

CONTROL AND RISK OF CEO COMPENSATION

Álvarez Pérez, M.D., Neira Fontela, E., Castro Casal, C.*

Summary

This study analyses the influence of various characteristics of the Board of Directors on the control and risk of the compensation of the Chief Executive Officer (CEO). It also examines the effect on these variables of some of the CEO personal characteristics and of various contingencies of the firm. The results reveal that control of the CEO compensation is determined fundamentally by the CEO participation in the capital of the firm, while the level of risk of the CEO compensation package is higher when the firm is diversified and implements a proactive competitive strategy.

Keywords: CEO, corporate governance, Board of Directors, compensation, risk, control

* *All - Universidad de Santiago de Compostela, Spain*

1. Introduction

Over the last few decades, the topic of Chief Executive Officer (CEO) compensation has attracted substantial interest both from scholars of several academic fields (accounting, economics, finance, law, management, and strategy) and investors. According to O'Neill (2007:692), interest in CEO remuneration "has largely focused on two issues: the overall levels of pay and the apparent lack of relationship between those amounts and company performance".

The first one is a regular subject of criticism in the business and general media, both due to the amount of CEO pay, which continues to rise despite the efforts of regulators, Boards, and investors to limit executive excess, and due to the linked corporate scandals (Harris & Bromiley, 2007; Zhang et al., 2008). Moreover, it is the second that has been the major concern of academics and which lies behind corporate governance reforms (Merhebi et al., 2006; Thompson, 2005). This interest is due to the belief that CEO compensation can be used as a mechanism to align management interests with those of shareholders, and that CEO pay is a solution to the agency costs arising from the separation of ownership and management.

Belief in the capacity of the CEO compensation to orientate their decisions towards the creation of shareholder value has been supported by several studies. Thus, the results of the laboratory study by Tosi, Katz & Gomez Mejia (1997), in which 228 students took part, revealed that when compensation was linked to the interests of shareholders, the managers (students) made decisions that maximised profits, but when compensation was linked to standards representing a low return for shareholders, the managers (students) made decisions to achieve those standards. This result indicates that the system of compensation, when properly designed and implemented, has a great influence on managers'

decisions on creation of value, and is a powerful mechanism for ensuring that top management will act according to the owners' interests. Other studies (Hill & Hansen, 1989; Hoskisson et al., 1993) support this finding, revealing the influence of the CEO compensation package, for example, on corporate investment (Coles et al., 2006; Kang et al., 2006) and R&D investment (Ryan & Wiggins, 2002).

The relationship between CEO compensation and company performance is linked to the two variables of interest in our study: control of the CEO compensation package and the level of risk of this package. Specifically, our study seeks to identify to what extent various characteristics of the Board that condition its independence, of the CEO himself and of the firm, are related to the level of risk of the CEO compensation package and its control by the Board of Directors, or by the Compensation Committee.

The rest of the paper is arranged as follows: Section 2 provides a background to the existing published literature and establishes the hypotheses. Section 3 discusses the methodology used, the data, and the empirical results. Section 4 concludes.

2. Framework and hypotheses

Previous literature has attributed three main functions to the Board of directors (Johnson, Daily, and Ellstrand, 1996): the agency/control role, the strategic decision and policy support role, and the resource acquirer role. The first role stipulates that the Board monitors the behaviour of the management on behalf of the shareholders. The second one considers that the members of Board offer input to decisions on strategic direction, through their expertise and information. The third one views the directors as a way of identifying and acquiring tangible and intangible resources on behalf of the firm. According to Lasfer (2006: 1006), the last two functions can be referred to as the advisory role of the Board which is not expected to

create a conflict of interest with CEO, while these are likely to resent the first role “because its objective is to scrutinise their decisions and limit some of their activities aimed at maximising their own and not necessarily shareholders’ interests”.

The principal-agent model is the standard economic theory of executive compensation (Conyon, 2006). The “agency problem” arises from the fundamental assumptions regarding the divergence of interests between the owners and their agents (Berle & Means, 1932; Jensen & Meckling, 1976). According to agency theory, CEO are self-interested, risk averse, and possess goals that diverge from those of shareholders. Thus, CEO will engage in self-serving actions at shareholders’ expense when given an opportunity.

Agency theory recommends Boards dominated by outside directors to help protect shareholders from self-serving behaviour by the CEO. These Boards must monitor CEO and offer them incentives to act in shareholders’ wealth (Fama & Jensen, 1983). In practice, the compensation committee of the Board determines pay on behalf of shareholders.

In this view, the Board designs an optimal compensation contract and makes an offer to the CEO. This contract will provide incentives to align their mutual interests (Holmstrom, 1979; Eaton & Rosen, 1983; Eisenhardt, 1989; Zajac & Westphal, 1994). Since the sensitivity of CEO wealth to stock price is seen as aligning their incentives with the interests of shareholders, the CEO’s compensation package will use a variable percentage of compensation, generally in the form of shares and stock options, to link the CEO compensation to shareholders’ wealth. Top management will thus share the risk with the shareholders.

However, transferring risk to the CEO has two disadvantages, which must be taken into account when designing his compensation package. First, to the extent that CEO are undiversified with respect to firm-specific wealth, they are exposed to more risk than diversified shareholders, so the higher risk must be compensated by the payment of a premium, causing the principal to incur higher costs. That is to say that the CEO will only accept compensation packages with higher risk in exchange for an increase in his potential gains. Various studies (Rajagopalan & Prescott, 1990; Colon & Park, 1990) have shown a positive and significant relationship between the risk of the CEO’s compensation package and their level of compensation.

