CORPORATE GOVERNANCE STRUCTURE AND BOARD OF DIRECTORS REMUNERATION POLICIES: EVIDENCE FROM SPAIN

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CORPORATE GOVERNANCE STRUCTURE AND BOARD OF DIRECTORS

REMUNERATION POLICIES: EVIDENCE FROM SPAIN

Abstract: This paper analyses the effect of corporate governance structure's

development on the total amount and composition of the remuneration packages

received by Spanish listed firms' board members. We study the possible influence of

the firms' ownership structure and board features on remuneration policies. Our main

results suggest that firm's size and profitability, together with certain corporate

governance characteristics, such as the ownership concentration, the directors'

ownership stake and the existence of a nomination and remuneration committee, affect

the directors' compensation schemes in the Spanish stock market.

Keywords: Corporate governance structure, directors remuneration, compensation

policies, nomination and remuneration committee.

JEL Codes: G30, G32.

1

1.- INTRODUCTION

The interest aroused by the remuneration policies that companies apply to their directors is clearly seen from the numerous studies, normally descriptive, which refer to the magnitude and composition of these; also to be noted is the existence of recommendations in this regard made by the Corporate Governance Codes and the legal stipulations which, in recent years, have been issued by both national and supranational organisms advocating a greater transparency and control of the remuneration of company directors.

The remuneration awarded to directors, which goes beyond a mere payment for the work carried out, supposes the existence of a company mechanism which permits it, on the one hand, to attract and retain qualified directors and, on the other hand, to generate adequate incentives so that their behaviour is in accord with the interests of the shareholders.

This last aspect of remuneration has been analysed in the economic literature that treats it as just another mechanism used in the governance of a company in order to provide that, on a contractual basis, the directors are sufficiently disciplined and motivated so as to ensure that the marginal benefits they may receive from any opportunistic behaviour will be lower than the cost to them of such behaviour, given the compensations offered by the company (Shleifer and Vishny, 1997).

However, two alternatives, in principle in opposition to each other, may explain the magnitude and composition of the remuneration received by board members. In the first place, that the drawing up of the remuneration policies be in accordance with the interests of the shareholders, thus constituting an adequate mechanism for the supervision and control of the behaviour of the directors. Or, in the second place, that the remuneration schemes constitute a reflection of the particular interests of the board and, therefore, are the result of its capacity to evade the discipline of the remaining mechanisms of supervision and control. The different empirical analyses carried out for this paper try to find conclusions in respect of the above in the case of companies listed on the Spanish market.

Although the studies carried out in the field of remuneration received by company directors are numerous, the majority are centred in the analysis of the determining factors of the remuneration of the higher management or the Chief Executive Officer, whereas evidence relating to the explanatory factors behind the remuneration received by the whole board is scarcer. One of the reasons for this in Spain is the traditional reticence of companies to reveal information in respect of the remuneration received individually by board members, which has limited the scope of these studies.

This present paper is intended to bridge this research gap in relation to the remuneration policies of board members in Spain. More specifically, its usefulness is based in the implications derivable from these in relation to the determining factors of the remuneration policies which listed Spanish companies apply to their boards. These will permit us to discern whether, in the Spanish case, remuneration is conceived as a

mechanism for motivation and discipline in respect of the board members, or is, on the contrary, the result of the discretionary behaviour of board members leading them to construct their own remuneration schemes.

The interest of this topic in the Spanish market derives from the differences between this institutional framework as compared to other developed European and American markets. On the one hand, Spanish board of directors are characterised by a high proportion of proprietary directors, that is, directors who are or represent large shareholders. These board members can have a determinant influence on the Board's decisions such as the design of remuneration policies. On the other hand, several international studies show higher amount of director's remuneration and a lower weight of its variable component in Spain as compared to other developed countries.

The rest of this paper is as follows. Firstly, we review the theoretical framework of the study of remuneration policies as applied to directors, and we set down the hypotheses of this research. In the third section, we explain the methodology and variables *vis-à-vis* the hypotheses. In the fourth section, we describe the data bases and the study model. The principle results are then presented in the following section. After discussing the significance of these and their implications in respect of remuneration policies, we finish by summarizing the main conclusions of the research.

2.- THEORETICAL FRAME AND HYPOTHESES OF THE RESEARCH

At present, the salary policy of board members is being considered from different perspectives, among which are to be found the descriptive studies, which list amounts and composition; the empirical studies, which analyse the repercussions of the remuneration policies in respect of the value of the company and the behaviour of board members, or the determining factors of the remuneration policies utilised by companies; and, lastly, the recommendations of the Corporate Governance Codes and the legal regulations which advocate control and transparency in respect of remuneration policies.

2.1.- Descriptive studies

In the first place, in relation to the descriptive studies in which are analysed the amounts and composition of the remuneration received by board members and top executives, it should be pointed out that these studies, normally published annually or bi-annually, are usually carried out by consultancy firms (Heidrick & Struggles, Spencer Stuart, Watson Wyatt, Mercer, PriceWaterhouseCoopers, among others). The usefulness of these studies is, principally, that they permit direct comparisons of the remuneration policies of companies on a national and international basis.

To this effect, a comparative vision of the remuneration of the board members of Spanish companies in the European context can be extracted from the biennial studies carried out by the consultancy company Heidrick & Struggles on the structures of the corporate governance of the 300 largest European companies. These studies, for the

year 2003, show that the member companies of the Spanish IBEX 35 stock index had, on average, the highest remuneration of the 10 European countries analysed¹ (70,000 euros a year, on average, for each board member). More recently, in the 2007 edition, using data of 2006, the board members of Spanish companies are the second best paid (with an average of 96,099 euros a year for each member), being the Swiss in first place (average 139,752 euros a year), while French board members on average receive the lowest remuneration (43,529 euros a year) of the European countries analysed. These salary differences are even more noteworthy if it is taken into account that, according to the 2007 paper, Spanish board members attend fewer board meetings (with an average percentage of 66% attendance) than those of the rest of the countries (the attendance ratio varies between 84% and 96%).

