly, by the active involvement of the controlling shareholders and by their close monitoring on outside managers.

The main agency problem, however, arises between non-controlling shareholders and controlling shareholders that often have control rights in excess of their cash flow rights (La Porta et al. 1998). To discipline controlling shareholders adequate legal protection of minority shareholders and a well functioning market for corporate control are required. Interestingly, concentration of ownership in the hands of family shareholders is more common in countries where the legal protection of non-controlling shareholders is weaker and the potential for the expropriation of their rights stronger.

3. Italian capitalism and implications for board turnover

Corporate Governance in Italy

In light of the observations in the previous Section corporate governance in Italy has a number of specificities that make it different both from the market oriented Anglo-Saxon model and from the relationship oriented German and Japanese models.

One key feature is precisely how the separation between *ownership* and *control* of firms takes place. Public companies are the exception. Much more common is concentrated ownership and control through *pyramidal groups* (Barca 1996). Most large and medium sized companies belong to a group organized as a pyramid.⁴ The holding company at the top of the pyramid is often controlled by a “family” through voting trusts and cross shareholding with allied groups. Family control of pyramidal groups is common even among the largest Italian firms (e.g. FIAT, Pirelli, Benetton, and until recently, Olivetti). There are relatively few intra-group cross shareholdings (the law limits the voting

⁴ See Brioschi et al. (1990) and Barca (1996) for a description of this phenomenon. Bianco, Gola, Signorini (1996) report that hierarchical group control accounts for over 57% (32,6%) of manufacturing companies of more (less) than 200 employees.

rights of those shares) but there are very strong inter-group cross shareholdings.

A number of factors link these features to the limited legal protection of non-controlling shareholders in Italy and to the weak market for corporate control. First, the system of pyramidal groups and coalitional control offers the possibility of gaining and maintaining company control with a small fraction of the voting rights and shields the controlling group from the threat of hostile takeovers. Hostile takeovers and proxy fights aimed at removing incumbent management are virtually absent in Italy. Although changes of the controlling shareholders are frequent, they are friendly in most cases (Caprio et al. 1994).⁵ The benefits of control appear larger than elsewhere. For voting stocks enjoy an abnormally high premium. Zingales (1994) reports a 82% premium associated with the voting rights of stocks of companies listed on the Milan Stock Exchange against of a voting premium between 10% and 20% common in other countries. Nicodano (1998) shows that for a sample of Italian listed companies the voting premium is even larger when non-voting stocks are issued by pyramid groups. Furthermore, as La Porta et al. (1998) report, in all largest Italian listed companies, regardless of the ownership structure, there is no other large independent shareholder that can potentially monitor the controlling shareholders. Disclosure rules and insider trading regulations are poorly designed and enforced. Sole 24 Ore (1999) reports that of all 51 insider trading investigations conducted by C.O.N.S.O.B. (the Italian equivalent of the U.S. S.E.C.) in 1997-1998 only one resulted in a guilty verdict.

Second, institutional investors hold a small fraction of the equity of Italian firms⁶ and, in general, are not active investors.⁷ It is often the case that bank-controlled mutual funds hold significant fractions of the capital of firms that belong to allied groups and

⁵ Caprio et al. (1994) report that in the 1970s (1980s) 28,81% (32,75%) of listed companies in Italy experienced a change of control.

⁶ In 1997 mutual funds stocks was 6% of the Milan Stock Exchange capitalization. That ratio was 5% for insurance companies, 0.5% for pension funds, 0.2% for stock brokers (S.I.M.) (Banca d' Italia 1998).

⁷ An exception has been the role of foreign institutional investors, among which CALPERS, in the fight to oust

exercise their voting rights according to the strategy decided by their parent company. Italian pension funds are in their infancy.

Finally, the Milan Stock Exchange by all measures is the least developed among the G7 countries and ranks last both for capitalization and for volume of transactions as a percentage of GNP (Barca et al. 1995). The Milan Stock Exchange has traditionally played a minor role both in the market for corporate control and in channeling the savings of the Italian households.⁸

Although the above features make the Italian system much more similar to the German and Japanese models than to the Anglo-Saxon model, there are important differences with the former models too. In the relationship-based systems, banks and large shareholders perform an important monitoring role and replace the missing external markets for corporate control.⁹ Despite the importance of the banking system as a source of corporate funds, bank governance in Italy has been ineffective for several reasons (De Cecco and Ferri 1994 and Barca 1996). First, banks in Italy have in general preferred an arm's-length relationship with their corporate customers and have not been involved in any significant monitoring activity. Rather than developing information-intensive relationship banking with their corporate clients, as stressed by the monitoring view of financial intermediation, Italian banks have largely relied on the availability of good collateral as the main criterion to grant credit. De Cecco and Ferri (1994) argue that perhaps with the exceptions of two former universal banks,¹⁰ most Italian banks have not developed the skills to exercise adequate ex ante screening of loan applicants and ex post monitoring of their corporate loans. Second, a distinctive feature of bank lending in Italy has been the

incumbent management of Olivetti after a long series of losses.

