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managerial wealth to the performance of the firm and to promote executive equity ownership (Murphy, 1999; Ofek and Yermack, 2000).

In English-speaking countries stock options became the most popular instrument for remunerating top management in early 2000 (Conyon and Schwalbach, 2000; Murphy, 2002). Brown (2002) points out that the percentage of the CEO's remuneration paid in stock options rose from 27 per cent in 1992 to 60 per cent in 2000.

The use of SOPs as a component of CEO compensation has been favoured by the lengthy 'boom market' of the 1990s, the tax advantages to both firm and executive, the financial attractiveness of stock options in start-up firms and the institutional pressures created by the growing acceptance of stock options (Murphy, 1999). But the key factor for explaining the popularity of stock options is the corporate governance system. The outsider or Anglo-Saxon system, characterised by diffuse ownership, tends to rely more on managerial compensation to solve the agency conflict.

However, several studies have highlighted the negative relationship between stock options and research and development (R&D) expenditure (Henderson and Frederickson, 2001), the payment of dividends, the level of risk assumed and the search for new business initiatives (Deyá, 2004).¹ For their part, Gerety et al. (2001) have shown that the reaction of the US stock market to the adoption of this type of incentives system for managers is neither economically nor statistically significant. Also, Ofek and Yermack (2000) and McGuire and Matta (2003) indicate that it has little impact on CEO ownership levels.

Perhaps because of these results, in recent years large British firms have replaced share-purchasing rights with other formulas of variable remuneration for their managers. According to a report by Deloitte & Touche (2005), of the 250 principal firms of reference quoted in the FTSE-250 index of the London Stock Exchange, only 48 per cent still used 'stock options' as an incentive for their managers, as against the 76 per cent that did so in 2003.

The decision to replace 'stock options' with other systems of remuneration is influenced by aspects as diverse as taxation of remunerations, the principles of corporate governance or the fact that share options have to figure in the firm's profit and loss

account. According to the study by Deloitte & Touche (2005), the latter has been the reason why many British firms have sought other types of remuneration.

Outside the Anglo-Saxon countries, stock options have been less common and have represented a smaller percentage of the remuneration package (Loewenstein, 2000; Kahan, 2001; Murphy, 1999). Once again this reality can be explained by the corporate governance system. In an insider system, typical of Japan and Europe (except the UK), stock options have been considered less necessary to solve the agency problem because ownership is concentrated and control is assumed to be exercised by banks, companies and families (large shareholders).

However, the use of stock options is gradually increasing outside the Anglo-Saxon countries (Conyon and Schwalbach, 2000; Kalmi et al., 2005). According to the report of the Towers Perrin consultancy (2005), between 2001 and 2004 the use of stock options increased by 30 per cent in Italy, 20 per cent in Spain, Japan and Germany, 10 per cent in the Netherlands and 5 per cent in France. This increase is justified by the need to compete in an increasingly global executive labour market (Conyon and Murphy, 2000). SOPs may be critical to attracting talent (Levinson, 2001). Once a firm has hired skilled executives, stock options may enable it to keep them, or at least may increase the costs that other firms will incur in luring these executives from their present employment (McGuire and Matta, 2003).

In Spain, according to the report titled 'Compensation of Top Management in Europe 2006' by the Watson Wyatt consultancy (2006), 43 per cent of Spanish CEOs participated in SOPs. This, however, is the lowest percentage among western European countries, with the exception of Luxembourg. In Europe, Norway has the highest use (69 per cent), followed by Finland (61 per cent), Switzerland (58 per cent), Austria (57 per cent) and the United Kingdom (56 per cent). Percentages closer to Spain's are those of France (45 per cent), Greece (45 per cent) and Ireland (49 per cent).

In this paper we propose to analyse to what extent the design of SOPs can be explained by the hypothesis of managerial power (Bebchuk et al., 2002; Bebchuk and Fried, 2003), according to which the CEO's remuneration will be higher and/or less sensitive to performance in firms where the CEO has relatively more power than the Board.