As regards the composition of the remuneration, the above-mentioned report also indicates a sparseness of forms of board members remuneration in relation to company results. In respect of variable remuneration, Spain, Holland and Sweden are at the bottom of the list, with approximately 70% of board members payments being assessed on a fixed basis.

A first interpretation of this data would point to the possibility that the relatively high remuneration received by board members of large Spanish companies, as well as this being mainly in the form of fixed payments, could not be in accordance with the interests of the shareholders, and therefore would be a reflection of the capacity of the directors to determine their own remuneration schemes.

2.2.- Empirical studies

In the second place, the empirical literature of economics has analysed both the influence of remuneration policies on the value of the company and on the behaviour of board members, as well as the determining factors of the characteristics of these policies.

In relation to the first of these, the studies carried out until now have not been conclusive in establishing a relationship between company remuneration policies and either company market value or the behaviour of board members; these are the conclusions of certain studies which have reviewed the literature in detail (Gómez-Mejía and Wiseman, 1997; Murphy, 1999; Core *et al.*, 2003).

In relation to the factors determining company remuneration policies, on one hand there appears to be conclusive evidence that relates the amounts of the remuneration to company size (Murphy, 1985; Kaplan, 1994; Core *et al.*, 1999) and profitability (Jensen and Murphy, 1990; Gregg *et al.*, 1993; Attaway, 2000); on the other hand, many empirical studies along the same lines as this one have raised the theoretical possibility that companies in possession of more developed corporate governance policies, or, to put it another way, those which have organizational structures in which the interests of board members and owners are less divergent, present remuneration schemes for the former more in agreement with the interests of the latter. However, neither has this hypothesis been conclusively demonstrated.

So, on one hand it can be seen that the existence of large shareholders with the incentive to exercise governance control contributes to a greater moderation in the remuneration of board members (Dyl, 1988; Hambrick and Finkelstein, 1995), or in the expenses allotted to improve the working conditions of directors (Yafeh and Yosha, 1996). On the other hand, board members shareholding seems to intensify the direct relation between company size and board members remuneration (Tosi *et al.*, 2000).

Also, the relation between the supervisory capacity of the board and directorial remuneration has been analysed, considering the possible influence of the composition, the structure and the functions of the board on remuneration policies. It has not been observed that payments to Chief Executive Officers are significantly different according to the proportion of outside board members present on the board (Westphal and Zajak, 1995), and their remuneration may even be higher where there is a greater percentage of independent board members (Core *et al.*, 1999). However, a direct relation between the size of the board and the remuneration of Chief Executive Officers can be seen to exist (Holthausen and Larcker, 1993).

In relation to the existence of delegated committees, it can be seen that companies in which there is a greater independence on the part of the remuneration committees also have a lesser tendency to offer in the money share options to directors (Yermack, 1997; Aboody and Kasznik, 2000) and the payments to top executives are more closely connected to company performance (Conyon and Peck, 1998). Nevertheless, more recent studies do not corroborate the existence of a relationship between the level of independence of this type of committee and payments to directors (Anderson and Bizjak, 2003), or, to put it more generally, between the level of directorial entrenchment and the probability that the company will make exercise price adjustments of the options conceded to the directors with the object of increasing their value (Chidambaran and Prabhala, 2003).

Finally, the dual function of the Chief Executive Officer, who is also the chairman of the board, permits him to concentrate elevated levels of power which can bring about directorial entrenchment. As a result of this, a positive relationship between the remuneration of the top executive and the duality of his functions is evident (Boyd, 1994; Westphal and Zajac, 1995).

In the Spanish case², studies on the payments to top directors, although sparse and conditioned by the reluctance of companies to publish information about remuneration (Romero and Valle, 2001), do show that, in general, the level of payments increases with the size of the company (Ortin, 1997; Álvarez and Neira, 2001) and its profitability (Álvarez and Neira, 2001). In comparison with companies in Anglo-saxon countries, the use of variable remuneration formulae is not so wide-spread in Spanish companies (Ortin,1997), although in recent years the studies carried out by various consultancy companies show a notable increase in their use (Watson Wyatt, 2000; Mercer, 2002; PricewaterhouseCoopers, 2004). Also, it can be seen that remuneration policies may be conditioned by the sector of activity (Ortin and Salas, 1997) and by the kind of competitive strategy that the company follows (Álvarez and Neira, 2001; Sánchez and

Aragón, 2003), pointing to an interchange between the incentives in the short term in the form of bonuses, and in the long term in the form of promotion possibilities (Ortin and Salas, 1997).

2.3.- Corporate Governance Codes recommendations and legal regulations.

In the third and last place, interest in the remuneration of board members has been reflected in the recommendations of the Corporate Governance Codes as well as in the various legal regulations, promulgated nationally and internationally, which tend to increase control and transparency over the remuneration of company directors.

As a result of the promulgation in 1992 of the Cadbury Code in the United Kingdom, a common pattern in corporate governance codes is the formulation of recommendations that advocate an increase in the transparency of board members remuneration, an observation of principles of moderation and relation to company results, and also that there should be independent committees of board selection and remuneration whose task it is to draw up the remuneration policies of the board.

In line with these initiatives, in 2004 the European Commission presented a recommendation relating to the guiding principles of salary policies in respect of board members of listed companies. In this recommendation from Brussels, it was proposed that member states should take measures to make public the individual remuneration of each board member and the terms of the possible reinforced contracts of top executives, and foster the submission of board remuneration to the stockholders' meetings for their approval. This recommendation is an attempt to safeguard the rights of shareholders, letting them obtain information about possible situations in which excessive remuneration may give rise to conflicts of interest.

In the Spanish case, the Corporate Governance Codes promulgated during the last decade Olivencia (1998), Aldama (2003), or, more recently, the Unified Code (2006), to mention only the most relevant, have included recommendations relating to the necessity to make public board members remuneration and that such remuneration be in line with criteria of moderation, and related to company performance. Also, beginning with the Aldama Code, there has been an emphasis on the necessity to differentiate the remuneration schemes applicable to executive and non-executive board members, so that the variable component should be more important in the case of the former, and the fixed component in the case of the latter.