Second, when the CEO bears too much risk his aversion to it may increase (Holmstrom, 1979; Holmstrom & Milgrom, 1987; Shavell, 1979), and he may become more conservative than would be desirable for the interests of the shareholders. In other words, beyond a certain threshold, the transfer of risk to the CEO may be prejudicial to any increase in shareholders’ wealth. Coles et al. (2006) argue that when the CEO compensation package has an excessively high level of risk, it is possible that

managers will forgo some positive net present value projects if those projects are very risky

An alternative view, firmly situated within an agency theory perspective, is the managerial power thesis (Bebchuk & Fried, 2004). In this perspective, managerial pay is not only designed to alleviate agency costs, but is in fact part of the agency problem through managerial power and rent extraction. They suggest that CEO set their pay. Defects in the underlying governance structures, particularly the insulation of directors from shareholders, enable the CEO to exert undue influence over the Board. This power has led to directors being unable to defend the shareholders’ wealth, being “captives” of the CEO. For Bebchuk and Fried (2004), the absence of director independence, not poor judgement, is what enables CEO to establish his own compensation. The lack of effective oversight of CEO pay enables them to obtain “rents”, or financial benefits in excess of those obtainable from an independent Board. Thus, remuneration arrangements are clearly a major part of the agency problem.

CEO has power when they can exercise significant influence over direct and indirect economic benefits to directors, particularly, over their nomination and appointment to the Board (Hill & Phan, 1991; Kimberly & Zajac, 1988; O’Reilly et al., 1988; Tosi & Gomez Mejia, 1989). In the cases of powerful CEO the Board and the Compensation Committee “cooperate with the CEO and agree on excessive compensation, settling on contracts that are not in shareholders’ interests. This excess pay constitutes an economic rent, an amount greater than necessary to get the CEO to work in the firm” (Conyon, 2006, 26). Consequently, for the managerial power thesis, CEO may use their power to limit control of their compensation by the Board and to reduce the level of risk of their package.

2.1. Control and risk of CEO compensation

If the Board of directors is to maximise shareholder benefits it will exercise independent oversight by seeking to minimise agency costs and relate incentives specifically to shareholder value. This focus on shareholder interests requires the Board to bargain with the CEO to best ensure outcomes favourable to shareholders.

The control of the process of setting the CEO compensation makes reference to the degree to which compensation policies and practices are designed in accordance with the interests of the shareholders, and to the degree to which the criteria and processes of compensation cannot be manipulated by the CEO (Tosi & Gomez Mejia, 1989, 1994).

Gomez Mejia and collaborators (Tosi & Gomez Mejia, 1989; Gomez Mejia & Balkin, 1992) identify three dimensions in CEO compensation risk: the variability of the financial compensation, its timescale, and its penalization. According to this approach, the risk of the CEO compensation will be

lower the more his income: (1) is relatively stable, (2) is formed by short-term rather than long-term incentives, and (3) is protected against decreased performance of the firm – the compensation increases when the firm's results improve, but does not decrease when they are reduced.

2.2. Composition and structure of the Board of Directors

Combs et al. (2007) argue that Board composition concerns shareholders mainly when a CEO is powerful. In their study, CEO power refers to the potential for the CEO to leverage ownership or position to pursue her or his own goals. A CEO whose power remains unchecked by outside directors is more likely to take self-serving actions that decrease shareholder wealth (Dunn, 2004; Frankforter et al., 2000). When a CEO power is low, however, power circulation theory suggests that monitoring by other executives is sufficient to protect shareholders (Ocasio, 1994).

Power is conferred through formal position. One way CEO acquire additional position power is to be given the dual roles of CEO and Board chair (Daily & Johnson, 1997). Fama and Jensen (1983) argue that concentration of decision management and decision control in one individual reduces the Board's effectiveness in monitoring top management. Recently, Kyereboah-Coleman and Biekpe (2006-2007) have shown, like other studies, that a two-tier Board structure enhances firms' performance, though it has an insignificantly positive impact on sales growth rate. Thus, for efficient performance of firms, the adoption of the two-tier Board structure is critical.

Although the coincidence of the posts of CEO and Chair of the Board may provide clear leadership in internally and externally, it implies a substantial concentration of power in the hands of one person (Rechner & Dalton, 1989), which may give rise to inappropriate behaviors. For example, Dunn (2004) found that dual CEO-chairs are more likely to publish fraudulent financial statements.

Several studies reveal a positive relationship between the duality of the CEO/Chair posts and the CEO level of compensation (Boyd, 1994; Main & Johnston, 1993; Westphal & Zajac, 1995); such a relationship is not supported, however, by the study carried out by Conyon and Peck (1998).

The Board may create a Compensation Committee to which it entrusts the setting of the CEO compensation (Cadbury Report, 1992; Olivencia Report, 1998). When such a Compensation Committee does not exist, or when there are executive members on it, the CEO has greater possibilities of designing a compensation package congruent with his personal interests, without taking the shareholders' interests sufficiently into account (Conyon & Peck, 1998; Ezzaniel & Walson, 1997; Main & Johnston, 1993). The capacity of the members of the Compensation Committee to exercise control is

related to their independence, which is conditioned by the system of recruitment and selection of its members. On Boards where there is no Appointments Committee, the new Directors may be proposed by the CEO, which may subsequently limit their independence (Hart, 1995). The CEO power will therefore be less when properly structured monitoring committees exist than when such committees do not exist.