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To reach this objective, the paper is structured as follows. The next section analyses different SOPs and their implications for managers and shareholders. Section Three explores the managerial power approach as a determinant of the mode of SOP implemented, and outlines the hypotheses tested in subsequent sections. Then, we explain the research design and review the findings from a sample of Spanish firms. In the final section the results will be discussed and suggestions for further research will be proposed.

TYPES OF SOP

SOPs are complex compensation systems. They have multiple characteristics on which those responsible for designing them must decide. Despite the importance of the specific design of SOPs, Hall (2000: 126) says, 'most of the companies I've studied don't pay a whole lot for attention to the way they grant options. Their directors assume that the important thing is just to have a plan in place, the details are trivial'. As a result, companies often end up having options programmes that are counterproductive (Hall, 2000).

From the combination of these dimensions arise different types of options:

- Conventional options establish a fixed exercise price and the only condition for exercising the purchase of stock is that the beneficiary is required to remain in the firm.
- Restricted stock options are conditioned to the achievement of goals (performance-vested options) or to the possession of a certain number of shares. These are therefore conventional options to which clauses have been added restricting the right of exercise.
- Indexed options establish an exercise price in terms of a pre-defined index (general or sector index or benchmark index).

Types of SOP and Implications for the CEO and Shareholders

Conventional options violate a basic proposition in the incentive compensation literature that contracts should insure agents against uncertainty generated by common factors beyond their control, while retaining controllable, idiosyncratic effects to provide the appropriate incentives (Johnson and Tian, 2000). This type of

option can both reward the manager without him making any effort, simply taking advantage of a 'stroke of luck' propitiated by outside forces, and deprive him of reward even when he deserves one (Bebchuk et al., 2002). Consequently, this type of option wastes shareholders' money and sends inappropriate messages to managers, who may perceive that to obtain profits from their SOPs it is not necessary to make an effort, but that they can be achieved by taking advantage of the trend of the market.

The Behavioural Agency Model (BAM), developed by Wiseman and Gómez-Mejia (1998), also allows us to question the capacity of traditional options to encourage managers to take risks.

Conventional stock options, and especially those granted 'in the money', offering high potential profits because there is a high probability that they will result in gains for the manager, will lead the manager to perceive the remuneration as a secure income, thus creating a situation of expectation of gains. According to the BAM, this encourages the manager, in order to protect these expected gains, not to undertake risky projects even when they are profitable for the shareholders.

The disadvantages of the above types can be overcome by using other types of stock options, such as indexed stock options and restricted stock options.

Since executives holding indexed options are rewarded only to the extent that their performance exceeds the market, these plans utilise a less noisy performance measure, protect executives from market shocks and also protect shareholders from rewarding poorly performing executives in bull markets.

Indexed stock options offer managers a lower potential for gains than traditional options. According to Murphy (2002), the probability of obtaining a reward with an indexed option is 50 per cent, whereas with a traditional option granted 'at the money' it is 80 per cent. Following the postulates of the BAM, indexed stock options, by increasing the probability that managers will perceive a situation of expectations of losses, encourage the manager to develop investment projects that lead to an increase in the price of the firm's shares greater than that of the index selected.

Options conditioned to the achievement of objectives (performance-vested options) subject the right of exercise to the achievement of certain objectives (return on equity, market share, share price, etc.).

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The motivating capacity of performance-vested options depends on how the objectives are established. When they affect the creation of value, this type of option, like indexed options, will encourage a linkage between remuneration and the creation of value, preventing the manager from obtaining reward thanks to a 'stroke of luck'. Also, when the objectives are achievable, though challenging, they will encourage the taking of risks.

Options conditioned to participation in capital, i.e. those types that require possession of a certain number of shares to be able to exercise the option right, increase the manager's personal commitment to the firm. The best guarantee of improving managers' future performances is to link their gains to the firms' results even before receiving the incentive.

Therefore, the CEO will prefer conventional stock options, especially granted 'in the money', because they offer him a potential gain greater than indexed options and restricted options. However, if the Board wishes to stimulate the creation of value conventional stock options, especially 'in the money', are not suitable, as they do not always link reward to creation of value.