⁸ According to Pagano, Panetta and Zingales (1995), Barca (1996) and La Porta et al. (1997) the Italian corporate governance mechanisms are underdeveloped and substantially delay the flow of external capital to firms.

⁹ See Aoki (1988) for a discussion of the Japanese case.

¹⁰ Banca Commerciale Italiana and Credito Italiano.

widespread practice of multiple loans.¹¹ With multiple loans, a firm is financed at the same time by several banks, none of which acts as a main bank as in Germany or in Japan. This allows banks to share idiosyncratic risks but reduces their incentives to screen and monitor firms. Third, the legal procedures for turning control over to the banks and to other creditors are not well established (Barca 1996).¹²

Board of Directors

The above features of Italian capitalism affect board of directors functions and composition. First, although the members of the board of directors have fiduciary duties with respect to all shareholders¹³ they mainly represent the interests of the controlling shareholders, minority shareholders being typically not well represented. A survey conducted in 1994 (Crisci and Tarizzo 1995) on the Boards of Directors of 500 Italian companies provides a clear picture. At the question “Who do you represent in the board?” 83% of the directors answered “the controlling shareholders” and only 12% “the minority shareholders”. Furthermore in 1995 in all top twenty Italian firms by stock market capitalization a member of the controlling family sits in the board as the C.E.O., the Honorary Chairman, or the Vice-Chairman of the firm controlled by that family (La Porta et al. 1998). Second, the main task of the directors (more than 75% of them are executives) is strategic planning and its implementation while independent monitoring of executives is regarded as a marginal task. (Crisci and Tarizzo 1995). No independent monitoring is exerted also by the Internal Auditing Committee, appointed by the controlling shareholders and with limited power (Barca 1996).

¹¹ Barca (1996) reports that the average number of banks financing a firm ranges from 5 for the smallest firms to 30 for the largest. Detragiache, Garella and Guiso (1997) report that for firms between 50 and 500 employees the modal number of banking relations is 1 in the USA against 7 in Italy and that only 1.25% of Italian firms obtain credit only from one bank against 37% in the USA.

¹² Evidence of weak protection of creditors rights in Italy is also offered by the cross-country study of La Porta et al. (1996).

¹³ Directors' fiduciary responsibility to shareholders is explicitly stated in the law, art. 2392 and 1710 of Civil Code (c.c.).

Outside directors are rare. Crisci and Tarizzo (1995) report that in most instances the new director had previous strong ties with the firm: in 64% of the cases directors have been chosen among former managers or consultants of the firm, in 26% of the cases among either shareholders or their relatives, and in only 6% of the cases the director did not have any previous relationship with the firm. The same survey reports that the choice of a new director is based more on personal contacts than on the search for the best candidate.

Board members are appointed by the shareholders for a three-year, renewable term with no time limit. Typically there is no mandatory retirement age. The president of the board is elected either by the board or by the shareholders.

Testable implications for board turnover

The above features of the Italian system of corporate governance have several implications for board turnover. First, as we have argued above, the agency problem between top managers and controlling shareholders is small, and their incentives are typically aligned. Hence turnover has a limited disciplinary role which would lead us to expect a low turnover-performance sensitivity (Hypothesis 1). It is interesting to contrast our hypothesis with Kaplan's (1994b) according to whom, everything else equal, higher ownership concentration leads to a closer monitoring and hence to a higher turnover-performance sensitivity. The difference arises because his focus is mainly on public companies while our companies are mainly family-controlled pyramidal groups where the main agency problem lies between controlling and non-controlling shareholders. Second, turnover should be sensitive to ownership change, either because board members are often controlling shareholders or because they have strong ties with them (Hypothesis 2). Third, we expect that turnover of the members of the controlling family is lower than turnover of outside directors. Thus we expect that family-controlled firms have a lower

turnover (Hypothesis 3). Fourth, since the main task of Italian directors is strategic planning and its implementation rather than independent monitoring of the C.E.O. and other top executives, we would expect similar turnover-performance sensitivity for C.E.O.s and other directors (Hypothesis 4). In particular, to test this hypothesis we consider the turnover of three nested subsets of board directors (as specified in Section 4), instead of restricting the attention to C.E.O. turnover like most of the literature.¹⁴ Fifth, if state-controlled companies may have objectives different from value-maximization, we should expect a weaker relation between turnover and performance in these companies (Hypothesis 5). Finally, the limited role of the stock market and of the market for corporate control imply smaller sensitivity of turnover to performance than in other countries (Hypothesis 6).

4. Data

Sources: The members of the boards of directors and the data on the accounting-based performance measures are obtained from *Calepino dell' Azionista* (1987-1997), a yearly publication on Italian listed companies. To eliminate discrepancies board members information is cross-checked with another board members information from another stock-exchange yearbook *Taccuino dell'Azionista* and from CONSOB information from company filings. The data on the ownership structure and the market value of the firms are obtained by *Taccuino dell'Azionista* (1987-1998).

