

Executive compensation and ownership structure: Empirical evidence for Italian listed companies

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January 2008 *

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Abstract

This paper investigates the determinants of executive compensation in Italian listed companies over the period 1995 – 2002. Using a unique database, with yearly data on executive pay and very detailed information on companies' ownership structures, we explore the impact of performance and corporate governance characteristics on Board compensation.

We find that the level of board compensation is significantly affected, as expected, by the size of the firm, accounting returns and market valuation. High ownership concentration is associated with lower executive pay, according to the hypothesis that strong ultimate shareholders have an higher incentive either to monitor the management, and not to extract private benefits via excessive personal compensation. Quite surprisingly, the wedge between cash flow and voting rights seem to exert a negative impact on the level of compensation; control enhancing devices could increase agency costs, but do not seem to induce the extraction of higher board compensation. Looking at the nature of the ultimate owner, the level of Board compensation is higher for family firms, and with a lesser extent, for Widely Held firms; managers of State owned companies receive a significantly lower compensation. Furthermore, within family firms, executive compensation is higher in founder-controlled corporations, while in firms controlled by descendants board remuneration seems very close to widely held firms.

Taking into account the compensation received by every board member, emerge that family firms pay higher compensation both for executives and non executive directors. For CEOs cash compensation seem more related to performance and company valuation than other board positions, while president – often a family member - compensation is less related to ownership concentration and performance characteristics. Within family firms, directors that are members of the controlling family obtain usually higher compensation, but not for CEO role.

1. Introduction

Board and CEO compensation is one of the most debated topics in corporate governance literature. As documented by Murphy (1999), the number of papers focused on management compensation have risen over the last two decades, in line with the increase in the amount of executives pay. However, most of the papers empirically analyse the evolution in executive compensation with respect to US and, to a smaller extent, UK, while little evidence is provided for Continental European companies. In the European environment, the empirical evidence on Anglo-Saxon markets is of little utility, given the substantial differences affecting the corporate governance: Anglo-Saxon companies have very dispersed ownership and hardly deviate from the one-share one-vote rule; on the other side, European companies are characterized by higher ownership concentration and larger use of control-enhancing devices. These differences are of particular interest because, among other factors, they are expected to affect the amount and the structure of executive compensation.

In order to study the relationship between executive compensation and ownership structures, the case of Italian listed companies is of particular interest, since it offers a wide variety of ownership structures that are common to other European countries. In fact, Italian listed companies show very high level of ownership concentration and separation of ownership and control; moreover, there is a relevant number of state-owned companies, and a large number of family firms (Faccio and Lang, 2002; Barontini and Caprio 2006). Therefore, the study of the relationship between ownership structures and executive compensation in Italy may offer results that can be of general interest for companies in the other Continental European countries.

Based on a large sample of companies listed to the Milan Stock Exchange in the period 1995-2002, our paper aims to study the determinants of Board and CEO levels of compensation. Beyond the control variables usually considered in the empirical literature on executive compensation, such as company size and investment opportunities, our regression model include many corporate governance variables, such as the wedge between voting and cash flow rights, the nature of control (public, family or State-owned company), ownership concentration, board size, and the presence of a second large shareholder.

The results show that the level of board and executive compensation is affected by firm's characteristics and ownership structure. We find that the level of board compensation is significantly affected, as expected, by the size of the firm, accounting returns and market valuation. High ownership concentration is associated with lower executive pay, according to the hypothesis that strong ultimate shareholders have a higher incentive either to monitor the management, and not to extract private benefits via excessive personal compensation. Quite surprisingly, the wedge between cash flow and voting rights seem to exert a negative impact on the level of compensation; control enhancing devices could increase agency costs, but do not seem to induce the extraction of higher board compensation. Looking at the nature of the ultimate owner, the level of Board compensation is higher for family firms, and with a lesser extent, for Widely Held firms; managers of State owned companies receive a significantly lower compensation. Furthermore, within family firms, executive compensation is higher in founder-controlled corporations, while in firms controlled by descendants board remuneration seems very close to widely held firms. Taking into account the compensation received by every board member, emerge that family firms pay higher compensation both for executives and non executive directors. For CEOs cash compensation seem more related to performance and company valuation than other board positions, while president – often a family member - compensation is less related to ownership concentration and performance characteristics. Within family firms, directors that are members of the controlling family obtain usually higher compensation, but not for CEO role.

2. Literature review

In an agency scheme, the delegation of tasks by the owner to the Executive Board requires governance mechanisms that align the interests of principal and agent (Jensen and Meckling, 1976). There are many forces that should induce the management to use their effective control rights to pursue projects that increase firm value instead of benefiting themselves: the threat of dismissal (Fama, 1980); the possibility that poor performance firms are subject to takeover and the incumbent management is removed (Grossman and Hart, 1980); the direct control exerted on management activity by large

shareholders (Shleifer and Vishny, 1986). However, while these forces contribute to mitigate the agency costs of separation between ownership and control, there is still large room for a closer alignment between the interests of agent and principal. A relevant role in this respect could be played by compensation strategies that link management rewards to changes in shareholders wealth (Jensen and Murphy, 1990).

Previous papers aimed to assess the quality of corporate governance standards mainly studying both the sensitivity of top executive turnover to performance (Coffee, 1999, Volpin, 2002), and the impact of governance characteristics on firm valuation (Morck *et al.*, 1988; McConnell and Servaes, 1990). Only a few papers focused on executive compensation as a proxy for the efficiency of the corporate governance mechanism. Notably exception with this respect are, to our knowledge, the study of Core *et al.* (1999), that explores the impact of board and ownership structure on CEO compensation for a sample of US firms, Renneboog and Trojanowski (2003), that study the effect of institutional ownership concentration on CEO turnover and compensation for a sample of UK firms, and Davila and Penalva (2006), that empirically examine how corporate governance affects the structure of executive compensation contracts, and in particular the implicit weights of firm performance measures on CEO compensation.

Our study examines the impact on executive compensation of ownership structure for Italian listed companies, with a particular focus on the effect of the ownership concentration, the wedge between voting and cash flow rights, and the nature of control (public, family or State-owned company).