Types of SOP and their Use by Firms

Although conventional options can reward the manager without him making any effort, Alvarez and Neira (2005), in their study of SOPs in Spain, found that conventional stock options, especially those granted 'at the money', were the most frequently used, though performance-vested options were also used.

This result shows that Spanish firms resort to types of SOP resembling those used in the USA to a greater extent than those applied in European countries like Germany, Sweden and the Netherlands. Indeed, conventional options 'at the money' are the most frequently granted in the USA (Bebchuk et al., 2002; Murphy, 2002), whereas options restricted to the achievement of objectives (performance-vested options) are not common, only 5 per cent of the USA's 250 largest listed firms having them (Levinshon, 2001). On the other hand, performance-vested options are very frequent in Germany, Sweden and the Netherlands (Pilv, 2003; Tower Perrin, 2005). In Japan, conventional stock options granted 'out of the money' predominate (Kato et al., 2005).

The differences in design between the SOPs used by Spanish firms and those applied in other European countries characterised by an 'insider' system of governance may be due to the fact that the Spanish model departs from this system in some respects and presents certain similarities to the Anglo-Saxon countries. Spain has a one-tier system (with a board) and the duality chairman/CEO is very frequent, as in Anglo-Saxon countries. These characteristics may enable the CEO to influence the process of remuneration.

MANAGERIAL POWER AND TYPES OF STOCK OPTIONS PLANS

The managerial power view predicts that pay will be higher and/or less sensitive to performance in firms in which the CEO has relatively more power than the Board.

CEOs can use their power to increase their pay through conventional stock options rather than cash, in an attempt to camouflage pay to mitigate external scrutiny and criticism. The directors could justify these features of option plans as optimal to shareholders and society in general, alleging accounting benefits or the need to retain the executive in the face of the intense job competition in the market.

The literature (Beatty and Zajac, 1994; Tosi and Gómez-Mejia, 1989) suggests that the power of the CEO depends in large part on: 1) the ownership structure of the firm, 2) the composition of the Board and its incentives to monitor the CEO, and 3) personal characteristics. Thus, it can be argued that these variables will also influence the type of SOP used to compensate the CEO.

Ownership Structure and CEOs' Power

The presence of large outside shareholders committed to maintaining their participation in the long-term plays an active role in the monitoring of top management because they have the capacity to exercise control and incentives to carry it out. The greater the percentage of capital controlled by the shareholders, the greater the correlation between the CEO's personal earnings and that of the firm, with greater incentive to monitor the management and to design an SOP that will favour the creation of value rather than only the interests of the CEO.

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Gómez-Mejia et al. (1987) show that, while in owner-controlled firms there is a positive and significant relationship between the CEO's compensation and the company's performance, in management-controlled firms the most significant determinant of the level of compensation is the size of the firm and not its performance. These results may indicate that in management-controlled firms the CEO uses his power to increase his compensation (Finkelstein and Hambrick, 1988). In a later study, Tosi and Gómez-Mejia (1989) confirm this argument. They find that in management-controlled firms the influence exercised by the CEO and by outside consultants on the CEO's compensation is greater than in owner-controlled firms.

We therefore establish the following hypothesis:

H1: The less concentrated the ownership:

- (1.1) the greater the probability that conventional options will be used to compensate the CEO, rather than restricted options or indexed options;
- (1.2) the greater the probability that conventional options granted 'in the money' will be used to compensate the CEO, rather than any other type (restricted options, indexed options and conventional options granted 'at the money' and 'out of the money') .

Composition and Motivation of the Board of Directors and CEO's Power

The literature shows that CEO power is enhanced by the poor working of the Board (Hill and Phan, 1991). One cause is the directors' lack of incentives.

To resolve the problem of directors' incentives, Boyd (1994) supports the thesis of convergence, according to which the Board's motivation to monitor the management increases proportionally to their participation in the firm's capital. Boyd (1994) also revealed that the CEO's level of compensation decreased as the Board's stock ownership increased.