Firm Sample: We consider all industrial firms (i.e. excluding banks, insurance companies and financial holding companies)¹⁵ listed on the Italian Stock Exchanges over the period

¹⁴ Most studies on Anglo-Saxon countries focus on C.E.O. turnover only and relatively few studies on Continental Europe and Japan consider board turnover (Kaplan 1994a, 1994b, Gisbert 1998, Renneboog 1997).

¹⁵ Banks, insurance companies and financial holding companies are excluded because for accounting reasons before 1993 their performance measures are not easily comparable with those of the other

1988-1996. Thus, our sample includes only "survivors". The final sample consists of 73 companies. This represents about one third of all listed companies (the number of listed companies varies between 228 in 1988 and 215 in 1997). Our sample includes both private and state-owned companies.

Turnover Measures: We use three different measures of directors' turnover. Measure A refers to the turnover of the entire board of directors. Measure B considers the turnover of top executives: Chairman (President), Vice-President, C.E.O.s¹⁶, and General Manager. Measure C considers the turnover of C.E.O.s only.

For each turnover measure A, B, C, we also use two alternative definitions of turnover: *job turnover* and *person turnover*. Job turnover considers the change in the person holding a given position. It captures instances in which directors swap their titles but they remain on the board and accounts for additions and cancellations of positions to the board. Thus, according to job turnover, turnover A measures the percentage of directors that left a given position in the board between year t and year $t+1$, turnover B measures the percentage of top executives that left their position in the reference period, and turnover C indicates whether the C.E.O.s left his position in the reference period.

Person turnover is the exit rate from measure A, B or C between year t and $t+1$. Hence, according to this alternative definition, turnover A measures the percentage of directors that left the board, turnover B measures the percentage of top executives that left the board and finally turnover C indicates whether the C.E.O. left the board. Person turnover does not consider additions to the board and does not capture a change in the positions held by directors if they remain on the board. Consider for example measure B. If two top executives swap their positions, this change is captured by job turnover but not by person turnover. Job and person turnover coincide for measure C. The distinction

companies.

between job and person turnover may be useful given that voting trusts and family control may entail that some directors change positions without leaving the board.

In the regressions, we use person turnover when we consider the entire board (measure A) and job turnover when we consider top executives (measure B) and C.E.O.s (measure C). The justification is that when we consider top executives or C.E.O.s we are interested in determining whether a director with a given job title maintains it the following year. However, when we look at the entire board we are more interested in knowing whether a director remains in the board rather than in recording all positions held by that director.

A shortcoming of our data set is that our source (Calepino dell' Azionista) reports information on the persons on the board only at the survey time of each year (June 30). Our source does not reports information on persons remaining in the board for a period shorter than one year and which does not include June 30. This potentially underestimates the true turnover. However, cases in which a director resigns, or is fired, after few months on the job are rare.

Information on Directors: For each director we have information about his/her gender, the total number of directorship held, and the age. From this we have constructed the following variables: **Gender**, defined as the average fraction of women in each measure (A, B and C), **Number of Directorships** which is the average number of positions held in other boards by the directors in each measure, and the average **Age** of the directors in each measure.

Performance Measures: We use both accounting-based and market-based performance measures. A well-known drawback of accounting-based performance measures is that

¹⁶ Large companies may have more than one C.E.O..

they can be manipulated by managers. However, in our case there are two good reasons for using them. First, if stock prices are in general affected by factors other than managerial effort this is even more so in Italy because of the above mentioned imperfections of the Italian Stock Exchange. Hence, directors may be reluctant to use them to evaluate the C.E.O. Second, firm size is one of the most important determinants of managerial compensation.¹⁷ This can lead managers to increase firm size at the expenses of shareholder value. To test whether Italian firms are less concerned with stock return (interpreted by some as a short-term objective) and more with market share we use **Sales growth** as performance measure. In addition to sales growth we use another accounting-based performance measure, **Operating income growth**. Operating income is defined as earnings before taxes, interest and depreciation. The choice of this variable is justified on the ground that it cannot be easily manipulated since it does not incorporate the choice of the depreciation and tax regime.

In addition to these accounting-based variables we used the percentage change in market capitalization as a proxy for stock return. The change in market capitalization is defined as the change in stock market capitalization of the company between the end of year t (December 31) and the end of year $t+1$, divided by company capitalization at year t . Since its coefficient was never significant, the regressions with this variable are not reported. We used also a dummy that takes value 1 if (net) income is negative and 0 otherwise and the ratio of earnings over assets. Again these variables were never significant and the regressions are not reported. All variables are measured in current lire.

We allow for a non linear relationship between turnover and firm performance by introducing for each performance variable the product between the variable itself and its absolute value. This transformation maintains the sign of the variable. Finally,

¹⁷ For evidence on Italian firms see Brunello, Graziano and Parigi (1998).

performance was measured over the current and the previous one-year and two-year periods. Lags were never significant.