The recommendations formulated by the Corporate Governance Codes and the European Commission have opened the way to legal reforms in Spain that have come to regulate the information requirements with which companies must comply in relation to remuneration policies.

For example, Law 26/2003, of July 17, called Law of Transparency of Listed Companies, regulates the obligations governing company information and transparency, making reference to the obligation, among others, that listed companies make public every year a report on corporate governance, which must include, at minimum,

information in respect of the ownership structure, the structure and functions of the board, intragroup transactions, the systems of risk control, the workings of the General Assembly, and the level of compliance with the recommendations of corporate governance in accord with the principle of 'comply or explain'³.

Subsequently, the Ministerial Order on the Annual Report of Corporate Governance of Listed Public Companies (December 26, 2003), details the structure and the minimum contents of the Corporate Governance Report; and Circular number 1/2004, of March 17, of the National Committee of the Stock Market, regulates the content and the format of the Annual Report on Corporate Governance, which listed companies are obliged to publish in their web pages. In accordance with this format, and in relation to remunerative information, listed companies are obliged to provide information on the total remuneration of the board members, differentiating the various remuneration concepts: fixed remuneration, variable remuneration, expenses, statuary obligations, share options, and others⁴. Likewise, companies must detail the total remuneration received by each class of board member: executive, outside major shareholders or their representatives (called 'dominicales' in Spain) and outside independents.

The availability of detailed data on the remuneration received by Spanish company board members as a consequence of its obligatory inclusion in the annual report on corporate governance of listed companies, has permitted us in this study to bypass the traditional reticence about revealing this kind of information, and to delve deeper into the analysis of the determining factors of the remuneration schemes implemented by companies in their boards.

In this context, where the board members policies on remuneration are subject to growing demands of transparency, moderation and relation to company performance, the present study analyses the influence of the structure of company governance on these policies for the Spanish case.

2.4.- Study hypotheses

This paper suggests, in a general way, that boards members remuneration, as much regarding its magnitude as its structure, may be related to the level of development of the structure of corporate company governance. Variables related to ownership structure and boards of directors' features are treated as representative elements of governance structure.

The underlying reasoning common to the different hypotheses set down here supposes that more developed governance structures will favour better safeguarding of shareholders' interests, and will be reflected in remuneration policies characterized by greater salary moderation and more relation to company performance.

Regarding the influence of corporate governance structure on remuneration policies, four potentially explanatory factors are analysed: the concentration of ownership, the share participation of board members, the composition of the board and the existence of a nomination and remuneration board committee. In continuation, the hypotheses

associated with the influence that each one of these factors may have on the remuneration policies of the board, are set down.

2.4.1.- The effect of ownership concentration on remuneration policies

The dispersal of ownership structure in large companies may give rise to a 'free rider' problem (Grossman and Hart, 1980); also, the direct supervisory costs may be too high for the small shareholders, all of which supposes a reduction of direct supervision of the directors. However, large shareholders may have incentives to supervise directorial activities given that the increase in value of their shares resulting from such supervision may be greater than the supervisory costs directly incurred.

In carrying out this supervision, the large shareholders will try to avoid unnecessary costs such as the existence of excessive remuneration for board members and top executives, and will promote the creation of incentive schemes tending to align the efforts of board members with the creation of value for the shareholders. Firth *et al.* (1999) and Hartzell and Starks (2003) emphasize that the concentration of ownership has a negative effect on the remuneration of top executives and, additionally, they also stress the existence of a positive effect on the sensitivity of remuneration to company yield.

So, given the incentives of the large shareholders to supervise directorial activity, we expect the concentration of ownership to have the effect of containing salary levels and promoting schemes of variable remuneration. We present therefore the following hypothesis:

HIPOTHESIS 1: Share concentration negatively affects the amount of remuneration and positively affects the percentage of variable board members remuneration.

2.4.2.- The effect of board members stock ownership on remuneration policies

Board members stock ownership favours an alignment of the interests of directors with the rest of the shareholders (Bearle and Means, 1932; Jensen and Meckling, 1976). Board members may benefit from share participation through the positive market image of a containment policy in respect of remuneration levels. In this respect, Allen (1981) emphasizes the existence of a negative relation between the share ownership of top executives and their salary level, which is interpreted as saying that when directors may receive high returns through the receipt of dividends, they may renounce their right to a part of their remuneration to avoid agitation on the part of the rest of the shareholders.

Nevertheless, it is also plausible that board members may try to compensate for the risk of buying a large number of shares through higher levels of remuneration. Seen from this point of view, increases in share ownership on the part of board members may lead to their entrenchment to elude disciplinary actions deriving from the rest of the mechanisms which make up corporate governance structure. Holderness and Sheehan (1988) provide evidence for a positive relationship between the share ownership of top

executives and their levels of remuneration, which may be interpreted as a manifestation of such entrenchment.

On the other hand, the dependence of a substantial part of board members wealth on company results makes it probable that they will resist the idea that an important part of their remuneration should be variable and, at the same time, depend on company performance. Consequently, we expect that board members share ownership will have a moderating effect in terms of the percentage of remuneration of a variable character. In accord with these arguments, we present the following hypothesis:

HYPOTHESIS 2: Board members stock ownership positively affects the amount of remuneration and negatively affects the percentages of variable board members remuneration.

2.4.3.- Effect of board composition on remuneration policies

The composition of the board is a fundamental characteristic of this mechanism of corporate supervision and control, which has an effect on company governance. With regard to this, there exists a considerable volume of evidence which makes manifest the supervisory role played by outside independent board members in situations in which conflicts of interest may arise between shareholders and directors, such as in the case of the dismissal of opportunistic directors (Weisbach, 1988), or during the processes of company acquisitions (Byrd and Hickman, 1992).