Tosi and Gomez Mejia (1989) show that: (1) the control of compensation process significantly influences the risk of the CEO compensation package and (2) the control of the compensation process is reduced when the CEO participates in the process and increases when there is a Compensation Committee. This last is congruent with the result obtained by Conyon and Peck (1998): in firms that have Compensation Committees consisting mainly of non-executive directors (outside directors), there is greater linkage between the CEO compensation and the firm's performance.

In accordance with the above we propose the following hypotheses:

Hypothesis 1: The risk of the CEO compensation (a) will be lower when there is Chair/CEO duality; and (b) will be greater in firms where there is a Compensation Committee.

Hypothesis 2: The control of the process of setting the CEO compensation: (a) will be less when there is Chair/CEO duality; and (b) will be greater in firms where there is a Compensation Committee.

2.3. CEO personal characteristics

According to agency theory, when the CEO has been a relatively short time in the post, the information asymmetry between principal and agent can be considerable; hence contingent compensation may be more attractive than control based on behaviour. As the CEO tenure of the post increases, the information asymmetry is reduced, and the Board can possess a precise image of his capacity and of his contribution to performance; therefore, the value of incremental information about the CEO, relating to results or to behaviours, diminishes with time (Tosi et al., 1997). As the CEO length of service increases, the culture of the firm itself can govern his behaviour and solve the problems of agency. Thus, according to agency theory, the information asymmetry between the CEO and the Board of Directors is reduced with the former's length of service in the post, so that the mechanism of supervision can be less costly than contingent compensation.

For the managerial power thesis, tenure is a key ingredient in the process of building power. Over time, CEO establishes a performance record and builds relationships with key stakeholders, making them less susceptible to removal (Haleblian & Rajagopalan, 2006; Hill & Phan, 1991). Longer tenure by the CEO can be interpreted as greater familiarity

with the Board, favoured by the possible influence of the CEO on the appointment of directors.

Eaton and Rosen (1983) showed that the weight placed on equity-based compensation is greater when the CEO tenure is shorter. Subsequent studies (Gibbons & Murphy, 1992; Hill & Phan, 1991; Murphy, 1986) show that the sensitivity of the compensation to the CEO performance decreases as the CEO tenure increases. Likewise, Tosi & Gomez Mejia (1989) show that tenure is correlated negatively with the risk of the compensation package. We therefore propose:

Hypothesis 3: The risk of the CEO compensation will be negatively related with the CEO tenure.

Hypothesis 4: The control of the process of setting the CEO compensation will be negatively related with the CEO tenure.

Ownership is an important source of power (Daily and Johnson, 1997), but because it binds CEO and shareholder wealth it also furnishes a strong performance incentive (Fama and Jensen, 1983). Greater participation by the CEO in the capital of the firm, insofar as it encourages the alignment of interests between management and owners, may reduce the need to transfer risk to the CEO through the compensation, since the CEO may, in this case, have sufficient incentives to behave in accordance with the interests of the shareholders. On the other hand, greater participation by the CEO in the capital of the firm will favour greater control by the CEO over the appointment of directors.

Lasfer (2006) shows that as managerial ownership increases, companies are less likely to have a high proportion of non-executives on the Board, to split the roles of the CEO and the chairman, to appoint a non-executive director as a chairman and to adopt the Cadbury (1992) recommendations. The results are consistent with US evidence (Bhagat & Black, 1998; Holderness et al., 1999) and cast doubt on the effectiveness of the Board structure as an internal corporate governance mechanism.

More directly, Mehran (1995) found that the weight placed on equity-based compensation was greater when the CEO owned a smaller stake in the firm. Thus, we posit:

Hypothesis 5: The risk of the CEO compensation will be negatively related with the participation by the CEO in the capital of the firm.

Hypothesis 6: The control of the process of setting the CEO compensation will be negatively related with the participation by the CEO in the capital of the firm.

2.4. Contingencies of the firm

The literature on strategic management points out that the organizational and strategic context affects the degree of discretion available to top management. Specifically, the following sources of discretionality have been identified: the regulation of the industry (Crawford et al., 1995; Finkelstein & Boyd, 1998;

Hambrick & Finkelstein, 1987; Hubbard & Palia 1995; Joskow et al., 1993; Rajagopalan & Finkelstein, 1992); the growth of the market (Collins et al., 1995; Finkelstein & Boyd, 1998; Gaver & Gaver, 1995; Smith & Wang, 1992); the strategy of the firm (Rajagopalan & Finkelstein, 1992). The wider the CEO discretion, the greater will be the impact of his decisions on the firm's results (Finkelstein & Hambrick, 1996).

In firms that grant wide discretion to the CEO, the Board may find it difficult to determine in advance what the proper decisions should be, due to: (1) the multitude of strategic alternatives available and (2) the number of variables that can influence the results, which generates causal ambiguity (Snow & Hrebiniak, 1980). Furthermore, such contexts are associated with greater variability and uncertainty of results (Hambrick & Finkelstein, 1987), which may favour choices by the CEO that do not contribute to the creation of shareholder value; this leads to higher control costs and increases the risk for the managers (Rajagopalan & Finkelstein, 1992).