Each of these characteristics could exert a significant impact on executive compensation, although the magnitude and the sign of the relationship is not always clearly predictable.

A more concentrated ownership structure could provide to the management stronger incentives to maximize the value of the firm, inducing a closer alignment between management and shareholders interests. This circumstance is expected to reduce the manager's rent-extraction of the shareholder's wealth, leading to a smaller amount of management compensation. Dyl (1988), Core *et al.* (1999), Cavalluzzo and Sankaraguruswamy (2000), Cyert *et al.* (2002), and Haid and Yurtoglu (2006) find that the share ownership of the largest shareholder is negatively related to the level of compensation, while Ke, Petroni and Salieddine (1999) find that the effect of ownership

concentration is not statistically significant for executive compensation in insurance companies.

The better monitoring activity exerted by the main shareholder should reduce the need for monetary incentives to executives, and then the sensitivity of management compensation to corporate performance. Mehran (1995) find out that the presence of large blockholders is associated with lower CEO pay-sensitivity, coherently with theoretical prediction of Shleifer and Vishny (1986) that large non-management shareholders of publicly-held firms serve as effective monitors of management, then reducing the needs for management pay incentives. On the contrary, Hartzell and Starks (2003) provide empirical evidence for a strong positive relation between institutional ownership concentration and the pay-for-performance sensitivity of managerial compensation, as an evidence of the fact that large professional owner can be more sensible to the management incentive problem, and adopt more aggressive pay-performance compensation. On a sample of Spanish firms, Crespi *et al.* (2002) show that the presence of a large shareholder is associated with a large sensitivity of cash-based executive compensation to changes in shareholder value, while in firms with a less concentrated ownership, modifications in managerial compensation depend upon changes in accounting returns in prior years.

Another interesting characteristic of Italian firms is the use of dual-class shares, pyramidal groups and other control-enhancing devices that increase the separation of ownership and control. The limited amount of cash flow rights related to a highly leveraged structure of control could worsen the agency problem between majority and minority shareholders: since only a small fraction of company's cost is born by majority shareholders, they could indulge to inefficiently high-rewarding contracts with the manager (for example, because he's a member of the controlling family). Under this perspective the inefficient compensation contract can be considered an agency cost related to the separation of ownership and control. Existing literature focused on the effect that the wedge between cash flow and voting rights exerts on firm value (La Porta *et al.*, 2002; Claessens *et al.* 2002) and inferior performance (Volpin 2002), while only little attention has been devoted to explore the effect on executive compensation. Haid and Yurtoglu (2006), exploring this issue on a sample of German firms, show that the wedge between voting and cash flow rights influence the relationship between firm's

size and the level of compensation (i.e. the increase in compensation in larger firms is positively influenced by the wedge); however, they doesn't provide evidence of a direct influence of the wedge on the executive level and pay-performance sensitivity.

The ownership structure of Italian firms is interesting also with regard to the type of controlling shareholders (Family, State, Institutional investors, etc.). State ownership is expected to generate significant inefficiencies, given that control rights are *de facto* in the hands of bureaucrats that have no cash flow rights and then no incentives to run efficiently the organization (Shleifer and Vishny, 1997). However, how this inefficiency impacts on management compensation is somewhat ambiguous. In fact, the lack of control exerted by the main shareholder could favour rent expropriation by the management, and then higher level of executive compensation. On the other hand, the pressure of public opinion on politicians to limit the excesses in management pay is likely to have a more immediate impact on State ownership firms, that can be forced to restrict the amount paid to its management.

When the ownership is in the hands of a family, the consequences on the executive compensation cannot also be easily predicted. Family ownership could be associated with a larger commitment of the founder and the other members of the family: in this case the management, that is often largely composed by descendents of the founder, could be paid less than its correspondent in non family firms. However, it could be equally likely that the family considers executive positions in the firm as a channel for providing highly-remunerated jobs to the descendants, that may translate in a larger amount of executive pay associated with family firms. To our knowledge, only a few papers explore this issue, and the empirical evidence is mixed: Cavalluzzo and Sankaraguruswamy (2000) find a negative impact of family ownership on the level of executive compensation¹. On the contrary, the study of Haid *et al.* (2006) lead to the opposite conclusion, and shows a positive relationship between family ownership and management pay.

Given the non predictability of the impact of State and family ownership on management compensation, the empirical evidence is important for interpreting which of the described behaviours is prevalent in these organizations.

¹ It worth to mention also that Sraer and Thesmar (2006), trying to interpret the results that French family firms largely outperform widely held corporations, offer evidence of lower wages in heir-managed family firms.

This paper analyses the determinants of the level and the sensitivity of executive compensation for Italian firms, exploring the effect of governance characteristics that are not common to Anglo-Saxon countries, to which almost all of the existent literature refers². To our knowledge, this is the first empirical study on executive compensation in Italy that benefit of a large database, with yearly data on executive compensation from 1995 to 2002, and very detailed information on companies' ownership structures. Previous studies focused on the Italian case were limited by the restricted number of companies and the non-random origin of the sample (Brunello *et al.* 2001), and the shortness of time-period and the limited amount of data on ownership structures (Zona 2001)³. It worth to mention a recent paper of Barucci and Falini (2007), that analyses executive remuneration of Italian listed companies in 2001- 2003.

3. Sample selection and data

a) Data on executive compensation

The lack of empirical studies on executive compensation in Continental European countries is mainly due to the scarce availability of data on management pay, an information that for a long time has not been subject to mandatory disclosure. Only recently many European countries adopted regulations that require companies to disclose information on management compensation, while this rule was enforced already in 1998 for Italian listed companies⁴, offering the opportunity to collect one of the longest historical data series on executive compensation among European countries.

² As previously noted, only a few studies are focused on the impact of governance characteristics on executive compensation outside US and UK. Besides the papers of Haid and Yurtoglu (2006) and Crespi (2002) cited above, it worth to mention the work of Randoy and Nielsen (2002), examining the relationship between company performance, corporate governance arrangements, and CEO compensation in Norway and Sweden. Although they find a significant positive relationship between board size, foreign board membership, and market capitalization versus CEO compensation, the relationship between company performance and CEO compensation is weak and not significant.