A board dominated by executive board members, or by outside members aligned with the executives, is severely limited in its capacity to control behaviour contrary to the interests of the shareholders, such as the establishment of high levels of board remuneration. On one hand, the executive board members will support each other in determining high salary levels and, on the other hand, the outside dependent members may support the aspirations of executives, to whom they normally owe their positions on the board. Sridharan (1996) finds evidence from the United States market that the greater the influence of the top executive on the board, as a result of a higher presence of executive board members, the greater the increases in their salary levels, both fixed and variable.

Independent board members, especially when selected by an independent selection committee, constitute a counterweight to the influence of the executive board members and the outside dependent members. A high proportion of independent members may, therefore, bring about a change in the agreements on salaries for board members and top executives in order to align them more with the interests of the shareholders, promoting remuneration that is more modest and more closely related to company performance. On the basis of this reasoning, we present the following hypothesis:

HYPOTHESIS 3: The proportion of independent board members affects negatively the amount of remuneration and positively the percentage of variable remuneration of the board.

2.4.4.- The effect of the existence of a nomination and remuneration committee on remuneration policy

The remuneration of board members, and in particular that of top executives, is an important potential source of conflict between directors and shareholders. In accordance with the recommendations formulated by most Corporate Governance Codes, the establishment of an independent committee in charge of the drawing up of remuneration policies would reduce the probabilities for this kind of conflict by avoiding the possibility of the top executives intervening directly in the determination of the remuneration schemes.

With regard to this, Conyon (1997) demonstrates the existence of a greater salary containment in the British market in respect of the boards of those companies which have a nomination and remuneration committee. The activities of these committees are not limited to the moderation of the salary levels of board members, but they are also responsible for the drawing up of remuneration structures which promote behaviour in accordance with the interests of shareholders and, finally, in an improved company performance (Klein, 1998). Consequently, if a nomination and remuneration committee exercises effective control, it will be expected to have a positive bearing on the containment of board remuneration and its relation to company yield.

HYPOTHESIS 4: The existence of a nomination and remuneration committee affects negatively the amount of remuneration and positively the percentage of variable board members remuneration.

3.- METHODOLOGY AND VARIABLES

With the aim of analysing the validity of the hypotheses presented relating to the influence of corporate governance structure on board remuneration policies, we have employed the following common structure for the models of linear regression whose coefficients have been estimated by ordinary least squares:

Board remuneration = f (ownership structure, board composition, remuneration committee, control variables)

We have estimated different regression models in which the dependent variable is modified with the aim of analysing different aspects of board members remuneration: total remuneration (TOTPAY) and the percentage of variable remuneration (%VARPAY).

With respect to the ownership structure, the percentage of capital in possession of the five largest shareholders (LARGE5) as well as the share participation of the board members (BOARDOWN) have been taken into account. Board composition is covered by three variables which represent the percentage of independent members (%INDBD), large shareholders representatives (%REFSHAREBD) and executives (%EXEBD). Owing to the high correlation, which reaches 79% between the proportion of the large

shareholders representatives and independents, and 53% between the proportion of large shareholders representatives and executives, these variables have been alternatively introduced in separate models. The existence of a nomination and remuneration committee responsible for these tasks is seen through a dummy variable (NRC) which has the value one in the presence of a committee and value zero where there is no committee.

Besides the variables related to the level of development of the governance structure already mentioned, potentially explanatory of the level and structure of board members remuneration, the following control variables have been included in the models: the level of financial leverage (LEV), the size (SIZE), the profitability (PERFORMANCE) and the risk (RISK), of the company. The economic literature establishes the influence of these dimensions on board remuneration on the basis of the following arguments.

In accordance with the disciplinary argument in respect of debt proposed by Jensen (1989), a high grade of financial leverage will reduce the level of free cash-flow with which the company would be able to pay its board members. In a similar way, the control exercised by financial institutions to guarantee borrowers' solvency would reduce management capacity to devote excessive funds to the remuneration of board members, owing to the negative effect that this behaviour would have on the capacity of the company to honour its debts. Finally, a high financial leverage increases the level of company risk and the variability of company yield, and, consequently, the resistance to such policies on the part of board members, a high percentage of whose remuneration is related to firms' results. So, a negative relationship between the level of leverage and the percentage of the variable components of the remuneration of board members is to be expected. The possible negative effect of debt on the total amount of board members remuneration and on the proportion of variable remuneration has been controlled by the inclusion of the ratio of leverage in the estimated models, calculated as the total debt divided by the total assets.

On the other hand, larger companies present greater opportunities for growth and their operations are more complex than those of smaller companies (Rosen, 1992). Consequently, the skills demanded of top management and board members, as well as the responsibilities they must assume, increase with the size of the company. It is therefore reasonable that the remuneration received, in accord with the skills demanded and the responsibilities assumed, will bear a direct relation to the size of the company. To control this possible effect of size on board members remuneration, the napierian logarithm of total assets has been introduced.

With regard to company profitability, from the point of view of the incentives generated by remuneration, the search for a greater alignment of interests between board members and shareholders requires the remuneration of the former to be related to company performance. Core *et al.* (1999) establish the existence of a positive relationship between the remuneration of top executives and company yield. Consequently, we include in the model the firms profitability (as the quotient between the EBITDA and the total assets) as a means of controlling the possible effect of company profitability on board members remuneration.

Finally, directors and, in general, all those who take part in the governance of a company, are averse to risk in the sense that they are unwilling to risk their human capital in high-risk activities if these are not compensated for adequately by a high remuneration. The positive relationship between risk and remuneration has been established by Harjoto and Mullineaux (2003) working with a sample of United States commercial banks. On the other hand, the executives and other board members will resist accepting that a high portion of their remuneration be related to company yield when this presents a high level of volatility, as Aggarwal and Samwick (1999) found for the United States market. The standard deviation of daily market profitability of the company shares has been introduced into the regression models as a mechanism to control the possible effect of company risk on board members remuneration.

4.- SAMPLE AND DATABASE

The analysis of the determining factors of board members remuneration has been carried out on a sample of 81 non-financial listed companies on the Madrid Stock Exchange for the financial year of 2005, in respect of which all the information necessary to calculate the variables used was at our disposal.