Company Information: We use the following information on sample companies: **Size**, (a dummy variable that takes value 0 if the company has less than 10,000 employees and 1 otherwise), stock market capitalization (**Market value** a discrete variable that takes three values: 1 if market capitalization < 300 billion lire; 2 if market capitalization is between 300 and 1,000 billion lire; and 3 if market capitalization > 1,000 billion lire), whether they are private or state-owned (**State ownership**: dummy variable that takes value 1 if the company is state-owned and 0 otherwise), the industry they belong to (chemical and pharmaceutical, textiles,...), and the controlling shareholder.

5. Summary statistics

Table 1 reports some descriptive statistics of board directors on the universe of all listed companies during the period 1984-1998 obtained from CONSOB. This table refers to all directors of listed companies that started their job before 1988, which allows us to follow each director for at least ten years. It provides information about the age, tenure in the job, number of companies in which the director had a job, and it allows us to compare the characteristics of board directors in our sample with those of the universe. Two facts are worth noticing. First, the average tenure in a given job is not much longer than the three-year length of the (renewable) contract for directors. Indeed, the median tenure in the job (not reported in Table 1) is 2.6 year. Second, each director holds on average more than two different positions in the same company.

The number of directors per board in our sample is shown in Table 2. Top Executives (C.E.O., President, Vice President, General Manager) are almost 30% of the board members. Not reported in the table is the difference between the average board

size of private companies (9.5 members) and of state-owned companies (12.8 members).

Table 3 reports some features of the boards in our sample: age, fraction of women, and number of outside directorships held by each director. The fraction of women on the board is very small and decreases further when we consider top executives only. The few women on a board are typically members of the controlling family. Directors often sit on more than one board. Interlocking directorship is a common feature in companies that belong to a pyramidal group and are controlled through a voting trust. The table shows that C.E.O.s hold less outside directorships than other directors. This is consistent with the notion that the opportunity cost of outside directorships is higher for managers with greater marginal products, which is often the case for C.E.O.s. Finally, Table 3 shows that more than a quarter of the C.E.O.s are members of the controlling family.¹⁸

Table 4 presents the average turnover in each measure under two alternative definitions of turnover, *job turnover* and *person turnover*. As expected, job turnover is higher than person turnover. The difference between job and person turnover indicates the percentage of directors changing position but remaining on the board. We interpret this as turnover related to other than disciplinary causes. It is interesting to note that this difference is larger for turnover C than for turnover B which, in turn, is larger than for turnover A. Namely, 17.3% of directors that leave their position remain in the board, while this percentage increases to 33.7 and to 34.6 when we consider top executives and C.E.O.s, respectively. Hence, about one third of top executives and of the C.E.O.s remains on the board when they leave their positions. Our data do not allow us to determine whether this is due to promotions, ties with the controlling shareholders or other reasons. Note that turnover C is smaller than turnover A and B under both definitions of turnover thus indicating that C.E.O.s are less likely to leave their position (and the board) than other directors.

¹⁸ See next section for a discussion of this point.

Table 5 presents some evidence on the relationship between turnover and changes in the controlling shareholder. Since directors in Italy represent mainly the controlling shareholders we expect a positive association between changes in the controlling shareholder and the likelihood of turnover (Hypothesis 2). The findings reported in Table 5 support this hypothesis: high levels of turnover (more than 50%) for measure B and C are more likely associated with a change in the ownership than with no change in ownership, while no turnover is more likely associated with no change in the ownership.

Finally, Table 6 presents some statistics on the companies in our sample. The average 1996 sales of our sample companies are 3.936 billion lire, thus suggesting that these are large companies.

6. Empirical results

This section presents the results of the regressions of board turnover against firm performance measures and other explanatory variables.

We test whether turnover is related to firm performance using the three turnover measures A, B, C. The regressions provide information on whether poor performance increases the likelihood of a change in the C.E.O.(s) and in the board composition.

Since our data are firm specific, variations in turnover rates across firms depend, in general, both on fixed and on time-varying effects. More in detail, let our turnover equations be specified as follows

$$turnover_{it} = \alpha_i + \beta x_{it} + \gamma z_t + e_{it}$$

where i is for firms and t for time, $turnover$ is a dummy equal to 1 if turnover takes places and to zero otherwise, x is a vector of variables that vary both over time and across firms, z is a vector of variables that vary only over time, e is an error term and α is a firm specific and time invariant effect. When α captures unobserved or unmeasured firm

characteristics that are correlated with firm performance, ignoring this fixed effect in estimation leads to biased results (Chamberlain 1984). This problem can be dealt with either by introducing in the regression firm specific dummies or by controlling for firm specific factors with other variables. We try to control for these factors by using some variables intended to capture different categories of company ownership: state ownership that indicates whether the firm is state-owned or private, C.E.O. ownership which is a proxy for family control, and ownership change (See below for a description of these two variables). However, since these variables do not take account of all firm specific factors we also use firm specific dummies.