³ The paper by Brunello *et al.* (2001) is based on a selection of 107 listed and not-listed firms and is limited to the 1993-1996 period. The sample account for 2996 observations, reduced to 623 observations when the focus is only on executives who are present for at least two consecutive years. The paper of Zona (2001) focuses exclusively on 1999 and to changes in executive compensation respect to 1998 all listed companies.

⁴ CONSOB communication n. 11580 released on the 15th of February 1998 and substituted by the regulation n. 11971 released on the 14th of May 1999.

Our study benefits of a unique database on board and executive compensation over the period 1995 – 2002, jointly with detailed information on performance and ownership structure of the companies, that will be described below.

Data on executive compensation are manually collected from annual end-of-year reports published by for almost all companies listed at Milan Stock Exchange over the period 1995 – 2002. The sample accounts for 1722 observations, corresponding to 215 firms on average per year. For the period 1995 – 1997 data on compensation are available only on an aggregate basis, for the whole Board of Directors, while for the 1998 – 2002 period they are collected for each single member of the board, according the following classification: Base compensation, Bonus, Non-Monetary Benefits, Other Compensation⁵. The sum of these variables define the *Total Compensation (TOTComp)*, with respect to the CEO (*CEO_TOTComp*) and the Board as a whole (*TOTComp_{Board}*). When referred to individual compensation over the 1998 – 2002 period, the sample account for 11,208 observations.

In order to account for inflation, we re-express yearly compensation in terms of 2002 Euro.

Data on *Other compensation* deserve a more thorough analysis, because it is reported not uniformly by companies. In this section could be registered forms of compensation with a very different nature, such as the Executive Committee Participation Fee, the indemnity corresponded when the executive leaves the firm, compensation granted by the participated companies, compensation that the executives return to another company (generally the Holding of the group) that appointed him in the board, reimbursement of anticipated expenses, compensation for consulting services provided to the firm by the member of the Board and, in a smaller number of observations, also the compensation the executive perceives as an employee of the company.

In order to study the annual executive compensation, we use *Refined Other Compensation*, namely the voice *Other Compensation* net of components that are credits of the executive, accrued in previous years (indemnity) or in current year (reimbursement of expenses), compensation received for consulting services provided to the firm, and compensation collected by the executive but returned to the company; we

⁵ We collect also data on the number of company's shares in portfolio and on stock option. We decided however to ignore information on stock options since data provided by Italian companies is very cryptic and, as a consequence, the valuation of executive's stock option portfolio not reliable.

include in annual executive compensation the other components, such as the Executive Committee Participation Fee, compensation the executive perceives as an employee of the company, and compensation granted by participated companies.

Given that the information provided by the companies respect to these very different possible types of payments is poor, in a limited number of cases we were not able to break up the voice *Other compensation*; in this circumstance, we included the whole amount, without other refinements.

Among these components, the most relevant for our analysis is probably the “Compensation granted by participated companies”. In fact, if this component is not subtracted by the Total compensation, the Board of a firm could show a Total compensation different from that of another identical firm, except for the participation of a given number of its directors to the board of some controlled companies. On the other side, however, if this component were not included, we would ignore a very important component of compensation. In fact, many companies set the compensation of the members of the Board considering all the sources of payment, regardless it is provided by the parent company or controlled companies. In this perspective, compensation provided by controlled companies cannot be discriminated respect to that paid by the parent company. Moreover, if this component were not included in executive compensation, the link between company performance, measured in terms of consolidated data, and executive compensation would be partially hidden.

These arguments induce to include in *Total compensation* the payments provided by controlled companies.

Another relevant issue concerns the choice between consolidated or firm-specific data when the company is an holding of a pyramidal group. In this case, two strategies are theoretically feasible: the first strategy is based on the hypothesis that the activity of the holding is restricted to managing the portfolio of shares, while no other activity is exerted by the holding that could affect the economic results of controlled companies. In this case the contribution of the executive is limited to the holding and should be measured through the non-consolidated statement of the company. On the other side, the second strategy moves from the hypothesis that the holding, and then its executives, actively coordinate the management of participated companies, then affecting the economic results that those companies produce. In these terms, the contribution of the

executives of the holding is only partially reflected in the company's statement, while a more complete measure of this contribution is offered by the consolidated statement. Since the second hypothesis seems more reasonable, at least with respect to Italian listed companies, we based our analysis on consolidated data.

b) Ownership variables

As previously explained, the level and the sensitivity of executive compensation could be related to the ownership structure. In order to detect the identity of the ultimate shareholder and the size of its cash-flow and voting rights, we used the standard methodology developed by La Porta et al. (1999), and followed, among the others, by Faccio and Lang (2002).

Looking at data available on "Taccuino dell'Azionista", "Calepino dell'azionista", and information disclosed by the corporations in the 'investor relation' section of their websites, we started finding the voting rights and cash-flow rights held by the largest direct shareholders, and then trace the map of the ownership of the stakes, in order to identify the ultimate shareholders and their ownership of voting and cash-flow rights. We use 20% as the cut off point for the existence of a control chain (a listed company that has no shareholder larger than 20% is considered widely held). Ultimate cash-flow rights (stated as the variable "O") takes into account the ownership over the whole chain of control, while Ultimate voting rights are the voting rights held in the weakest link of the control chain. In order to detect the separation between ownership and control, that reflects the use of control-enhancing devices (dual-class shares and pyramid), we use the variable "W", that capture the difference between the share of voting and cash-flow rights held by the ultimate owner.

We also identify the type of controlling shareholder, if any (Family, State, Widely Held company, Widely Held Financial corporation, Others), in order to verify if compensation policies are related to the characteristics of the controlling owner.

For family firms, in particular, will be interesting to examine the size and composition of the board (number of executive and non-executive directors and, among them, the number of members of board belonging to the controlling family), and its relation with board compensation. Moreover, as in Barontini and Caprio (2006), we detect the number of members of the board belonging to the controlling family, when there is one;

in this case, whether the founder is still alive and has a role in board, or the family members controlling the company have to be classified as descendants.

c) Performance and Control variables

Firm performance is expected to be positively related to the level of executive pay (Kaplan 1994; Murphy 1985). We use therefore different performance variables, that take into consideration both market and accounting returns:

- Stock market returns, computed in the same and previous year of accounting information;
- accounting Return on Assets (ROA), defined as the ratio between 'operating profit' and 'total assets'.