In Spain the directors who represent a controlling shareholder (companies, banks) as well as not having any share in the capital of the firm may be CEOs of other firms. Directors-CEOs seem likely to be sympathetic to their colleague's desires. They may also face a

conflict of interest on compensation issues; they are likely to find it easier to argue for increases in their own compensation by means of traditional options granted 'in the money' if the chief executives of comparable corporations are paid with this type of option.

We therefore posit:

H2: The smaller the percentage of capital owned by non-executive directors:

- (2.1) the greater the probability that conventional options will be used, rather than restricted or indexed options;
- (2.2) the greater the probability that the CEO will be compensated by means of conventional options granted 'in the money', rather than by any other type (restricted options, indexed options and conventional options granted 'at the money' and 'out of the money').

A much-debated question is 'CEO duality', which occurs when a firm's CEO also serves as Chairman of the Board of Directors. CEO duality provides the CEO with a wider power base and locus of control (Hambrick and Finkelstein, 1987). It cannot be ignored that, as well as presiding the meetings of the Board, the Chairman supervises the procedure of assessment and compensation of the CEO. It is open to doubt whether he will perform the latter function without taking into account his personal interests (Morck, Shleifer and Vishny, 1989). Furthermore, the Chairman of the Board of Directors can control the appointment of directors, achieving the appointment of persons close to him, which will limit their independence in defending the interests of shareholders (Hart, 1995; Singh and Harianto, 1989).

Some papers that analyse the influence of the composition and structure of the Board on the CEO's compensation (Boyd, 1994; Conyon and Peck, 1998) indicate a positive and significant relationship between the level of compensation for the CEO and CEO duality.

We therefore posit that:

H3: When CEO duality exists, as against non-CEO duality:

- (3.1) the greater the probability that conventional options will be used, rather than restricted or indexed options;

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- (3.2) the greater the probability that the CEO will be compensated by conventional options granted ‘in the money’, rather than by any other type (restricted options, indexed options and conventional options granted ‘at the money’ and ‘out of the money’).

CEO’s Personal Characteristics and Managerial Power

Longer service in the post of CEO, leading to greater familiarity, may increase his influence over members of the Board (O’Reilly et al., 1988).

Mangel and Singh (1993) show a positive and significant relationship between the CEO’s level of compensation and his length of tenure in the post. This result shows that the CEO’s length of tenure gives the CEO power to influence the Board to design systems of compensation in accordance with his preferences, even when they are contrary to the interests of shareholders. This characteristic can give him power over the appointment of directors, so he will select people close to him for the posts, thus reducing their independence when they come to design an optimum plan of incentives (Daily, 1995).

We therefore establish the following hypotheses:

H4: The longer the CEO’s tenure:

- (4.1) the greater the probability of using conventional options rather than restricted or indexed options;
- (4.2) the greater the probability that the CEO will be compensated by conventional options granted ‘in the money’ rather than any other type (restricted options, indexed options and conventional options granted ‘at the money’ and ‘out of the money’).

Also, the more shares owned by the CEO, the greater will be his influence on director elections and his ability to discourage a hostile takeover attempt (Hermalin and Weisbach, 1988). Holderness and Sheehan (1991) reveal a positive and significant relationship between the CEO’s level of compensation and his ownership of shares. This finding reveals that greater CEO share ownership

improves the CEO's power to influence the directors to design a compensation package in accord with his interests.

We therefore establish the following hypotheses:

H5: The greater the CEO's holding of company stock:

- (5.1) the greater the probability of using conventional options rather than restricted or indexed options;
- (5.2) the greater the probability that the CEO will be compensated by conventional options granted 'in the money' rather than any other type (restricted options, indexed options and conventional options granted 'at the money' and 'out of the money').

EMPIRICAL ANALYSIS

Sample

To test the working hypotheses we selected the 115 listed companies that best represented the General Index of the Madrid Stock Exchange in December 1999. From this total we excluded twelve firms in which the top executive was not a director. In the remaining 103 companies we verified whether they had used SOPs to compensate the CEO in the period 1999–2001. Twenty-three had used this type of incentive.