We assume that the error term has a normal distribution and estimate the turnover equations using the probit model. All regressions include time-period dummy variables. These variables are intended to control for economy-wide shocks. The tables do not report the coefficients for these dummies.

For each turnover measure we use two performance indicators: Sales growth (model 1), and operating income growth (model 2).

We cannot identify and exclude from our data set turnover instances due to retirement. To take into account retirement turnover, we introduced in the regressions the average age of the directors.

As Table 3 shows directors on average hold more than one directorship. It has been argued that interlocking directorships might lead to collusive behavior between directors. To test whether it is more difficult to remove directors with more outside directorships we use the variable number of Directorships.

To test if the turnover-performance sensitivity is lower in State-owned companies (Hypothesis 5) we include in the regressions the dummy variable state ownership.

To determine whether turnover is sensitive to ownership change (Hypothesis 2) we construct a dummy variable, **Ownership change**, indicating for each firm whether there

has been a change in the controlling shareholder. This variable takes value 0 if the firm never experienced a change in the controlling shareholder in the years considered and takes value 1 if the firm experienced at least one change in the controlling shareholder. It is thus a proxy for the contestability of company control. To construct it we use the determination of the controlling shareholder provided by Taccuino dell' Azionista. This variable does not include changes of the controlling shareholder within the same group.

To test if family-controlled firms have a lower turnover (Hypothesis 3) we encounter several problems due to lack of the relevant information. First, only ownership shares larger than 2% are public in Italy. Second, since many companies are controlled through holding companies it is difficult to trace the final owners: for example even if a director has zero (direct) shares he/she may control the company through the family holding. To (partially) overcome these problems we construct the dummy variable, **C.E.O. ownership**. C.E.O. ownership takes value 1 when there is at least one observation in which the C.E.O. is a member of the controlling family of that firm, and 0 otherwise. Since we might have missclassified some C.E.O.s that are members of controlling families our measure potentially underestimates the true relationship.

Large firms are less likely to be takeover targets. Then, management may pursue objectives different from value maximization with a weaker takeover threat. To test this hypothesis we introduced in the regressions three dummies: market value 1, market value 2, and market value 3.

Turnover Estimates

The estimates for turnover A, turnover B and turnover C are reported in Tables 7-9. The qualitative results for the three turnover measures are similar.

The relationship between turnover and performance measures under different model specifications is weak as predicted by Hypothesis 1. Sale growth is never

significant and growth of operating income is statistically significant only in model 2b both for turnover A (Table 7) and turnover C (Table 9).¹⁹ The coefficient of growth of operating income is negative as expected indicating that a decrease in operating income between year t and year $t+1$ increases the probability of C.E.O. turnover in the following year. The relationship between probability of turnover and operating income is non linear as indicated by the positive coefficient of its square. This implies that a negative change in operating income increases the probability of turnover for board members and that this effect is larger the smaller the values of operating income. The coefficient of growth of operating income and the coefficient of its square have opposite signs (both for for turnover A and for turnover C). Hence, to determine the sign of the total effect of growth of operating income on turnover we compute the value of the derivative of the probability function at the mean value of growth of operating income. For turnover A this value is - 0.226 indicating that, for example, a marginal decrease in growth of operating income from its mean value 3.95% increases the probability of turnover A by 0.226, from 15.8% to 16.03%. The value of the derivative for turnover C is -0.249. This implies that a marginal decrease in growth of operating income from its mean value increases the probability of turnover C by 0.249 from 18.5% to 18.75%. Note that performance sensitivity of turnover A and C are similar, although the the latter is larger. This result is consistent with Hypothesis 4.

The positive sign of the variable ownership change supports Hypothesis 2. This is the only variable that scores very well in all regressions is ownership change that presents a statistically significant and positive coefficient in all tables. This indicates that one or more instances of a change in the controlling shareholder increases the likelihood of turnover of all directors (Table 7), of top executives (Table 8) and of C.E.O.s (Table 9).

¹⁹ In model 2a of Table 7 operating income growth squared is statistically significant at 95% while operating income growth is statistically significant only at 90%. However, the likelihood ratio test implies that we cannot reject the joint hypothesis that the coefficients are different from zero.

Consider, for example, turnover B. In model 1a, a marginal increase in the likelihood of a change in the controlling shareholder (evaluated at its mean value of 0.246) increases the probability of top executives turnover by 0.0463, from 19.05% to 19.1%. In model 2a, the same increase in the likelihood of a change in the controlling shareholder increases the probability of top executives turnover by 0.0496. Similarly, a marginal increase in the likelihood of a change in the controlling shareholder increases the probability of C.E.O.s turnover by 0.0412 (from 18.5% to 18.54%) in model 1a, and by 0.0475 in model 2a.