The results of different empirical studies agree in indicating that the CEO risk and level of compensation are greater in contexts that grant him wider discretion. Rajagopalan and Finkelstein (1992) show that the CEO risk and level of compensation in firms that pursue a prospective strategy are higher than in ones that formulate reactive and/or defensive strategies. Specifically, the former use bonds and stock options more frequently and link a higher percentage of the compensation to the firm's performance. More recently, Finkelstein and Boyd (1998) on the basis of a sample of 600 large U.S. firms, analyse the relationship between the CEO degree of discretion and his compensation. The results show a positive relationship between the level of discretion and the remuneration obtained in the form of long term incentives.

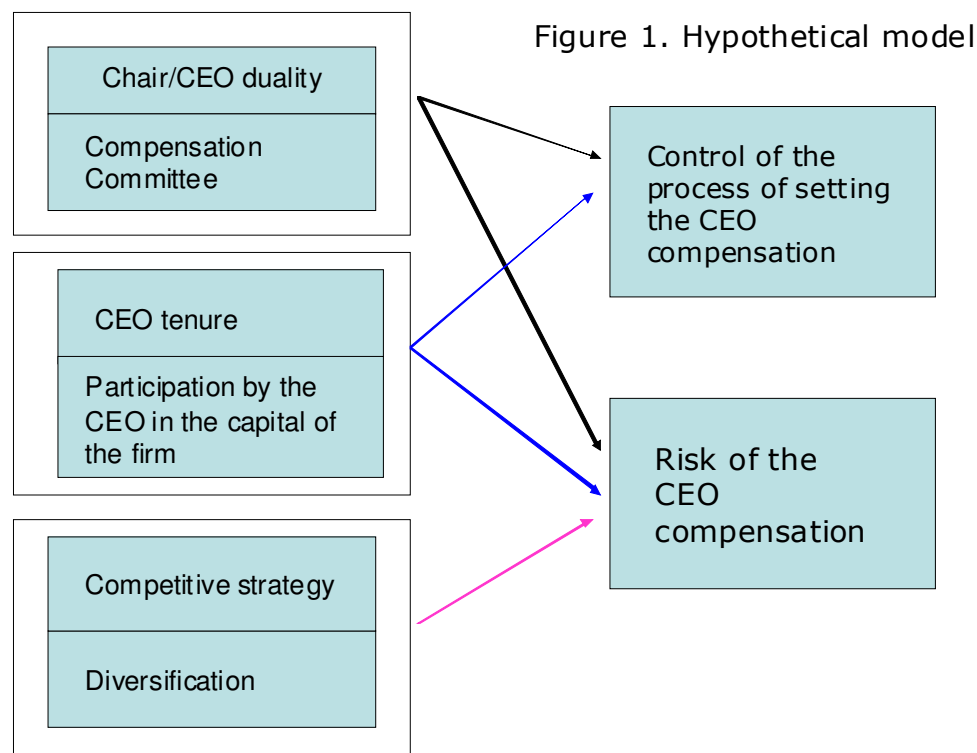
Studies analysed support the idea that in contexts where CEO are granted wide discretion, contingent compensation plans minimise the control costs and the higher risk assumed by the agent is compensated by the payment of a premium (Smith & Watts, 1992; Walsh & Seward, 1990).

Starting from the assumption that the situations where greater discretion is granted to the CEO: (1) imply for the Board a greater difficulty in trying to specify in advance the most appropriate actions of the CEO and (2) generate causal ambiguity, we expect a positive relationship between the contingencies that grant greater freedom to the CEO and the level of risk of his compensation.

Hypothesis 7: The CEO compensation risk will be greater (a) when the firm is diversified than when it is not; and (b) when the competitive strategy is proactive (prospective/ analytical) than when it is defensive.

3. Empirical study

Based on the above review, in this section we empirically test the set of hypotheses established (Figure 1).



3.1. Sample and data collection procedure

The population of interest is formed by all the firms listed on the Madrid Stock Exchange and traded on the continuous market during 1997, a total of 117 firms.

Once the questionnaire had been drawn up and revised by specialists it was sent, together with a letter of presentation, to all the Chairs of the Boards of Directors of the firms constituting the population. The letter explained briefly the nature of the research to be carried out and assured that the data would be processed in the aggregate. The names of all the Chairmen were taken from the DICODI 50,000 (1997). In the three months following the sending of the questionnaire, given the poor response, we attempted to make contact by telephone — an average of five calls per firm — in person and by fax. The final ratio of response was 15%.

Although the number of responses is not very large, the firms that did collaborate are highly representative, as their stock market capitalisation adds up to 31.6% of the total capitalization of the general index of the Bolsa de Madrid. By groups, we could highlight the representative of the firms belonging to the chemical, banking and electrical sectors. The capitalization of the firms in the chemical

sector has a weighting in their sector of 89.49%; those of the banking and financial sector 40.44%; and the electrical firms 38.8%.

3.2. Measurement of the variables

Control of the process of setting the CEO compensation. The degree of control of the CEO compensation is measured by means of 17 items taken from the studies by Tosi and Gomez Mejia (1989, 1994). These items refer fundamentally to the extent to which the policies and practices of compensation are designed in accordance with the interests of shareholders; the criteria and processes of compensation can be manipulated by the CEO; and motivational aspects other than taxes are taken into account. A five-point Likert-type scale is used to value each of the items.

After eliminating 4 items, the Cronbach alpha coefficient is .81. Factor analysis of the remaining 13 items generates a single factor. Its standardised values are used in the subsequent analysis.

CEO compensation risk. To measure the risk of the compensation package we used the scale of Tosi and Gomez Mejia (1989), formed by 3 items, each relating to one of the three dimensions forming the construct: variability, orientation and penalization.