The data related to the remuneration and composition of the boards, as well as the ownership of shares by board members and large shareholders, has been extracted from the official registers of the National Commission of the Stock Market. The stock exchange quotations, necessary for the calculation of the variable proxy of the level of company risk, have been obtained from the registers of the Madrid Stock Exchange. Finally, the accounting data used to calculate the level of debt, company size and profitability are from the SABI database. The descriptive statistics of the variables used in the study are shown in table 1.

The average total remuneration of the Spanish boards in our sample was 2,625,160 euros. Although payment for objectives attained is now habitual practice in Spanish listed companies, amounts involved do not reach the percentages of other countries where the concept of variable remuneration is more established. So, the percentage of variable remuneration with respect to the total remuneration of the Spanish board members is on average around 14%, which coincides approximately with the datum provided (15%) by 'The Global Study of Remunerations, 2007', carried out by Mercer Human Resource Consulting, but in this case in respect of top executives of Spanish companies. This percentage is well below those obtained in Germany (34%), the United States (27%) and the United Kingdom (22%), to mention only some other countries.

With regard to the structure of company ownership, the percentage of capital in the possession of the five largest shareholders is on average 45.96%. Board members possess on average 23.64% of the company capital. This data shows a greater concentration of ownership in Spanish companies than applies in Anglo-saxon countries. In this respect, Ozkan's study (2006) showed for the UK market the

percentages of share ownership by the four largest shareholders and the board members as 25.34% and 4.49% respectively.

In analysing the data of the average board composition in our sample, it is seen that the large shareholders representatives make up the largest group $(45\%)^5$, followed by independents (35%) and executives (20%). These results are not directly comparable with the economies of other countries owing to the non-existence of the category of large shareholders representatives outside Spain; however, it can be seen that the sum of large shareholders representatives and independents, who together may be treated as forming the percentage of non-executives, is significantly higher than the 55.63% and 47% of non-executive board members in the studies of Ozkan (2006) and Weir and Laing (2001), respectively, in respect of the British market. This last study also highlights the fact that 42% of non-executive board members are independents. The high percentage of non-executives in the Spanish market is due to the high presence of large shareholders representatives.

A first approximation to the analysis of the influence of corporate governance structure on board remuneration can be extracted from the correlations shown in table 2. Contrary to our hypothesis 4 above, a positive correlation has been obtained between the dichotomous variable representative of the existence of a nomination and remuneration committee and the total board remuneration. However, the correlation with the variable proportion of the total remuneration is also positive, which suggests that a nomination and remuneration committee acts not so much as a mechanism to moderate the total remuneration, but to promote the application of remuneration schemes that permit the alignment of the interests of board members and shareholders.

In a similar manner, a clear influence of share ownership structure on board remuneration cannot be seen. The effect of share structure on remuneration is reduced to the negative correlation of board members stock ownership with the variable remuneration proportion. This relation would accord with an attitude averse to risk on the part of the board members, who would not be willing to assume any large risk related to their remuneration which would be added to that which they assume though direct share participation in the company.

With regard to board structure, a negative influence of the proportion of large shareholders representatives, and a positive influence of the proportion of executive board members, on the percentage of variable remuneration, is apparent. In principle, these results imply behaviour on the part of the large shareholders representatives contrary to the interests of the rest of the shareholders and suggest an alignment of the behaviour of the executive board members with that of the body of shareholders. However, this last result could be the consequence, in line with the recommendations of the latest Spanish Code of Best Practices, The Unified Code (2006), of the use of a profusion of variable remuneration formulae in respect of the executive board members in the face of the predominance of the fixed salaries of the independents and large shareholders representatives.

With regard to the control variables, a negative correlation between company risk and total board remuneration can be seen, which is contrary to the argument for larger remuneration as compensation for assumed risk. In a similar way, as foreseen, a positive influence of company size and profitability on total board remuneration can be seen, which agrees with the argument that larger companies demand greater responsibilities and skills on the part of their board members, for which they receive higher remuneration. On the other hand, the most profitable companies are those which have a greater capacity to remunerate board members.

Finally, the strong correlation obtained between the representative variables of board composition is worth mentioning. The correlation of the proportion of large shareholders representatives with the proportion of independents and executives is negative and rises to 79% and 53%, respectively.

5.- RESULTS

In accordance with the plan of this research, in this section we present the results obtained by means of the estimation of different regression models by which we try to determine the influence of company governance structure on, firstly, the amounts of board members remuneration, and then on its structure.

The contrast of the validity of the hypotheses relating to the influence of governance structure on total board members remuneration (TOTPAY) has been carried out using three linear regression models in which, with the aim of avoiding the problems of multicollinearity already mentioned, the variables relating to the percentages representing the different classes of board members (executives, large shareholders representatives and independents) have been introduced alternately.

In table 3 are shown the results of the estimated regression models. As can be seen, the different models used do not verify the proposed hypotheses except for hypothesis 3, relating to the relationship between board composition and its remuneration policies. So, a significant relationship between the amounts of board remuneration and aspects of corporate governance such as share ownership concentration, board members stock ownership or the existence of a nomination and remuneration committee⁶, cannot be seen.

In accordance with hypothesis 3, the percentage of executives would present a significant, positive effect on the total board remuneration. The interpretation of this result suggests that a greater presence of executive board members favours higher levels of remuneration, which is to say, remuneration more in accordance with the aspirations of board members and to the detriment of the interests of the company owners. Also, the minus sign characterising the variable percentage of independents would suggest that the presence of independents fosters moderate remuneration more in accord with shareholders' interests. However, this result must be interpreted with caution for it is only marginally significant.

Another aspect which should be mentioned is that the variables with the greatest explanatory capacity of the level of board members remuneration are those related to company size and profitability, both being control variables introduced into the models. The associated coefficients are positive and statistically significant. These results agree with previous empirical evidence that makes manifest greater directorial remuneration in the case of large companies where the supervision and management usually entail a greater operative complexity, and, equally, in companies of high profitability which are prepared to pay larger amounts of remuneration, either as 'prizes' to directors for their achievements, or to retain and attract qualified directors.