Measurement of the Variables

The study examines two dichotomous dependent variables: 1) use of conventional options versus indexed or restricted options; and 2) use of conventional options granted 'in the money' versus any other type of options or grant (see Table 1.1).

The explanatory variables fall into three categories: 1) ownership structure; 2) composition and incentives of the Board; and 3) personal characteristics of the CEO. We also considered a control variable: the size of the firm. The description of the variables is given in Table 1.1.

The data corresponding to the variables examined in this study were obtained from the following databases:

- Summary report on share option rights of companies owned or controlled by their directors (National Stock Market Commission – CNMV²).

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Table 1.1: List of Variables

Dependent Variables	Description
Conventional option	Dichotomous variable, taking value 1 when the type of option used to compensate the CEO is conventional and 0 when it is indexed or restricted
Conventional option 'in the money'	Dichotomous variable taking value 1 when the CEO is compensated by conventional options granted 'in the money', and 0 otherwise
Explanatory Variables	Measurement
Structure of Ownership	
Holding of majority shareholder	Measured by the percentage of capital owned by the majority shareholder
Composition and Incentives of the Board	
Duality Chairman/CEO	Dichotomous variable taking the value 1 when the chairman of the Board is the CEO and 0 in all other cases
Holding of non-executive directors	Measured by the percentage of capital owned by the non-executive directors
Personal Characteristics of the CEO	
CEO tenure	Measured by the number of years that the CEO has occupied the post
CEO's holding	Measured by the percentage of capital owned by the CEO
Control Variable	
Firm size	Measured by the logarithm of the firm's sales

- Significant holdings presented to the CNMV.
- Audited annual reports presented to the CNMV.
- Good governance reports presented to the CNMV.

RESULTS

The characteristics of the twenty-three companies that use SOPs, in terms of the variables analysed, are given in Table 1.2. The correlation matrix shows a single negative and significant correlation between the firm's size and the holding of the majority shareholder. Therefore the greater the size of the firm, the smaller the percentage of the firm's capital owned by the majority shareholder.

Some of the twenty-three firms that used SOPs had more than one plan, which explains why thirty-nine plans were identified. Of these, twenty-seven (69.2 per cent) are of the conventional options type and the remaining twelve (30.8 per cent) are restricted options, conditioned to the achievement of objectives and the possession of a certain number of shares (see Table 1.3). No SOPs were of the indexed options type.

In both the conventional options mode and the restricted options mode, the most frequent alternative is the grant 'at the money', though the conventional options granted 'in the money' are not negligible, as they represent 25.6 per cent of the total of SOPs.

Table 1.2: Descriptive Statistics (Means and Standard Deviations) and Correlations Matrix

	Mean	S.D.	1	2	3	4	5	6
1. CEO's holding	1.97	8.54	1					
2. CEO tenure	5.32	4.30	0.19	1				
3. Holding of majority shareholder	31.62	30.56	0.08	-0.04	1			
4. Holding of non-executive directors	4.13	9.50	-0.08	-0.08	-0.07	1		
5. Duality Chairman/CEO	0.56	0.50	0.19	-0.02	0.22	0.10	1	
6. Firm size	12.27	2.03	-0.11	0.23	-0.53**	0.13	-0.24	1

*** $p < 0.001$, ** $p < 0.05$, * $p < 0.1$

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Table 1.3: Frequency of Option Type

	Conventional Option	Restricted Option	Total
Granted 'in the money'	10 (25.6%)	1 (2.6%)	11 (28.2%)
Granted 'at the money'	11 (28.2%)	7 (18%)	18 (46.2%)
Granted 'out of the money'	6 (15.4%)	4 (10.2%)	10 (25.6%)
Total	27 (69.2%)	12 (30.8%)	39 (100%)

By means of the Mann-Whitney non-parametric U test³ we examined the differences of means in the continuous variables between the two sub-samples obtained based on use of: 1) conventional options versus restricted options; and 2) conventional options granted 'in the money' versus other type (restricted options and conventional options granted 'at the money' and 'out of the money') (see Table 1.4).