Each of these dimensions is measured by a five-point Likert-type scale. The level of compensation risk is obtained by calculating the mean of the three dimensions.

Duality of Chair and CEO. A dichotomous variable that takes the value 1 when exist the duality CEO-Chair and the value 0 when this duality does not exist.

Existence of a Compensation Committee. A dichotomous variable that takes the value 1 when such a Committee exists with no executive members, and 0 when no Committee exists or when it contains executive members.

CEO tenure. Metric variable reflecting the CEO number of years in the post.

CEO participation in the capital of the firm. Metric variable reflecting the CEO participation in the capital of the firm.

Competitive strategy. Dichotomous variable taking the value 1 when the firm's competitive strategy is prospective/analytical and value 0 when it is defensive.

Diversification. Dichotomous variable taking the value 1 when the firm is diversified in its activities and value 0 when the firm operates in a single business /predominant business.

3.3. Results

Having proposed the antecedents of the control and the level of risk of the CEO compensation, we began performing variance analyses for the category variables and correlation analyses for the metric variables. Subsequently, we constructed a linear

regression model with all the explanatory variables that had been shown to be significant in the prior bivariate analysis ($p < .05$). Moreover, since one problem with bivariate analysis is that it ignores the possibility that variables with weak significance can become significant when analysed jointly, we introduced all the explanatory variables that presented a $p < .1$.

Tables 1, 2, 3 and 4 present the results of the variance analyses, the independent variables of which are: CEO/Chair duality (table 1), existence of a Compensation Committee (table 2), competition strategy (table 3) and diversification (table 4).

Tables 1 and 2 show that the duality of Chair/CEO and the existence of a Compensation Committee do not significantly differentiate the risk of CEO compensation. Thus, the results do not show significant differences in the level of compensation risk when the CEO also occupies the post of Chairman of the Board and when these posts are occupied by two different people. Nor do we find differences in the level of CEO compensation risk when a Compensation Committee exists and when it does not.

With regard to the control of compensation, duality and the existence of a Compensation Committee are associated with significantly different means of control of CEO compensation at the level of .10. Specifically, the results show that the average of control of the compensation process is significantly lower in firms where there is duality of Chairman/CEO and where there is no Compensation Committee.

Table 1. Analysis of variance according to Chairman / CEO duality

	Chairman/CEO Duality				
	YES		NO		
Variable	Mean	Standard Deviation	Mean	Standard Deviation	F
Compensation risk	2.10	.46	1.90	.26	.133
Control of compensation	-.59	.50	.29	.18	4.102*
* p<.10, **p<.05, ***p<.01					

Table 2. Analysis of variance according to the existence of a Compensation Committee

	Existence of a Compensation Committee				
	YES		NO		
Variable	Mean	Standard Deviation	Mean	Standard Deviation	F
Compensation risk	2.21	.30	1.77	.35	.946
Control of compensation	.36	.16	-.45	.42	3.793*
* p<.10, **p<.05, ***p<.01					

Tables 3 and 4 show that both competitive strategy and diversification differentiate significantly ($p<.01$) the level of risk of the CEO compensation package. The risk of the CEO compensation is significantly higher in the firms that opt for a

prospective/analytical competition strategy than in those that follow a defensive strategy. The risk of the compensation package is also significantly higher in diversified firms than in those with a single line of business.

Table 3. Analysis of the variance of competition strategy

	Competitive strategy				
	Defensive		Prospective/Analytical		
Variable	Mean	Standard Deviation	Mean	Standard Deviation	F
Compensation risk	1.27	.22	2.38	.22	7.256***
* p<.10. **p<.05. ***p<.01					

* $p<.10$, ** $p<.05$, *** $p<.01$

Table 5 shows the correlation between risk, control, tenure and the CEO participation in the firm's capital. The results show a negative relationship between compensation risk and tenure, though the

level of significance is insufficient ($p<.1$). We also observe a negative coefficient of correlation of risk with participation in the firm's capital, but the relationship is not significant.

Table 4. Analysis of variance of diversification

	Diversification				
	Undiversified		Diversified		
Variable	Mean	Standard Deviation	Mean	Standard Deviation	F
Compensation risk	1.71	.22	3.08	.2035	9.334***
* p<.10. **p<.05. ***p<.01					

* $p<.10$, ** $p<.05$, *** $p<.01$

With regard to the control of the CEO compensation, Table 5 indicates that it decreases

significantly with longer tenure of the CEO and with his participation in the firm's capital ($p<.05$).

Table 5. Correlations matrix

	Tenure	Participation	Risk	Control
CEO tenure	1.00	.676***	-.417*	-.542**
CEO participation in firm's capital		1.00	-.140	-.534**
Compensation risk			1.00	.323
Control				1.00

* $p<.10$, ** $p<.05$, *** $p<.01$

In accordance with the levels of significance found in the bivariate analyses, in the regression model for the level of compensation risk we have included as explanatory variables: (1) CEO tenure, which is significantly correlated with the CEO participation in the firm's capital; (2) the competition

strategy ; and (3) diversification. The results are shown in table 6. The model is observed to be significant ($F = 12.337$, $p<.01$) and explains 57.2% of the variance, the significant variables being competitive strategy ($B=.506$, $p<.01$) and diversification ($B=-.559$, $p<.01$).