Every accounting information are supplied by Worldscope; market returns are supplied by Datastream.

In order to lessen the problem of omitted variables in regressing executive compensation on ownership structure proxies, we include control variables that account for firm characteristics that previous studies found to exert a significant impact on executive pay. Rosen (1982) predict that larger firms require more talented and more costly management; Baker, Jensen and Murphy (1988) document that larger firms, in terms of net sales, have higher paid executives, although Murphy (1999) shows that the explanatory power of firm sales has declined over time. Our sample include not only industrial firms, but also banks and financial firms; given that for these latter companies sales is an ambiguous parameter, we adopt Total Asset as a proxy for the size, and we expect that it is positively related with the level of executive compensation (in the regressions, we use logs).

Complexity of operations and growth opportunities, shown by the Tobin's Q, are expected to have a positive impact not only on the level of executive pay (Smith and Watts, 1992), but also on pay-performance sensitivity, as confirmed by the study of Harvey and Shrieves (2001), that document a strong relation between growth opportunities and the presence of incentive compensation. We use therefore Tobin's Q, computed as the ratio between (Book value of total assets – Book value of shareholders' equity + Market value of shareholders' equity) and (Book value of total assets), and control also for the percentage increase in sales or total assets in the previous year.

With respect to the firm risk, under a theoretical perspective, the risk and the level of executive compensation may either increase or decrease with firm risk (Banker and Datar, 1989). On a sample of large and small firms, Cyert *et al.* (1997) document strong positive associations between CEO compensation and firm risk, consistent with standard agency theory. On the contrary, Core *et al.* (1999) found that the level of CEO total compensation is negatively related to firm risk. In our study, the proxy adopted for the firm risk is the CAPM Beta of the company, estimated over 36 months.

In regression analysis we use also Industry dummies (15 variables based on Campbell (1996) classification) and year dummy variables.

4. Results

4.1 Descriptive statistics

In this section we document the increase in Board and Executive compensation of Italian firms over the 1995 – 2002 period.

As shown in Table I, the mean and the median of Board Total compensation increased almost constantly until 2001, while only a slight decrease is registered on 2002. It is noteworthy that Board Total compensation increased in 2000 and 2001, even after accounting (ROA) and stock returns decreased substantially. Moreover, the mean of either Total compensation and Base compensation show a consistent increment in 1998, not registered by the median, largely due to some outliers⁶.

⁶ In more detail, the 1998-2000 mean is influenced by the very large compensation paid by Fiat and Pirelli to their CEOs.

Table I. Sample description of Board compensation and Firm characteristics over 1995- 2002 period

Total compensation is the sum of all the cash components of executive pay (Base compensation, Non-Monetary Benefits, Bonus, Non-Monetary Benefits, Adjusted Other Compensation). Size is firm's Total Asset, ROA is annual Return on Assets, Return is the annual stock return, Tobin's Q is the ratio between (Book value of total assets - Book value of shareholders' equity + Market value of shareholders' equity) and (Book value of total assets).

Year	N. Obs.	Total compensation		Base compensation		Size	ROA	Return	Tobin's Q
		(in .000 Euro)		(in .000 Euro)					
		Mean	Median	Mean	Median				
1995	172	648	458	558	346	7.853	4,97%	-10,80%	0,95
1996	192	638	441	540	361	7.266	5,23%	4,20%	1,03
1997	204	691	466	600	372	7.361	5,87%	51,43%	1,20
1998	218	1218	582	1011	410	8.395	6,49%	38,28%	1,27
1999	201	1456	798	726	437	11.085	6,06%	33,92%	1,61
2000	247	1790	822	987	469	10.181	5,28%	19,03%	1,45
2001	230	2115	1031	1061	595	11.087	1,92%	-25,14%	1,45
2002	252	1938	987	931	574	10.369	0,78%	-17,61%	1,46

Even if the compensation of the Board as a whole is an important parameter to evaluate the cost of the top-direction of the firm, it is influenced by the size of the Board. In order to outline the individual compensation policy, it is necessary to split the compensation of the Board into its component. Table II highlights the trend in the different categories the Board is divided: CEO, President, Vice President and Directors without any other qualification; moreover the Table reports also compensation of General Directors that participate to the Board (*DG*; given the structure of data, individual compensation are available only for the 1998 – 2002 period).

Table II. Mean and Median Total Compensation split by position in the Board

Year	1998		1999		2000		2001		2002		Av. 1998-2002	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
CEO	521,229	308,128	564,762	294,072	719,626	256,851	689,644	287,719	699,577	283,000	638,968	285,954
% Δ			8,35%	-4,56%	27,42%	-12,66%	-4,17%	12,02%	1,44%	-1,64%		
President	1128,902	186,265	314,110	187,115	335,360	175,877	392,049	211,747	334,808	155,000	501,046	183,201
% Δ			-72,18%	0,46%	6,77%	-6,01%	16,90%	20,39%	-14,60%	-26,80%		
VicePresident	138,221	80,594	144,672	77,753	203,397	84,560	321,009	86,883	211,297	90,399	203,719	84,038
% Δ			4,67%	-3,53%	40,59%	8,76%	57,82%	2,75%	-34,18%	4,05%		
DG	233,679	126,345	337,670	120,937	580,950	117,234	427,755	132,632	447,804	128,561	405,572	125,142
% Δ			44,50%	-4,28%	72,05%	-3,06%	-26,37%	13,13%	4,69%	-3,07%		
Director	67,952	23,348	57,268	22,829	74,407	21,345	83,996	22,946	70,131	24,000	70,751	22,894
% Δ			-15,72%	-2,22%	29,93%	-6,50%	12,89%	7,50%	-16,51%	4,59%		

(in .000 Euro)

The first evidence arising is that CEO cash compensation is on average slightly higher than that of the President, and several time larger than the compensation of a Director with non-operative duties. Some clear systematic differences emerge therefore between different categories of the members of the Board.