Age has negative coefficients for turnover measures A and B and a positive coefficient for turnover C, but none of them is statistically significant. Also the number of outside directorships is statistically insignificant and therefore we have to reject the hypothesis that the higher the number of directorships the more important is the director and therefore the more difficult is to remove him/her.

Market value's coefficient are ambivalent. For turnover A market value 2 is significant and positive. This means that turnover is larger for firms with intermediate values of market capitalization. For turnover B no market value dummy is significant. For turnover C the dummy for market value 1 is significant and negative indicating that turnover is lower for firms with small value of market capitalization. This result is in contrast with our hypothesis.

State ownership is never significant under different model specifications. We also run regressions with state ownership interacted with the performance variables. The coefficients of the interacted variables were never significant and we do not report these results. Hence the hypothesis that the turnover-performance sensitivity of C.E.O.s and directors in state-owned companies is smaller than that of private companies (Hypothesis 5) is not supported by our findings.

The coefficient of board size in the regression for turnover A in Table 7, the coefficient of the number of top executives in Table 8 and the coefficient of the number of

C.E.O.s in Table 9 are significantly positive. This last variable is positively correlated with firm size and captures a pure size effect. However, it can also provide some information on the cost of directors replacement: a large board (many top executives/C.E.O.s) indicates that it is relatively easy to find directors (top executive/C.E.O.s) with the required human capital and skills.

Finally, the variable C.E.O. owner, which we recall is a proxy for family-controlled companies, has a negative coefficient as expected but it is not statistically significant. Studies on the relationship between managerial turnover and ownership in U.S. companies provide evidence that both incentive alignment and managerial entrenchment are at work. In U.S. companies turnover is always negatively related to performance but managerial ownership weakens this relationship. The results are different in our case. C.E.O. turnover in family controlled companies (companies in which the C.E.O. is a member of the controlling family for at least one year) is not statistically different from C.E.O. turnover in other companies. This result is quite surprising and in contrast with Hypothesis 3.

Table 9a presents the regressions for C.E.O. turnover for two subsets of firms: firms that experienced at least one change in ownership and firms that did not have any ownership change. We report the regressions only with growth of operating income (model 2a and 2b) since it is the only statistically significant performance variable in Table 9. The results are dramatically different: C.E.O. turnover is negatively related to performance in firms with one or more ownership change while there is no relation in the other group. This indicates that the weak turnover-performance relationship found in the previous tables is the result of very different turnover-performance sensitivities among the firms in our sample. Note that the dummy C.E.O. ownership has negative sign in the subset of companies without changes in the controlling shareholder and a positive sign in the other group of companies. This indicates that C.E.O. turnover in family controlled companies is

lower than C.E.O. turnover in the other companies when the family maintains the control and is larger when control changes hands. Thus, the lack of statistical significance of C.E.O. ownership in the previous tables may be due to the fact that the effect of family control on turnover is sensitive to whether control remains with the same family or not.

7. Conclusions and Extensions

We analyze the turnover of board directors on a sample of Italian listed companies. We accomplish this by using two different definitions of turnover: job turnover (when the director leaves the position) and person turnover (when the director leaves the board). We consider the turnover of the entire board (turnover A), the turnover of the President, Vice-President, General Manager and C.E.O.s (turnover B) and the turnover of C.E.O.s only (turnover C).

We find that overall the relationship between firm performance and the three measures of turnover is very weak. Turnover of top executives is independent of firm performance while the turnover of the board of directors and the turnover of C.E.O.s are negatively related to one performance variable only, operating income. The other performance variables, sale growth, a proxy for stock return, a dummy for negative income, the ratio of earnings to assets, are never statistically significant in any turnover measure.

Turnover is strongly related to changes in firm ownership: a change in the controlling shareholder increases the probability of turnover for all three measures. These findings are consistent with the hypothesis that a change in the controlling shareholder leads in many cases to a change in board composition. Ownership change affects also the turnover-performance sensitivity. C.E.O. turnover is negatively related to growth of operating income in firms that changed controlling shareholder at least once while it is independent of firm performance in companies with no change in the controlling

shareholder.

The difference between job and person turnover indicates that about a third of C.E.O.s and other top executives (President, Vice-President and General Manager) do not leave the board when they leave their position. We leave to future research to establish the link between this finding and the features of the Italian capitalism.

The weak a relationship between firm performance and board turnover is in contrast with the evidence both from Anglo-Saxon and Continental Europe countries. While the difference with the Anglo-Saxon world is not surprising given the deep differences in the governance systems, the difference with countries like Spain, Denmark, Belgium and Germany is more puzzling. All these countries, like Italy, have some concentrated ownership, a relatively small number of listed companies and a large number of family-controlled companies. However, recent studies (see Section 2) have shown that in all these countries turnover is negatively related to firm performance. We are currently working to analyze these issues more in detail.

Table 1. Age, tenure and number of companies changed by directors in the universe of all listed companies, 1984-1998.