Table 6. Regressions: Risk and control of compensation

Explanatory variables	Risk	Control	
	B	B	
CEO tenure	-.227		
Capital owned by CEO		-.534**	
Competitive strategy	.506***		
Diversification	-.559***		
Adjusted R^2 (F)	.57 (12.337***)	.24 (6.360**)	

* $p<.10$, ** $p<.05$, *** $p<.01$

In the case of control of the CEO compensation, according to the significance levels found in the bivariate analyses the regression model must include as explanatory variables: (1) the CEO tenure, (2) the CEO participation in the firm's capital, (3) Chairman/CEO duality, and (4) the existence of a Compensation Committee. However, some of these variables are related. Specifically, we verify that the longer the CEO tenure, the greater his stake in the capital of the firm; also, the variance analysis reveals that the CEO participation in the capital of the firm is significantly greater when there is duality of Chairman/CEO and when there is no Compensation Committee.

The most synthetic model of control of the CEO compensation process can be considered as a function of the CEO participation in the capital of the firm. The results of the linear regression (table 6) reveal a negative and significant relationship between the two variables ($B = -.534$, $p < .05$). The adjusted R^2 of the model is .24.

Conclusions

CEO compensation is increasingly becoming consolidated as a strategic tool that the Board of Directors can use to attract and retain talented executives, and to incentivise them to take decisions that will result in the creation of shareholder value.

Our study shows that the CEO characteristics are significantly related to the degree of control of his compensation process. The CEO participation in the firm's capital is seen to be the key variable, and is associated with characteristics of Board structure, as well as with the CEO tenure. These relationships are, moreover, logical: the greater the CEO participation in the capital of the firm, the more possibilities he will have of being chosen as Chairman of the Board and the longer his tenure; also, the CEO tenure may favour the increase in the percentage of shares owned, either because he has been rewarded with shares, or because he has acquired them. This result supports both agency theory and managerial power theory.

However, the consequences of the above relationship for the shareholders may be different depending on the perspective adopted. According to the first, less control of the compensation process will not have negative consequences for the shareholders' interests, as the CEO participation in capital will itself be sufficient to motivate him to take decisions congruent with their interests. And according to the managerial power thesis, in the absence of controls, a significant participation of the CEO in the firm's capital grants him power to take decisions congruent with his own interests, but not necessarily with those of the minority shareholders.

The level of risk of the CEO compensation is a matter of controversy. Although a higher risk may incentivise the CEO to undertake risky projects and expand his horizon in decision making, transferring risk to him involves a cost for the principal because:

(1) he will have to pay a risk premium, which translates into a higher level of compensation, for the CEO to accept a higher level of risk, and (2) it may accentuate his aversion to risk.

Our results show that the firm's strategic contingencies are significantly related to the level of risk of the CEO compensation. This result is coherent with agency theory: diversification and prospective/analytical competition strategies may make supervision by the Board more difficult than when the firm has a single business activity and the competition strategy is defensive. It will consequently be appropriate to transfer a higher risk to the CEO compensation in order to incentivise him to make decisions oriented towards the creation of shareholder value.

Before finalising we have to point out the limitations deriving from the size of the sample which, notwithstanding, should not be scorned, in view of the notable difficulty of obtaining primary data on CEO compensation in large firms. The availability of a larger volume of information will make it possible to carry out studies that will strengthen the results obtained and improve understanding of the antecedents of the control and level of risk of CEO compensation.

References

1. Bebchuk, L. & Fried, J. 2004. Pay without Performance: The Unfulfilled Promise of Executive Compensation. Harvard University Press: Cambridge, MA.
2. Berle, A.A. & Means, G.C. 1932. The Modern Corporation and Private Property. The Commerce Clearing House: New York, NY.
3. Bhagat, S. & Black, B.S. 1998. The Uncertain Relationship between Board Composition and Firm Performance. In K. Hopt, M. Roe & E. Wymeersch (Eds.) Corporate Governance: The State of the Art and Emerging Research. Oxford University Press: Oxford.
4. Boyd, B.K. 1994. Board control and CEO compensation. Strategic Management Journal, Vol. 15, No. 5, pp. 335-344.
5. Cadbury Report. 1992. The Financial Aspects of Corporate Governance.
6. Coles, J.L., Daniel, N.D. & Naveen, L. 2006. Managerial incentives and risk-taking. Journal of Financial Economics, Vol. 79, pp. 431-468.
7. Collins, M.C., Blackwell, D.W. & Sinkey, J.F.Jr. 1995. The relationship between corporate compensation policies and investment opportunities: empirical evidence for large bank holding companies. Financial Management, Vol. 24, No. 3, pp. 40-53.
8. Combs, J.G., Ketchen, D.J. Jr, Peryman, A.A. & Donahue, M.S. 2007. The Moderating Effect of CEO Power on the Board Composition-Firm Performance Relationship. Journal of Management Studies, Vol. 44, No. 8, pp. 1299-1323.
9. Conlon, E.J. & Parks, J.M. 1990. Effects of monitoring and tradition on compensation arrangements: An experiment with principal-agent dyads. Academy of Management Journal, Vol. 3,