Looking at the trend of median values, compensation is quite stable, even if the evidence for the categories is mixed over time (in 2002, for example, the compensation of CEO, President, and General Directors declined, while that of Vice President and Directors increased). On the other side, mean compensation usually increases for all classes, with only sporadic exceptions.

Compared to the trend in firm performance, declined over 2001 and 2002 either in terms of accounting and stock returns, it seems that the compensation of single categories react with different readiness, as for the decline in CEO General Director and President compensation in 2001 and for Presidents, Vice Presidents and Directors in 2002. This not-clear relationship between compensation and performance deserves more deep analysis in the following section of the paper.

Table III summarizes the evolution in the form of control for Italian firms over the period considered.

Table III. The structure of control for Italian firms over the 1995-2002 period

First sh. and 2nd sh. are the percentage of voting rights respectively for the first and the second largest shareholder. O and C are respectively the percentage of cash-flow rights and voting rights of the ultimate owner. W is the difference between C and O

Year	First sh.	2nd sh.	O	C	W
1995	48,3%	8,1%	37,6%	48,8%	11,2%
1996	48,7%	8,2%	37,0%	48,0%	11,1%
1997	46,5%	8,7%	37,7%	46,6%	8,9%
1998	45,4%	7,7%	37,2%	44,9%	7,6%
1999	46,5%	7,5%	39,9%	46,4%	6,6%
2000	46,9%	7,3%	39,5%	45,6%	6,1%
2001	46,2%	7,3%	40,7%	45,8%	5,1%
2002	45,6%	7,4%	40,9%	45,5%	4,6%

The ownership structure is then characterized by the presence of a very large shareholders with direct ownership (*First Sh.*), even if the concentration of its ownership declines over time, as that for the second shareholder (*Second Sh.*). On the

contrary, the concentration of the Ultimate shareholder, coincident with the percentage of cash flow rights, increase over time, while the percentage of voting rights tends to shrink. The combination of these two latter effects leads to the reduction of the wedge between cash flow and voting rights (last column). The implied result is that the use by Italian firms of control-enhancing devices, such as pyramidal group and dual-class shares, has declined over time.

A further step in the analysis is to look at the nature of the ownership. With this respect, we firstly separate the sample between widely held firms, namely firms whose largest shareholder own less than 20% of capital, and closely held firms. Among closely held firms, we distinguish between family-owned (*Family*), State-owned (*State*), firms owned by a widely-held industrial company (*CH_WHC*), and firms owned by a widely-held financial company (*CH_WHF*).

Table IV. Ownership percentage of controlling shareholder

Ownership percentage for different controlling shareholder: Family and State are family-owned and State-owned firms. CH_WHC are firms owned by a widely-held industrial company. CH_WHF are firms owned by a widely-held financial company.

Year	WH 20% Th.	Family	State	CH_WHC	CH_WHF	Other
1995	10,7%	49,0%	14,8%	9,4%	14,1%	2,0%
1996	11,7%	50,6%	13,6%	9,3%	12,3%	2,5%
1997	10,7%	51,4%	11,3%	13,0%	11,9%	1,7%
1998	12,1%	51,6%	8,8%	11,6%	12,1%	3,7%
1999	12,6%	49,2%	13,1%	13,6%	9,4%	2,1%
2000	15,0%	48,5%	11,0%	10,5%	14,0%	1,0%
2001	15,0%	52,9%	7,5%	15,0%	7,0%	2,7%
2002	13,7%	52,8%	9,1%	14,2%	7,1%	3,0%

Table IV shows that widely held company are very few in Italy, even if we register a slight increase over time. On the contrary the predominant ownership model is family-based, that account approximately for the half of listed companies on the Italian market. Also the percentage of State-owned firms decreased over time, as the result on the ongoing privatization process.

In order to explore whether ownership structures are related to the nature of ownership, we look at the wedge between cash flow and voting rights, dividing the sample by the type of the Ultimate owner.

Table V. The Wedge between voting and cash flow rights

Family and State are family-owned and State-owned firms. CH_WHC are firms owned by a widely-held industrial company. CH_WHF are firms owned by a widely-held financial company. The wedge is the difference between the percentage of cash-flow rights and voting rights of the ultimate owner.

	WH 20% Th.	Family	State	CH_WHC	CH_WHF	Other
O	8,7%	40,7%	49,4%	46,7%	45,5%	61,4%
C	9,8%	50,4%	58,3%	50,5%	52,8%	65,1%
W	1,2%	9,8%	8,9%	3,8%	7,3%	3,7%

Data in Table V confirm a very strong ownership concentration for Italian listed companies and lead to the conclusion that Family firms make the largest use of control-enhancing devices (the mean Wedge is close to 10%, the largest value among all type of control).

4.2 The determinants of the level of Board compensation in Italy**a) The determinants of board size**

The main aim of the paper is to explore the impact that ownership structures exert on board and executive compensation. As a first approach to the analysis, we want to test whether a poor governance structure, in terms of a large wedge between cash flow and voting rights, translates into a larger Board of Director (the number of its members). In fact, especially within family firms, the most simple way the controlling shareholder has to expropriate minority shareholders is by appointing large and highly paid Board of Directors. We then perform the following regression:

$$\ln(BoardSize) = \alpha + \Omega(Size) + \gamma(LQ) + \lambda(OWN)$$

where *BoardSize* is the number of members in the board; as control variables we adopt firm size and investment opportunities, respectively proxied by Total Asset (*Size*) and Tobin's *Q(LQ)*; *OWN* is a vector of ownership variables: *W* is the wedge between cash flow and voting rights; moreover, following Pagano and Roell (1998), Denis *et al.* (1997) and Volpin (2002), we include also the percentage of ownership for the second largest shareholder, moving from the theoretical viewpoint that large minority shareholders play a role in monitoring the controlling shareholder; this control activity could add efficiency to the firm, and then should imply less members in the Board;

however, the second largest shareholder could induce in bargaining activity with the control shareholder, and then require for himself the right to appoint a given number of members to the Board. The latter case should translate in a larger Board of directors.