	Mean	Standard Dev.	Min	Max
Age in 1998 (years)	60.65	9.24	21	79
Tenure in the job (years)	3.28	956.39	0.08	9.86
Number of companies changed	2.56	3.15	0	16
Number of jobs held in the same company	2.24	1.78	1	12
Observations	4191	4191	4191	4191

Source: C.O.N.S.O.B.

Table 2. Number of members of the board. Measure A: all board members. Measure B: top executives (President, Vice-president, General Manager and C.E.O.s). Measure C: C.E.O.s. 1988-1996.

	Measure A	Measure B	Measure C
Mean	10.04	2.82	1.26
Standard deviation	3.81	0.97	0.52
Median	9	3	1
Min	3	1	0
Max	25	6	4
Observations	584	581	509

Table 3. Age, Gender, Number of outside directorships, ownership, of board members 1988-1996.

	Measure A	Measure B	Measure C
Average age	55.5	57.8	55.2
Gender *	2.9	2.5	2.3
N. of outside directorships	2.3	2.2	2.0
Ownership**	-	-	28.24
Observations	584	581	509

* % of women in each measure

** % of C.E.O.s that are members of the controlling family.

Table 4. Person and job turnover 1988-1996.

	Turnover A	Turnover B	Turnover C
Person Turnover	15.8	12.6	12.1
Job Turnover	19.1	19.0	18.5
Observations	584	581	509

Note. Average values in %.

Table 5. Turnover and ownership change.

Turnover %	Turnover C		Turnover B	
	Zero ownership change	Ownership change = 1	Zero ownership change	Ownership change = 1
0	83.71	70.59	66.96	47.06
>0, =.5	4.69	2.94	25.68	32.37
>.5, = 1	11.61	26.47	3.79	7.35
Observations	448	136	448	136

Note. Ownership change = 1 refers to firms that have experienced at least 1 change of the controlling shareholder in the period 1987-1996.

Table 6. Performance variables. Descriptive statistics.

	Sale	Sale growth (%)	Operating income	Operating income growth (%)
Mean	3,936	11.1	852	3.96
Standard dev.		57.9		51.44
Min.	0.762	-97.8	-284	-183.21
Max.	74,498	789.3	19,919	189.06
Observations	73	578	73	544

Note. Levels: fiscal year 1996; in billion lire. Growth rate: average 1987-1996

Table 7. Probit Estimates Turnover A

Indepen. Variables	Model 1a	Model 1b	Model 2a	Model 2b
Constant	0.132 (0.284)	-2.221 (0.041)	.040 (0.947)	-2.430 (0.027)
Sale Growth	-0.527 (0.210)	-.227 (0.640)		
Sale Gr. Squared*	0.018 (0.864)	-.263 (0.649)		
Op. Income Growth			-.442 (0.124)	-.612 (0.072)
Op.Inc.Gr.Squared*			.422 (0.081)	.680 (0.022)
Age	-0.011 (0.259)		-.009 (0.410)	
Board Size	0.063 (0.001)	.114 (0.003)	.058 (0.003)	.097 (0.011)
N. Directorships	-0.063 (0.303)	.002 (0.986)	-.087 (0.163)	.029 (0.845)
Mkt. Value 1	0.043 (0.777)	.221 (0.383)	.000 (0.997)	.233 (0.369)
Mkt. Value 2	0.407 (0.025)	.339 (0.333)	.424 (0.024)	.495 (0.167)
Mkt. Value 3	0.421 (0.070)	-.043 (0.921)	.414 (0.079)	.052 (0.906)
State ownership	-0.010 (0.958)		.013 (0.947)	
Ownership change	0.366 (0.011)		.352 (0.018)	
Firm Size	0.060 (0.735)		0.065 (0.719)	
Firm dummies	NO	YES	NO	YES
Year dummies	YES	YES	YES	YES
Observations	574	551	543	523
Pseudo R ²	0.08	0.14	0.07	0.15
L.R. **	0.118	0.269	0.215	0.052

Note. P-values in parenthesis.

* Defined as the product of the variable and its absolute value.

** Likelihood ratio test on the hypothesis that the coefficients of the performance variables are jointly different from zero.

Table 8. Probit Estimates Turnover B

Independ. Variables	Model 1a	Model 1b	Model 2a	Model 2b
Constant	-1.56 (0.034)	-0.446 (0.661)	-1.275 (0.021)	-1.102 (0.157)
Sale Growth	-0.98 (0.823)	0.149 (0.758)		
Sale Gr. Squared *	-0.208 (0.691)	-0.535 (0.341)		
Op.Income Growth			-0.009 (0.973)	-0.054 (0.865)
Op.Inc. Gr. Squared*			0.079 (0.732)	0.200 (0.446)
Age	-0.002 (0.779)		-0.001 (0.885)	
N. Top Executives	0.295 (0.000)	0.348 (0.000)	0.285 (0.000)	0.307 (0.005)
N. Directorships	-0.065 (0.162)	-0.194 (0.054)	-0.043 (0.368)	-0.130 (0.211)
Mkt. Value 1	-0.095 (0.548)	-0.029 (0.917)	-0.105 (0.521)	-0.039 (0.889)
Mkt. Value 2	0.028 (0.878)	-0.137 (0.712)	-0.010 (0.957)	-0.127 (0.740)
Mkt. Value 3	0.055 (0.808)	-0.440 (0.319)	0.087 (0.709)	-0.281 (0.535)
State ownership	-0.029 (0.864)		0.018 (0.920)	
Ownership change	0.491 (0.000)		0.529 (0.000)	
Firm Size	0.183 (0.287)		0.167 (0.338)	
Firm dummies	NO	YES	NO	YES
Year dummies	YES	YES	YES	YES
Observations	571	555	540	525
Pseudo R ²	0.083	0.168	0.081	0.169
L.R. **	0.538	0.434	0.731	0.306