The test of differences of means between the firms that use conventional options and those that use restricted options shows that the size of the firms that resort to the conventional mode is larger than that of the firms that employ restricted options. It also shows that the holding of the majority shareholder in the company's capital and the holdings of executive directors in the company's capital are significantly smaller in the group of firms that use conventional options, whereas the CEO's tenure and his holding in the company's capital do not differ significantly between the firms that use conventional options and those that resort to restricted options. The Pearson Chi-Square test (χ^2) does not find a significant relationship between chairman/CEO duality and the use of one or other type of options.

The results of the test of differences of means between the group of firms that use conventional options 'in the money' and the group that use restricted options and conventional options granted 'at the money' and 'out of the money' indicate that the percentage of company capital owned by the majority shareholder is significantly less in the first group, while the CEO's tenure and the size of the firm are significantly greater. The differences in the CEO's holding in the firm and

Table 1.4: Comparison of Means

	Conventional Option		M-W-U Test Z (sig.)	Conventional Option 'in the Money'		M-W-U Test Z (sig.)
	Yes Mean (Standard deviation) <i>n</i> = 27	No Mean (Standard deviation) <i>n</i> = 12		Yes Mean (Standard deviation) <i>n</i> = 10	No Mean (Standard deviation) <i>n</i> = 29	
Holding of majority shareholder	26.25 (28.8)	45.50 (31.87)	-2.377 (0.01)**	13.57 (20.06)	38.71 (31.31)	-3.659 (0.000)***
Holding of non- executive directors	2.02 (2.34)	10.73 (17.10)	-1.917 (0.05)*	3.45 (2.31)	4.43 (11.30)	-1.466 (0.15)
CEO's tenure	5.11 (4.54)	5.77 (3.77)	-0.359 (0.79)	7.54 (5.41)	4.38 (3.44)	-1.921 (0.06)*
CEO's holding	0.83 (2.78)	0.17 (2.2)	-0.368 (0.73)	0.19 (0.34)	0.8 (2.78)	-0.692 (0.39)
Firm size	12.63 (2.17)	11.45 (1.43)	-2.125 (0.03)**	13.42 (2.05)	11.82 (1.86)	-2.187 (0.02)**
	Mean (S.d.)	Mean (S.d.)	Test χ^2 (sig.)	Mean (S.d.)	Mean (S.d.)	Test χ^2 (sig.)
Duality Chairman/ CEO	0.53 (0.50)	0.36 (0.5)	2.436 (0.27)	0.54 (0.50)	0.46 (0.48)	2.504 (0.28)

*** $p < 0.001$, ** $p < 0.05$, * $p < 0.1$

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the holdings of non-executive directors are significant. Nor is there a relationship between the type of SOP and chairman/CEO duality.

To test the hypothesis we used two logistic regression models, one to model the probability of use of conventional options and the other to model the probability of use of conventional options granted 'in the money'. The two models are expressed as follows:

$$P(Y) = 1 / (1 + e^{-z})$$

where Y is the dependent variable (model 1: use of conventional options, model 2: conventional options granted 'in the money') and z is the linear combination of the independent variables for the period prior to the formulation of the plan.

$z = \beta_0 + \beta_1$ holding of majority shareholder $+ \beta_2$ holding of non-executive directors $+ \beta_3$ CEO tenure $+ \beta_4$ CEO's holding $+ \beta_5$ duality chairman/CEO $+ \beta_6$ firm size $+ \epsilon$.

The fact that the 'holding of majority shareholder' and 'firm size' variables present a high correlation, as can be seen in the correlations matrix (see Table 1.2), together with the limitation imposed by the size of the sample, led us to follow the 'forward Wald' procedure, in order to avoid possible problems of multicollinearity among the regressors. This procedure only introduces the variables that contribute to the overall fit of the model and excludes the variables that are not significant.

Table 1.5 presents the results of estimating the two logit models.