- No. 3, pp. 603-622.
10. Conyon, M.J. 2006. Executive Compensation and Incentives. *Academy of Management Perspectives*, February, pp. 25-44.
11. Conyon, M.J. & Peck, S.I. 1998. Board control, remuneration committees, and top management compensation. *Academy of Management Journal*, Vol. 41, No. 2, pp. 146-157.
12. Crawford, A.J., Ezzell, J.R. & Miles, J.A. 1995. Bank CEO pay-performance relations and the effects of deregulation. *The Journal of Business*, Vol. 68, No. 2, pp. 231-256.
13. Daily, C. M. & Johnson, J. L. 1997. Sources of CEO power and firm financial performance: a longitudinal assessment. *Journal of Management*, Vol. 23, pp. 97-117.
14. Daily, C.M., Johnson, J.J., Ellstrand, A.E. & Dalton, D.R. 1998. Compensation committee composition as a determinant of CEO compensation. *Academy of Management Journal*, Vol. 41, No. 2, pp. 209-220.
15. DICI 50.000. Anuario de Sociedades, Consejeros y Directivos. Grupo Asnef Equifax.
16. Dunn. 2004. The impact of insider power on fraudulent financial reporting. *Journal of Management*, Vol. 30, pp. 397-412.
17. Eaton, J. & Rosen, H. 1983. Agency, delayed compensation, and the structure of executive remuneration. *The Journal of Finance*, Vol. 38, No. 5, pp. 1489-1505.
18. Eisenhardt, K.M. 1989. Agency theory: An assessment and review. *Academy of Management Review*, Vol. 14, No. 1, pp. 57-74.
19. Ezzamel, M. & Watson, R. 1997. Wearing two hats: The conflicting management and control roles of non-executive directors. In *Corporate Governance: Economic, management, and financial issues*, K. Keasey, S. Thompson & M. Wright (Eds.), Oxford University Press: Oxford.
20. Fama, E.F. & Jensen, M.C. 1983. The separation of ownership and control. *Journal of Law and Economics*, Vol. 26, pp. 301-326.
21. Finkelstein, S. & Boyd, B.K. 1998. How much does the CEO matter? The role of managerial discretion in the setting of CEO compensation. *Academy of Management Journal*, Vol. 41, No. 2, pp. 179-199.
22. Finkelstein, S. & Hambrick, D. 1996. *Strategic leadership: Top executives and their effects on organizations*. West: St. Paul, Mn.
23. Frankforter, S.A., Berman, S.L. & Jones, T.M. 2000. Boards of directors and shark repellents: assessing the value of an agency theory perspective. *Journal of Management Studies*, Vol. 37, pp. 321-348.
24. Gaver, J. & Gaver, K. 1995. Compensation policy and the investment opportunity set. *Financial Management*, Vol. 24, No.1, pp.19-32.
25. Gibbons, R. & Murphy, K. 1992. Optimal incentive contracts in the presence of career concerns: theory and evidence. *Journal of Political Economy*, Vol. 100, No. 3, pp. 468-505.
26. Gomez-Mejia, L.R. & Balkin, D.B. 1992. *Compensation, organizational strategy, and firm performance*. South-Western Publishing Co.
27. Halebian, J. & Rajagopalan, N. 2006. A cognitive model of CEO dismissal: understanding the influence of board perceptions, attributions and efficacy beliefs. *Journal of Management Studies*, Vol. 43, pp. 1009-1026.
28. Hambrick, D.C. & Finkelstein, S. 1987. Managerial discretion: A bridge between polar views of organizational outcomes. In *Research in Organizational Behavior*, Vo. 9, L.L. Cummings & B.M. Staw (Eds.). JAI Press, Inc.
29. Harris, J. & Bromiley, P. 2007. Incentives to cheat: The influence of executive compensation and firm performance on financial misinterpretation. *Organization Science*, Vol. 18, pp. 350-367.
30. Hill, C & Hansen, G. 1989. Institutional holdings and corporate R&D intensity in research intensive industries. *Academy of Management Proceedings*, pp. 17-21.
31. Hill, C.W. & Phan, P. 1991. CEO tenure as a determinant of CEO pay. *Academy of Management Journal*, Vol. 34, pp. 712-717.
32. Holderness, C.G., R.S. Kroszner & D.P. Sheehan. 1999. Were the good old days that good? Changes in managerial stock ownership since the Depression. *Journal of Finance*, Vol. 54, pp. 435-470.
33. Holmstrom, B. 1979. Moral hazard and observability. *The Bell Journal of Economics*, Vol. 10, pp. 74-91.
34. Holmstrom, B. & Milgrom, P. 1987. Aggregation and linearity in the provision of inter-temporal incentives. *Econometrica*, Vol. 55, pp. 303-328.
35. Hoskisson, R.E., Hitt, M.A. & Hill, W.L. 1993. Managerial incentives and investment in R&D in large multiproduct firms. *Organization Science*, Vol. 4, pp. 325-341.
36. Hubbard, R.G. & Palia, D. 1995. Executive pay and performance: Evidence from the banking industry. *Journal of Financial Economics*, Vol. 39, No. 1, pp. 105-130.
37. Jensen, M. & Meckling, W.H. 1976. Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, Vol. 3, No. 4, pp. 305-350.
38. Johnson, J., Daily, C. & Ellstrand, A. 1996. Board of directors: a review and research agenda. *Journal of Management*, Vol. 22, No. 3, pp. 409-438.
39. Joskow, P., Rose, N. & Shepard, A. 1993. *Regulatory constraints on CEO compensation*. National Bureau of Economic Research: Washington, D.C.
40. Kang, S., Kumar, P. & Lee, Y. 2006. Agency and corporate investment: The role of executive compensation and corporate governance. *Journal of Business*, Vol. 79, No. 3, pp. 1127-1147.
41. Kyereboah-Coleman, A. & Biekpe, N. 2006-2007. The relationship between board size, board composition, CEO duality and firm performance: Experience from Ghana. *Corporate Ownership & Control*. Vol. 4, No. 2, pp. 114-122.
42. Kimberly, J.R. & Zajac, E.J. 1988. The dynamics of CEO/board relations. In D.C. Hambrick (Eds.) *The Executive Effect: Concepts and Methods for Studying Top Management*. JAI Press: Greenwich, CT., pp. 179-204.
43. Lasfer, M.A. 2006. The Interrelationship between managerial ownership and board structure. *Journal of Business Finance & Accounting*, Vol. 37, No. 7 & 8, pp. 1006-1033.
44. Main, B.G., Johnston, J. 1993. Remuneration committees and corporate governance. *Accounting and Business Research*, Vol. 23, No. 91 A, pp. 351-362.
45. Mehran, H. 1995. Executive compensation structure, ownership, and firm performance. *Journal of*