In the second stage of the study, with the object of analysing the relationship between company governance structure and the composition of board members remuneration, the percentage of variable remuneration with respect to the total (%VARPAY) has been introduced into the models as a dependent variable. Variable remuneration constitutes that part of board members salaries the amounts of which depend on the attainment of determined fixed objectives in a financial year. In table 4 are shown the coefficients obtained in the different proposed models and their levels of significance⁷.

The results permit us, on the one hand, to confirm hypotheses 2 and 4, relating to the influence of board members ownership and the existence of a nomination and remuneration committee on board members remuneration policies; on the other hand, they reflect the effect of the composition of the board on its remuneration policy, as postulated in hypothesis 3, although in a sense contrary to that proposal.

So, the board members ownership variable shows a significant minus sign, making manifest a definite reluctance on the part of those board members with substantial capital participation in the company to receive variable remuneration. The effect that board members ownership has on their wealth would provoke members to show a greater preference for remuneration schemes with a predominantly fixed component, with the aim of avoiding an excessive reliance of their personal wealth on company performance.

The existence of a nomination and remuneration committee positively and significantly influences the percentage of variable remuneration, as was expected from hypothesis 4. With regard to this, the presence of an organ independent of the board, and one specifically responsible for the drawing up of remuneration policies, brings with it a greater weight of variable remuneration, which will benefit the interests of the shareholders.

With relation to the percentage of executives on the board, the coefficients obtained are positive and significant. This result, in principle contrary to our hypothesis on the influence of board composition on remuneration structure, may be explained by the recommendations that the Spanish Unified Code (2006) presented in respect of remuneration schemes. These recommendations consider that the remuneration of outside board members should not contain variable components, or those related to

company performance, with the aim of safeguarding their independence *vis-à-vis* the executives. The high probability that this recommendation is accepted by boards with a majority of outside large shareholders representatives may also explain the negative significant coefficient obtained by this variable.

Taken globally, our results suggest that although the total quantity of board members remuneration does not appear to be affected by corporate governance structure, its composition may indeed be conditioned by certain aspects of the governance of the company. So, the existence of supervisory mechanisms, such as share concentration or the presence of independent committees of selection and remuneration bring with them remuneration schemes characterized by a greater weight of the variable component.

With relation to the initial plan of this research, the results obtained appear to suggest that board members remuneration policy is configured as a control mechanism in the case of those companies with more developed governance structures. On the other hand, in the case of little developed governance structures, in which the capacity of directorial entrenchment is greater, one should not discard the possibility that this policy may satisfy their particular interests.

6.- CONCLUSIONS

Board members remuneration policies constitute a potential source of conflict between directors and owners. Consequently, this matter has received a great deal of attention in recent years, both professionally and academically. Likewise, the economic authorities have not remained on the sidelines, promoting, among other measures, the inclusion of the recommendations of corporate governance codes relating to a relationship between remuneration and company performance, and the formation of independent committees responsible for drawing up remuneration policy.

This study analyses the effect of the development of corporate governance structures on the amounts and the composition of board members remuneration in listed companies on the Spanish market. The principle conclusions obtained may be synthesized in the following points.

In the first place, it is established that, in line with previous empirical studies, there is a direct relation between the amounts of board members salaries and the size and profitability of the company. On the other hand, the existence of a significant influence of corporate governance structure on the total quantity of board members remuneration has not been established.

In the second place, with regard to the structure of board members remuneration, and more particularly with respect to the percentage of variable remuneration, it is seen that board members stock ownership, board composition and the existence of a nomination and remuneration committe, affect this kind of remuneration. With regard to this, it should be emphasized that there is an important relationship between remuneration and company performance in the case of companies which utilise committees of selection

and remuneration. On the other hand, there are indications that variable remuneration plays a lesser role in companies whose board members own larger capital stakes.

In general, it may be concluded that the existence of nomination and remuneration committee in respect of administrative boards can play an active role in the control of remuneration policies in Spain. The control would be translated, in accordance with the recommendations formulated by the corporate governance codes, into the fostering of a greater weight of variable remuneration or remuneration linked to company performance.

Future developments of this research area could analyse the effect of the structure and functioning of the nomination and remuneration committee in Spain on the supervisory capacity of board members remuneration policies; and, on an international basis, whether the specific characteristics of the economic, socio-cultural and legal aspects of other countries give rise to differences in the remuneration policies applied to company boards in those countries.

¹ United Kingdom, Holland, Switzerland, France, Sweden, Portugal, Belgium, Spain, Italy and Germany.

² A review of Spanish empirical literature on remuneration schemes can be found in Gispert and Ortin (2002).

³ The principle 'comply or explain', in force in the application of the recommendations in the Corporate Governance Codes, refers to the obligation of companies to observe the recommendations or explain to the markets the reasons why they have not done so.

⁴ Under the generic heading 'others' are included the rest of the forms of remuneration permitted by the company, such as advances, loans, contributions and contractual obligations in respect of funds and pension plans, life insurance premiums and guarantees established by the company for the benefit of the board members.

⁵ The Spanish Unified Code (2006) recommends that the ratio of proprietary directors to independents should reflect the relationship in the company's capital between the shareholdings they represent and others.

⁶ The robustness of the results of the models has been reinforced by the carrying out of additional tests. So, the models of the first phase of the study have been replicated, substituting the dependent variable: total remuneration, by the average board members remuneration, without a significant variation in the results being noted. Also, the fact that the company belongs to one sector or another may be a circumstance which influences the remuneration policies applied by the company. In this respect, it is worth mentioning that different tests have also been carried out in which industrial dummy variables have been included in all the estimated models in this study, without significant changes in the character or significance of the coefficients for the rest of the explanatory factors.

⁷ As can be seen, the second estimated model does not produce a statistically significant result, and for this reason only the results of the first and third models have been interpreted.

REFERENCES

Aboody, D.; Kasznik, R. (2000) CEO stock option awards and the timing of corporate voluntary disclosures, Journal of Accounting & Economics, 29, 73-100.