Note. P-values in parenthesis.

* Defined as the product of the variable and its absolute value.

** Likelihood ratio test on the hypothesis that the coefficients of the performance variables are jointly different from zero.

Table 9. Probit Estimates Turnover C

Independ. Variables	Model 1a	Model 1b	Model 2a	Model 2b
Constant	-2.224 (0.000)	-2.161 (0.038)	-2.298 (0.000)	-2.810 (0.034)
Sale Growth	-0.227 (0.637)	-0.174 (0.743)		
Sale Gr. Squared *	-0.156 (0.759)	-0.285 (0.619)		
Operating Income Gr.			-0.579 (0.084)	-0.854 (0.025)
Op.Inc. Gr. Squared *			0.509 (0.074)	0.798 (0.012)
Age	0.010 (0.257)		0.011 (0.257)	
N. CEOs	0.622 (0.000)	0.056 (0.000)	0.625 (0.000)	0.962 (0.000)
N. Directorships	0.000 (1.000)	0.056 (0.634)	0.002 (0.945)	0.088 (0.455)
Mkt. Value 1	-0.386 (0.053)	-0.260 (0.447)	-0.403 (0.048)	-0.357 (0.309)
Mkt. Value 2	0.010 (0.962)	0.483 (0.289)	0.039 (0.857)	0.364 (0.444)
Mkt. Value 3	-0.194 (0.469)	-0.294 (0.569)	-0.153 (0.576)	-0.363 (0.500)
State Ownership	-0.024 (0.897)		-0.029 (0.879)	
CEO Owner	-0.199 (0.283)		-0.208 (0.271)	
Ownership change	0.557 (0.000)		0.637 (0.000)	
Firm Size	0.410 (0.036)		0.378 (0.055)	
Firm dummies	NO	YES	NO	YES
Year dummies	YES	YES	YES	YES
Observations	499	414	474	390
Pseudo R ²	0.105	0.148	0.110	0.156
L.R. **	0.466	0.454	0.196	0.042

Note. P-values in parenthesis.

* Defined as the product of the variable and its absolute value.

** Likelihood ratio test on the hypothesis that the coefficients of the performance variables are jointly different from zero.

Table 9a. Marginal Effect of independent variables on probability of turnover C (dF/dx) in companies with and without changes in controlling shareholder.

Independ. Variables	Companies without changes in controlling shareholder		Companies with at least a change in controlling shareholder	
	Model 2a	Model 2b	Model 2a	Model 2b
Operating Income Gr.	-0.042 (0.684)	-0.056 (0.675)	-0.579(0.003)	-0.819 (0.000)
Op.Inc. Gr. Squared *	0.045 (0.604)	0.104 (0.347)	0.402 (0.014)	0.521 (0.003)
Age	0.005 (0.095)		-0.007 (0.297)	
N. CEOs	0.202 (0.000)	0.383 (0.000)	-0.072 (0.536)	-0.254 (0.137)
N. Directorships	-0.005 (0.585)	-0.017 (0.668)	0.089 (0.042)	0.162 (0.006)
Mkt. Value 1	-0.075 (0.205)	-0.078 (0.549)	-0.231 (0.032)	-0.373 (0.020)
Mkt. Value 2	0.002 (0.976)	0.183 (0.341)	0.009 (0.953)	0.142 (0.596)
Mkt. Value 3	-0.010 (0.900)	-0.013 (0.945)	-0.125 (0.432)	-0.091 (0.683)
State Ownership	-0.050 (0.341)		0.106 (0.469)	
CEO Owner	-0.087 (0.097)		0.241 (0.071)	
Firm Size	0.099 (0.079)		0.179 (0.231)	
Firm dummies	NO	YES	NO	YES
Year dummies	YES	YES	YES	YES
Observations	364	287	111	104
Pseudo R ²	0.131	0.209	0.190	0.292
L.R. **	0.865	0.347	0.011	0.003

Note: P-values that the underlying coefficients being zero in parenthesis.

* Defined as the product of the variable and its absolute value.

** Likelihood ratio test on the hypothesis that the coefficients of the performance variables are jointly different from zero.

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