- Financial Economics, Vol. 38, pp. 163-184.
46. Merhebi, R., Pattenden, K., Swan, P.L. & Zhou, X. (2006) Australian chief executive officer remuneration: pay and performance. *Accounting and Finance*, Vol. 46, pp. 481-497.
47. Murphy, K.J. 1986. Incentives, learning, and compensation: A theoretical and empirical investigation of managerial labor contracts. *Rand Journal of Economics*, Vol. 7, spring, pp. 59-76.
48. Ocasio, W. 1994. Political dynamics and the circulation of power: CEO succession in U.S. industrial corporations, 1960-1990. *Administrative Science Quarterly*, Vol. 39, pp. 285-312.
49. Olivencia Report. 1998. Gobierno de las Sociedades.
50. O'Neill, G. 2007. A priori conceptions, methodological dogmatism and theory versus practice: three reasons why CEO pay research lacks convergence. *Corporate Governance*. Vol. 15, No.4, pp. 692-700.
51. O'Reilly, C.A., Main, B.G. & Crystal, G.S. 1988. CEO compensation as tournament and social comparison: A tale of two theories. *Administrative Science Quarterly*, Vol. 33, No. 2, pp. 257-274.
52. Rajagopalan, N. & Finkelstein, S. 1992. Effects of strategic orientation and environmental change on senior management reward systems. *Strategic Management Journal*, Vol. 13, special number, pp. 127-142.
53. Rajagopalan, N. & Prescott, J.E. 1990. Determinants of top management compensation: Explaining the impact of economic, behavioural, and strategic constructs and the moderating effects of industry. *Journal of Management*, Vol. 16, No. 3, pp. 515-538.
54. Rechner, P.L. & Dalton, D.R. 1989. The impact of CEO as board chairperson on corporate performance: Evidence vs. theory. *Academy of Management Executive*. Vol. 3, pp. 141-143.
55. Ryan, Jr. H., Wiggins III, R. 2002. The interactions between R&D investment decisions and compensation policy. *Financial Management*, Vol. 31, pp. 5-29.
56. Shavell, S. 1979. Risk sharing and incentives in the principal and agent relationship model. *Bell Journal of Economics*, Vol. 10, pp. 55-73.
57. Smith, C.W. & Watts, R.L. 1992. The investment opportunity set and corporate financing, dividend and compensation policies. *Journal of Financial Economics*, Vol. 32, No. 3, pp. 263-292.
58. Snow, C.C. & Hrebiniak, L.G. 1980. Strategy, distinctive competence and organizational performance. *Administrative Science Quarterly*, Vol. 25, N° 2, pp. 317-366.
59. Stiles, P. and Taylor, B. (2002) *Boards at Work: How Directors View their Roles and Responsibilities*. Oxford University Press: Oxford.
60. Thompson, S. 2005. The impact of Corporate Governance Reforms on the Remuneration of Executives in the UK. *Corporate Governance*, Vol. 13, pp. 19-25.
61. Tosi, H. & Gomez Mejia, L.R. 1994. CEO compensation monitoring and firm performance. *Academy of Management Journal*, Vol. 37, No. 4, pp. 1002-1016.
62. Tosi, H. & Gomez Mejia, L.R. 1989. The decoupling of CEO pay and performance: An agency theory perspective. *Administrative Science Quarterly*, Vol. 34, No. 2, pp. 169-190.
63. Tosi, H.L., Katz, J.P. & Gomez Mejia, L.R. 1997. Disaggregating the agency contract: the effect of monitoring, incentive alignment, and term in office on agent decision making. *Academy of Management Journal*, Vol. 40, No. 3, pp. 584-602.
64. Walsh, J.P. & Seward, J.K. 1990. On the efficiency of internal and external corporate control mechanism. *Academy of Management Review*, Vol. 15, No. 3, pp. 421-458.
65. Westphal, J.D. & Zajac, E.J. 1995. Detections from the inner circle: social exchange, reciprocity, and the diffusion of board independence in U.S. corporations. *Academy of Management Journal*. Best Papers Proceedings, pp. 281-285.
66. Zajac, E.J. & Westphal, J.D. 1994. The costs and benefits of managerial incentives and monitoring in large US corporations: When is more not better? *Strategic Management Journal*, Vol. 11, pp. 217-230.
67. Zhang, X., Bartol, K.M., Smith, K.G., Pfaffer, M.D. & Khanin, D.M. 2008. CEOs on the edge: earnings manipulation and stock-based incentive misalignment. *Academy of Management Journal*, Vol. 51, No. 2, pp. 241-258.