Table VI. Determinants of Board Size

LSize is the Log of firm's Total Asset, LQ is the Log of Tobin's Q, 2nd Sh. is the percentage of voting rights for the second largest shareholder. Wedge is the difference between the percentage of cash-flow rights and voting rights of the ultimate owner. [aggiornare la legenda. Per le dummy sono messe in confronto alle WH, che hanno I board più numerosi]

	<i>LSize</i>	<i>LQ</i>	<i>2nd Sh.</i>	<i>W</i>	<i>O</i>	<i>Family</i>	<i>State</i>	<i>Fin</i>
Coefficient	0,1411	0,1778	0,4579					
t-statistic	29,01*	6,04*	2,64*					
Coefficient	0,1377	0,1894	0,4281	0,1458	-0,0451			
t-statistic	26,04*	6,26*	2,36*	1,31	-0,77			
Coefficient	0,1411	0,1756	0,4648			-0,0525	-0,0466	-0,0396
t-statistic	25,63*	5,95*	2,66*			-2,16*	-1,13	-1,04
Coefficient	0,1387	0,1929	0,4696	0,2915	0,0204	-0,0841	-0,0721	-0,0533
t-statistic	22,82*	6,37*	2,54*	2,39*	0,32	-3,05*	-1,63	-1,34

Results show a strong relationship between the number of board members and *Size*, the investment opportunities of the firm (*LQ*), and the presence of a second large shareholder. The latter result suggests that the power of the second shareholder is addressed toward bargaining activity with the control shareholder within the Board of Directors. The wedge exerts a positive impact on the number of members in the Board, even if its magnitude is quite low; Family firms, moreover, have smaller Boards even after taking into account *Size* and the other explanatory variables.

Moving from these results, we exclude *BoardSize* as an explanatory variable for executive compensation; in fact, if included in the regression, this variable could in part capture the effect that ownership structures exert on Total Board compensation through an increase of the size of the Board of Directors.

b) The effect of the type of ultimate owner on board compensation

In order to explore the impact that ownership variables exert on the level of Board compensation, we perform a typical regressions described by the following general equation:

$$\ln(TOTComp_{it}) = \alpha + \beta(\overline{CV}_{i,t-1}) + \Omega YEAR + \gamma \overline{INDUSTRY} + \lambda \overline{CGov}_{i,t} \quad (1)$$

where $TOTComp_{it}$ is Total Board Compensation; \overline{CV} a vector of control variables, such as the Log of Total Asset ($LSize$) and Tobin's Q (LQ), firm's risk measured by stock returns standard deviation (STD), and either contemporary and lagged firm performance (ROA_t and ROA_{t-1} respectively); $YEAR$ is a dummy variable for 1995 – 2002 years; $INDUSTRY$ a set of industry dummy variables; and $CGov$ a vector of proxies for corporate governance of the firm.

The first step is the analysis of the effect the nature of the ultimate shareholder produces on the level of the Board compensation. We then specify the governance proxies in terms of dummies for the nature of the owner: Family, State, Widely held, and Others. The results are in Table VII.

The size of the firm exerts a large and positive impact on the level of the Board compensation, as well as lagged firm performance and investment opportunities. All coefficients are significant at standard levels. No significant effects are registered for contemporary firm operating performance, while firm's risk, although negatively correlated with compensation, is not significant.

As for the nature of the owner, results show that Family and Widely Held firms pay systematically larger compensation, if compared to the Boards of State-owned firms. This latter result can be interpreted in the sense of the pressure public opinion could exert on politicians to moderate executive compensation when firms are run by the State. Moreover, within family firms executive compensation is higher in founder-controlled corporations, while in firms controlled by descendants board remuneration seems very close to widely held firms.

Table VII. Determinants of Board Compensation.

LSize is the Log of firm's Total Asset, ROA_t and ROA_{t-1} are respectively current and lagged Return on Asset, LQ is the Log of Tobin's Q, Beta is the CAPM beta, Family and State are family-owned and State-owned firms. Widely Held are public companies.

	(1)	(2)	(3)	(4)	(5)	(6)
LSize	0,4412 26,72*	0,4262 25,07*	0,4641 27,71*	0,4537 25,62*	0,4676 27,05*	0,4527 23,04*
ROI _t	0,2342 0,44	0,2881 0,55	-0,0404 -0,08	0,0203 0,04	-0,2883 -0,55	0,7138 1,19
ROI _{t-1}	1,7345 3,29*	1,7598 3,39*	1,5240 2,97*	1,5757 3,10*	1,4759 2,79*	1,5996 2,72*
LQ	0,2588 3,04*	0,2714 3,24*	0,3337 4,02*	0,3339 4,05*	0,3627 4,34*	0,4350 4,62*
STD	-0,1579 -0,62	-0,1460 -0,58	-0,3093 -1,25	-0,3115 -1,27	-0,5484 -2,15*	-0,6296 -2,36*
O		-0,7365 5,29*		-0,5313 -3,51*		-0,5994 -3,49*
W		-1,0431 -3,61*		-1,0961 -3,08*		-0,8732 -2,68*
2nd Sh.		-0,2654 -0,52		0,0671 0,13		0,0891 0,17
Family			0,4301 4,41*	0,4117 4,19*		
- Founder					0,5258 4,62*	0,4736 3,97*
- Descendent					0,4110 3,88*	0,2467 2,25*
- Out Board					-0,5585 -2,40*	-0,2091 -0,84
State			-0,2361 -2,02*	-0,1470 -1,67	-0,2318 -1,98*	-0,0477 -0,38
WH			0,3574 3,63*	0,2286 2,21*	0,3640 3,67*	0,3102 2,88*
Other			-0,4834 -2,08*	-0,4528 -1,94	-0,4821 -2,07*	-0,6314 -2,80*

c) The impact of control enhancing devices on board compensation

As a second step of the analysis we want to test the impact of the wedge between voting and cash flow rights, then we adopt the wedge and ownership by the ultimate shareholder as corporate governance variables in equation (1).

As shown in Table VII, Regression 2, 4 and 6, with respect to the ownership variables, a larger ownership by the ultimate shareholder is negatively related to Board

compensation; this result seems to corroborate the hypothesis that a closer control is exerted by the owner when its stake of firm's capital is larger.