Aggarwal, R.; Samwick, A. (1999) The other side of the trade-off: the impact of risk on executive compensation, Journal of Political Economy, 107, 65-105.

Allen, M. (1981) Power and privilege in the large corporation: corporate control and managerial compensation, American Journal of Sociology, 86, 1112-1123.

Álvarez, M.D.; Neira, E. (2001) Nivel de riesgo en la retribución del máximo responsable ejecutivo, Investigaciones Europeas de Dirección y Economía de la Empresa, 7, 1, 71-86.

Anderson, R.C.; Bizjak, J.M. (2003) An empirical examination of the role of the CEO and the compensation committee in structuring executive pay, Journal of Banking and Finance, 27, 7, 1323-1348.

Attaway, M. (2000) A study of the relationship between company performance and CEO compensation, American Business Review, 18, 77-85.

Bearle A.; Means, G.C. (1932) The modern corporation and private property, Ed. Mcmillan, New York, NY.

Boyd, B.K. (1994) Board control and CEO compensation, Strategic Management Journal, 15, 335-344.

Byrd, J.; Hickman, K. (1992) Do outside directors monitor managers? Evidence from tender offer bids, Journal of Financial Economics, 32, 195-221.

Chidambaran, N.K.; Prabhala, N.R. (2003) Executive stock option repricing, internal governance mechanisms, and management turnover, Journal of Financial Economics, 69, 153-189.

Código de Buen Gobierno (Olivencia Code) (1998) El Gobierno de las Sociedades Cotizadas, Special Commission to Consider a Code of Ethics for Companies' Boards of Directors appointed by the Spanish Cabinet.

Conyon, M. (1997) Corporate governance and executive compensation, International Journal of Industrial Organization, 15, 493-509.

Conyon, M.J.; Peck, S.I. (1998) Board control, remuneration committees, and top management compensation, Academy of Management Journal, 41, 2, 146-157.

Core, J., Holthausen, R., Larcker, D. (1999) Corporate governance, chief executive officer compensation, and firm performance, Journal of Financial Economics, 51, 371-406.

Core, J.E.; Guay, W.R.; Larcker, D.F. (2003) Executive equity compensation and incentives: a survey, Economic Policy Review, 9, 1, 27-50.

Dyl, E. (1988) Corporate control and management compensation, Managerial and Decision Economics, 9, 21-25.

Firth, M.; Tam, M.; Tang, M. (1999) The determinants of top management pay, Omega, 27, 617-635.

Gispert, C.; Ortín, P. (2002) Mecanismos de disciplina de los directivos en España: el consejo de administración y los sistemas de retribución, Ekonomiaz, 50, 138-157.

Gomez-Mejía, L.R.; Wiseman, R.M. (1997) Reframing executive compensation: and assessment and outlook, Journal of Management, 23, 291-374.

Gregg, P.; Machin, S.; Szymanski, S. (1993) The disappearing relationship between directors' pay and corporate performance, British Journal of Industrial Relations, 31, 1-9.

Grossman, S.; Hart, O. (1980) Takeover bids and the free-rider problem and the theory of the corporation, Bell Journal of Economics, 11, 42-64.

Hambrick, D.C.; Finckelstein, S. (1995) The effects of ownership structure and conditions at the top: the case of CEO pay raises, Strategic Management Journal, 16, 175-193.

Harjoto M. A.; Mullineaux D. J. (2003) CEO compensation and the transformation of banking, The Journal of Financial Research, 26, 3, 341-354.

Hartzell, J.C., Starks, L.T. (2003) Institutional investors and executive compensation, Journal of Finance, 58, 2351-2374.

Holderness, C.G.; Sheehan, D.P. (1988) The role of majority shareholders in publicly held corporations: an exploratory analysis, Journal of Financial Economics, 20, 317-346.

Holthausen, R.W.; Larcker, D.F. (1993) Boards of directors, ownership structure and CEO compensation, Working paper, Wharton School, University of Pennsylvania, Philadelphia.

Informe Aldama (Aldama Report) (2003) Informe de la Comisión Especial para el Fomento de la Transparencia y Seguridad en los Mercados y en las Sociedades Cotizadas, CNMV.

Jensen, M.C. (1989) Eclipse of the public corporation, Harvard Business Review, 67, 5, 61-75.

Jensen, M.C.; Meckling, W.H. (1976) Theory of the firm; managerial behaviour, agency costs and ownership structure, Journal of Financial Economics, 305-360.

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

Kaplan, S. (1994) Top executive rewards and firm performance: a comparison of Japan and the United States, Journal of Political Economy, 102, 510-546.

Klein, A. (1998) Firm performance and board committee structure, Journal of Law and Economics, 41, 137-165.

Murphy, K. J. (1985) Corporate performance and managerial remuneration: an empirical analysis, Journal of Accounting and Economics, 7, 11-42.

Murphy, K. (1999) Executive Compensation, en O. Ashenfelter y D. Card, eds. Handbook of Labor Economics, 3, Amsterdam: North Holland.

Ortín, A. (1997) Tamaño de la empresa y remuneración de los máximos directivos, Revista de Economía Aplicada, 5, 13, 109-126.

Ortín, A.; Salas, V. (1997) The compensation of Spanish executives. A test of a managerial talent allocation model, International Journal of Industrial Organization, 15, 511-532.

Ozkan N. (2006) Do corporate governance mechanisms influence CEO compensation? An empirical investigation of UK companies, Journal of Multinational Financial Management (forthcoming 2006).

Romero, M.G.; Valle, R. (2001) La retribución de los directivos españoles: marcos teóricos y evidencia empírica, Revista Europea de Dirección y Economía de la Empresa, 10, 1, 99-118.

Rosen, S. (1992) Contracts and the market for executives. In: Wein, L., Wijkander, H. (Eds.), Contract Economics. Blackwell Publishers, 181-211.

Sánchez, G.; Aragón, A. (2003) Efectos en los resultados de la organización del ajuste entre la retribución del directivo y la estrategia de la empresa, Revista Europea de Dirección y Economía de la Empresa, 12, 4, 199-217.