A similar effect is detected for the wedge, whose coefficient is negative and statistically significant. This result could appear somewhat surprising, given that one of the main rationales for the use of control-enhancing devices is to expropriate minority shareholders, eventually with larger Board compensation. However, the specific nature of the controller (Family, State, widely-held or other) could affect the extent to which the wedge effect eventually takes place.

We explore this hypothesis repeating the previous regression on sub-samples selected by the nature of the controller. The results are shown in the following Table VII:

Table VIII. Determinants of Board Compensation separated by the nature of control.

LSize is the Log of firm's Total Asset, ROA_t-1 is the lagged Return on Asset, LQ is the Log of Tobin's Q, Beta is the CAPM beta, O is the percentage of cash-flow rights of the ultimate owner, Wedge is the difference between the percentage of cash-flow rights and voting rights of the ultimate owner. Family and State are family-owned and State-owned firms. Widely Held are public companies.

	<i>LSize</i>	<i>ROA_t-1</i>	<i>LQ</i>	<i>STD</i>	<i>O</i>	<i>W</i>	<i>2nd Sh.</i>
Family	0,5450	1,5242	0,4537	-0,2336	-1,3625	-2,9462	-1,0317
	19,25*	2,20*	4,05*	-0,67	-4,12*	-5,77*	-1,41
State	0,1770	-1,4668	0,4179	-2,2134	-1,0221	-0,5483	-2,5637
	1,76	-0,37	1,45	-2,19*	-1,75	-0,54	-1,62
Financ.	0,5766	2,6491	0,3694	-0,1543	0,3686	1,3673	2,5620
	7,64*	1,55	0,63	-0,13	0,73	1,42	1,64
WH	0,4098	3,1294	-0,0896	0,8233	-1,1097	-1,7943	-1,7643
	12,99*	3,64*	-0,49	2,14*	-4,56*	-1,86	-1,61

A different scenario arises when we look at each type of ownership. The Wedge influences Board compensation only in Family and State firms; however, contrary to what is expected, the coefficient is negative, indicating that compensation is lower the larger is the opportunity to the family or to the State to bear only a fraction of the higher compensation eventually granted to the members of the family. Among others, two explanations are equally feasible.

The first one is related to hierarchical position of a firm within the group. If a firm is in low position inside the control chain of the group, the wedge of the company is likely larger, while the compensation of the Board could be lower only because members of the Board have fewer opportunities to receive compensation from controlled companies. If this is the case, we detect higher wedge associated with lower compensation only

because of the larger compensation granted by companies with a high position within the group, and then with a lower wedge.

The second feasible explanation is that Family groups and State effectively exploit the wedge, but not in the form of higher Board compensation, given that it is probably not the most profitable mean to extract benefits from minority shareholders, while being one of the most visible, and then the one that more likely could trigger the “outrage reaction” by minority shareholders (Bebchuck and Fried, 2004).

In order to verify the most feasible explanation, we repeated regressions in Table VII not considering compensation perceived by controlled companies within the group. The coefficient of the wedge becomes not significant when referred to the sample as a whole, while is still significant, although with less magnitude, for the sub-sample of family firms. This result seems to corroborate the hypothesis of the effect on compensation of the hierarchical position of the firm within the group.

Moreover, State ownership is consistently associated with a large negative relation between Board compensation and ownership percentage, as a confirmation that when the presence of the State is strong, also the cap on Board compensation are more effective. On the other side, firm performance has no effect on compensation, what contribute to the view that the manager of a State-owned firm is paid less, and with low sensitivity to performance.

Finally, if the firm belong to a widely held corporation, no significant impact is exerted by the ownership and the wedge, as if the dispersed ownership reduce the incentives to expropriate minority shareholders’ wealth.

4.3 The determinants of the level of individual directors’ compensation in Italy

The evidence presented above is based on compensation of the Board as a whole. In order to study policy compensation within the Board of Directors, we now adopt individual compensation as the dependant variable. However, we extend the analysis by including all the members of the Board and not only the CEO, as in the most part of empirical studies on US firms that are almost totally referred to CEO compensation.

Table X. Determinants of individual compensation for executive Directors (CEO and President)

	CEO				President			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
LSize	0,3882 <i>16,35</i>	0,3383 <i>11,11</i>	0,4051 <i>16,30</i>	0,3475 <i>11,29</i>	0,3390 <i>11,52</i>	0,3801 <i>9,81</i>	0,3544 <i>11,71</i>	0,3933 <i>10,02</i>
ROI _t	1,6158 <i>2,26</i>	1,2459 <i>1,44</i>	1,3282 <i>1,82</i>	0,9733 <i>1,13</i>	-0,0173 <i>-0,02</i>	0,6745 <i>0,64</i>	-0,2482 <i>-0,29</i>	0,4807 <i>0,46</i>
LQ	0,2763 <i>2,43</i>	0,3460 <i>2,49</i>	0,3181 <i>2,78</i>	0,3739 <i>2,69</i>	-0,0385 <i>-0,30</i>	0,0297 <i>0,18</i>	0,0279 <i>0,21</i>	0,0719 <i>0,44</i>
O		-0,6573 <i>-2,31</i>		-0,5714 <i>-1,91</i>		0,3128 <i>0,95</i>		0,4566 <i>1,28</i>
W		0,6038 <i>1,18</i>		0,6165 <i>1,13</i>		0,0109 <i>0,02</i>		-0,0261 <i>-0,04</i>
2nd Sh.		0,1839 <i>0,21</i>		0,2744 <i>0,31</i>		1,4465 <i>1,34</i>		1,9879 <i>1,80</i>
Comittee	0,1627 <i>1,63</i>	0,1841 <i>1,61</i>	0,1613 <i>1,59</i>	0,1715 <i>1,50</i>	0,1420 <i>1,20</i>	0,3076 <i>2,13</i>	0,1531 <i>1,29</i>	0,3257 <i>2,26</i>
WH			0,4658 <i>2,83</i>	0,3481 <i>1,87</i>			0,2306 <i>1,31</i>	0,3687 <i>1,71</i>
Family			0,5104 <i>3,12</i>	0,3702 <i>2,02</i>			0,3914 <i>2,15</i>	0,4367 <i>2,02</i>
State			0,0100 <i>0,05</i>	-0,1453 <i>-0,63</i>			0,1268 <i>0,61</i>	-0,0299 <i>-0,11</i>

As shown in the table above, the determinants of CEO compensation are in line with the results reported with respect to the Board as a whole. CEO compensation is positively correlated with firm's size (*LSize*) and growth opportunity (*LQ*), while the negative coefficient for (*O*) confirms the disciplinary power of concentrated ownership. As for the type of ownership, the results confirm the positive impact of Family and widely held firms, while State ownership is not significant. On the contrary, the governance structure of the firm seems irrelevant with respect to the President; the only relevant parameter in this case is the participation to the Executive Committee, associated with larger compensation, as expected.

Table X. Determinants of individual compensation for non-executive Directors (Vice President and Director)

	VP				C			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
LSize	0,1814 <i>5,64</i>	0,1742 <i>4,42</i>	0,2169 <i>6,40</i>	0,1900 <i>4,59</i>	0,2621 <i>30,38</i>	0,2619 <i>24,06</i>	0,2686 <i>30,07</i>	0,2653 <i>23,73</i>
ROI _t	-0,2266 <i>-0,23</i>	0,0980 <i>0,09</i>	-0,1968 <i>-0,20</i>	0,2591 <i>0,24</i>	0,6364 <i>2,35</i>	0,9939 <i>3,09</i>	0,5606 <i>2,04</i>	0,8566 <i>2,65</i>
LQ	0,1897 <i>1,35</i>	0,3002 <i>1,78</i>	0,2616 <i>1,88</i>	0,3053 <i>1,82</i>	-0,0587 <i>-1,45</i>	-0,1080 <i>-2,32</i>	-0,0411 <i>-1,01</i>	-0,0967 <i>-2,08</i>
O		-0,4709 <i>-1,50</i>		-0,3187 <i>-0,93</i>		-0,0313 <i>-0,35</i>		-0,1048 <i>-1,04</i>
W		-0,2348 <i>-0,30</i>		-0,2145 <i>-0,27</i>		-1,3255 <i>-7,66</i>		-1,5899 <i>-8,44</i>
2nd Sh.		3,0215 <i>3,20</i>		2,7611 <i>2,84</i>		-0,2898 <i>-0,96</i>		-0,4226 <i>-1,37</i>
Comittee	0,2968 <i>2,42</i>	0,3972 <i>2,83</i>	0,3346 <i>2,73</i>	0,4194 <i>3,00</i>	0,3156 <i>7,48</i>	0,2770 <i>5,72</i>	0,3014 <i>7,11</i>	0,2866 <i>5,94</i>
WH			0,4932 <i>3,19</i>	0,3920 <i>2,08</i>			0,1592 <i>3,31</i>	0,1046 <i>1,86</i>
Family			0,6921 <i>3,81</i>	0,4414 <i>2,13</i>			0,2260 <i>4,36</i>	0,2918 <i>5,21</i>
State			0,4136 <i>1,84</i>	0,3154 <i>1,24</i>			0,1437 <i>2,40</i>	0,1531 <i>2,29</i>

With respect to Vice Presidents and Directors, the results indicate that ownership is not significant, while the wedge is highly significant and negative only for Directors. Moreover, for non-executive directors, the participation to the Executive Committee is associated with significant higher compensation, while in terms of the impact of the type of ownership it is confirmed that Family and widely-held firms pay higher compensation also to non-executive directors.

Within family firms, an interesting issue could be that of the discriminatory compensation policy eventually reserved to Board members belonging to the family. In order to test this hypothesis, we introduce into the regression the variable “Family Member”.

Table XI. Family membership and individual compensation within family firms

	ad	p	vp	c
LSize	0,5292 <i>15,47</i>	0,4446 <i>9,60</i>	0,4211 <i>6,87</i>	0,3262 <i>19,03</i>
ROI_t	1,1145 <i>1,17</i>	-1,3567 <i>-1,06</i>	-3,2944 <i>-1,84</i>	0,3989 <i>0,89</i>
LQ	0,3924 <i>2,74</i>	0,4160 <i>2,25</i>	0,3931 <i>1,81</i>	0,1059 <i>1,54</i>
Committee	0,0338 <i>0,24</i>	0,4492 <i>2,55</i>	0,4038 <i>1,54</i>	0,1918 <i>2,04</i>
Family Member	-0,1709 <i>-1,56</i>	0,7172 <i>4,95</i>	0,2592 <i>1,40</i>	0,2385 <i>3,22</i>

The coefficients of the variable “Family Member” for President and Directors are positive and significant, implying that family firms pay higher compensation to the members of the family.

In more general terms, the results of the analysis show that corporate ownership characteristics of the firms affect the level of Board compensation not only *via* the size of the Board, but also through the amount of compensation.

5. Conclusion

The paper is aimed to study the effect of corporate ownership on the level of executive compensation of Italian listed companies. This is the first study that explore this topic with respect to Italian listed companies, benefiting of a large database on executive compensation over the 1995 – 2002 period. The paper contributes to the study of corporate governance mechanisms by providing an analysis of the impact on executive compensation of ownership characteristics that are not common to Anglo-Saxon countries, to which almost all of the existent literature refers.

The results indicate that the level of board and executive compensation are significantly associated with firm’s characteristics. Consistently with the existent empirical literature, the amount of yearly compensation is positively related to firm size and accounting profits.

With respect to the ownership structure, we find that concentrated ownership is associated with lower LQ management compensation, coherently with the different incentives faced by the owner to monitor the activity of the board and to prevent rent

extraction in the form of higher management compensation. Also the nature of the owner exerts a significant impact on the level of executive compensation: results indicate that family firms and widely held firms pay systematically higher compensation to the Board, while State-owned firms are relatively conservative with this respect. Moreover, within family firms, executive compensation is higher in founder-controlled corporations, while in firms controlled by descendants board remuneration seems very close to widely held firms.

The wedge between cash flow and voting rights plays a significant role on executive compensation only for Family and State-Owned companies, but surprisingly this effect is in the sense of a negative impact on the level of compensation.

The results reported above are substantially confirmed when the analysis is extended to the compensation of individual members of the Board. This latter analysis is of particular interest with respect to family firms, showing that an higher compensation is reserved to Board members belonging to the family.

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