Sridharan, U.V. (1996) CEO influence and executive compensation, Financial Review, 31, 51-66.

Shleifer, A.; Vishny, R. (1997) A survey of corporate governance, Journal of Finance, 52, 2, 737-783.

Tosi, H.L.; Werner, S.; Katz, J.P.; Gómez-Mejía, L.R. (2000) How much does performance matter: A meta-analysis of CEO pay studies, Journal of Management, 26, 301-339.

Westphal, J.D.; Zajac, E.J. (1995) Who shall govern? CEO/board power, demographic similarity, and new director selection, Administrative Science Quarterly, 40, 60-83.

Weir, C.; Laing, D. (2001) Governance structures, director independence and corporate performance in the UK, European Business Review, 13, 2, 86-94.

Yafeh, Y.; Yosha, O. (1996) Large shareholders and banks: Who monitors and how?, Working paper, Hebrew University, Jerusalem, Israel.

Yermack, D. (1997) Good timing: CEO stock options awards and company news announcements, Journal of Finance, 52, 2, 449-476.

TABLE 1.- Descriptive Statistics (thousands of euros)

VARIABLES	OBSERVATIONS	MINIMUM	MAXIMUM	MEAN	STD DEVIATION
TOTPAY	81	15.00	15,956.00	2,625.16	2,785.93
%VARPAY	81	0.00	75.00	14.64	18.68
LARGE5	81	0.60	100.00	45.96	22.75
BOARDOWN	81	0.00	100.00	23.64	28.26
NRC	81	0.00	1.00	0.75	0.43
%REFSHAREBD	81	0.00	100.00	44.10	23.21
%INDBD	81	0.00	94.00	35.35	19.49
%EXEBD	81	0.00	90.00	20.30	14.11
LEV	81	0.00	1.16	0.51	0.23
SIZE	81	6,125.00	49,189,560.00	1,888,443.90	5,574,894.54
PERFORMANCE	81	-0.2474	0.8873	0.2358	0.1885
RISK	81	0.01	0.03	0.014	0.004
Variables definition	Variables definition				
TOTPAY	Total pay of Boar	d members			
%VARPAY	Percentage of vari	able compensation	of Board members		
LARGE5	Stock ownership of	of the five largest sh	nareholders (%)		
BOARDOWN	Stock ownership	of Board members ((%)		
NRC	Dummy variable:	one if there is a nor	mination and remuner	ration committee, ze	ero otherwise
%REFSHAREBD	Board's proportion of reference shareholder representatives (%)				
%INDBD	Board's proportion of independent directors (%)				
%EXEBD	Board's proportion of executive directors (%)				
LEV	Debt to total assets ratio (book values)				
i	I	,	•		

Book value of total assets

EBITDA to total assets ratio

Standard deviation of daily stock returns

SIZE

RISK

PERFORMANCE

TABLE 2.- Correlation Matrix

	TOTPAY	%VARPAY	LARGE5	BOARDOWN	%REFSHAREBD	%INDBD	%EXEBD	NRC	LEV	SIZE	PERFORMANCE	RISK
TOTPAY	1.000	0.291**	0.009	-0.086	-0.107	0.014	0.136	0.365**	0.188	0.800**	0.345**	-0.405**
%VARPAY		1.000	-0.062	-0.235*	-0.290**	0.150	0.234*	0.271*	0.097	0.171	0.088	-0.073
LARGE5			1.000	0.368**	0.207	-0.340**	0.119	-0.124	0.144	0.059	0.136	0.045
BOARDOWN				1.000	0.106	-0.269*	0.211	-0.127	-0.011	-0.217	0.116	0.019
%REFSHAREBD					1.000	-0.790**	-0.535**	-0.095	0.100	-0.060	-0.262*	-0.066
%INDBD						1.000	-0.087	0.200	-0.192	0.088	0.114	0.020
%EXEBD							1.000	-0.130	0.090	-0.039	0.261*	0.088
NRC								1.000	0.016	0.362**	0.225*	0.019
LEV									1.000	0.339**	-0.257*	-0.020
SIZE										1.000	0.126	-0.440**
PERFORMANCE											1.000	-0.034
RISK												1.000

Pearson correlation coefficients.

*, ** Indicates p-values of coefficients are significant at the 5% and 1% statistical levels respectively.

TABLE 3.- Determinants of Total Board Remuneration (OLS models; SPSS 14.0) $(N = 81)^a$

Variables	Model 1	Model 2	Model 3
Intercept	0.669	0.896	0.649
LARGE5	-0.005	-0.006	-0.005
BOARDOWN	0.004	0.003	0.003
%REFSHAREBD	0.066		
%INDBD		-0.692*	
%EXEBD			1.028**
NRC	0.108	0.134	0.178
LEV	0.052	-0.047	-0.062
SIZE	0.495***	0.504***	0.493***
PERFORMANCE	1.532***	1.574***	1.243***
RISK	-15.518	-13.411	-19.406
F	22.858***	24.106***	24.377***
Adjusted R ²	68.6%	69.8%	70.0%

^a Dependent variable: TOTPAY. * p < 0.1; ** p < 0.05; *** p < 0.01.

TABLE 4.- Determinants of Board Variable Remuneration Percentage (OLS models; SPSS 14.0) $(N = 81)^a$

Variables	Model 1	Model 2	Model 3
Intercept	0.336	0.154	0.148
LARGE5	0.001	0.000	0.000
BOARDOWN	-0.002**	-0.002*	-0.002**
%REFSHAREBD	-0.234***		
%INDBD		0.085	
%EXEBD			0.452***
NRC	0.115**	0.105*	0.138***
LEV	0.113	0.119	0.056
SIZE	-0.012	-0.009	-0.009
PERFORMANCE	0.009	0.086	-0.022
RISK	-5.577	-4.283	-5.478
F	2.391***	1.516	2.754***
Adjusted R ²	12.2%	4.9%	14.9%

^a Dependent variable: %VARPAY. * p < 0.1; *** p < 0.05; *** p < 0.01.

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