The model corresponding to the probability that conventional options will be used correctly classifies 91.2 per cent of the observations. The 'holding of majority shareholder' variable negatively influences the probability ($\beta = -0.03$, $p < 0.1$) in the same way as 'holding of non-executive directors' ($\beta = -0.45$, $p < 0.05$). Therefore, hypotheses 1.1 and 2.1 are supported. The remaining variables are not significant, so hypotheses 3.1, 4.1 and 5.1 are not supported.

The model corresponding to the probability that conventional 'in the money' options will be used is also significant, correctly classifying 72.3 per cent of the observations. The 'holding of majority shareholder' variable has a negative influence on probability ($\beta = -0.03$, $p < 0.1$) and 'CEO tenure' has a positive one ($\beta = 0.18$, $p < 0.1$). Therefore, the results support hypotheses 1.2 and 4.2. The remaining variables are not significant, so hypotheses 2.2, 3.2 and 5.2 are not supported.

Table 1.5: Logit Model

Variables in the Equation					
Model 1 Dependent Variable: Conventional Option			Model 2 Dependent Variable: Conventional Option 'in the Money'		
Independent Variable	β	Wald (sig.)	Independent Variable	β	Wald (sig.)
Holding of the majority shareholder	−0.03	3.03 (0.08)*	Holding of the majority shareholder	−0.03	2.74 (0.09)*
Holding of non-executive directors	−0.45	6.13 (0.01)**	CEO tenure	0.18	3.12 (0.07)*
Constant	5.03	8.95 (0.003)**	Constant	−1.06	1.6 (0.20)
−2 log-likelihood = 26.028 $\chi^2 = 12.11$, sig. 0.002 R2 nagelkerke = 0.343 Percentage correct 91.2%			−2 log-likelihood = 35.203 $\chi^2 = 9,113$, sig. 0.01 R2 nagelkerke = 0.31 Percentage correct 72.3 %		
*** $p < 0.001$, ** $p < 0.05$, * $p < 0.1$					
Variables not in the Equation ¹					
Model 1 Dependent Variable: Conventional Option			Model 2 Dependent Variable: Conventional Option 'in the Money'		
CEO's holding Chairman/CEO Duality CEO tenure Firm size			CEO's holding Chairman/CEO Duality Holding of non-executive directors Firm size		

¹ The 'forward Wald' procedure only introduces the variables that contribute to the overall fit of the model and excludes the variables that are not significant.

The probability that conventional options will be used to reward the CEO therefore increases as the participation of the majority shareholder in the firm's capital decreases and as the participation of the non-executive directors decreases; whereas the probability

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that conventional ‘in the money’ options will be implemented decreases with the participation of the majority shareholder and increases with the CEO’s tenure.

DISCUSSION

In Spain the use of SOPs as a mechanism for remunerating managers has increased in recent years. Nevertheless, Spanish research into options-based remuneration of CEOs is recent and sparse.⁴

Our study finds that traditional stock options are used by Spanish firms more than conditioned stock options. Traditional stock options, especially those granted ‘in the money’, do not have the capacity to motivate the manager to orientate his activities towards the creation of value. The expectation of gains generated may incentivise the manager to act conservatively in order to protect such expectations. Furthermore, the influence of exogenous factors on the share price may cause the manager to obtain a high reward without having made any effort or deprive him of it even when it is deserved. Hence the questioning of the capacity of this type of option to incentivise the manager to seek and exploit new opportunities to achieve a competitive advantage.

Our study shows that: 1) the probability of using conventional options rather than restricted options increases as the participation in the firm’s capital of the majority shareholder and non-executive directors decreases; and 2) the probability of using conventional ‘in the money’ options decreases with the participation of the majority shareholder and increases with the CEO’s tenure. These results confirm that CEOs use their power to extract rents disguised as incentive pay.

In theory, ‘outrage cost’ should limit these rents. In practice, however, firms resort to ‘camouflage’ to minimize outrage costs. Traditional stock options seem to be perfect for such camouflage. Boards dominated by the CEO could justify this type of option by claiming that the outside consultant has recommended them in order to retain the CEO and that they are remuneration mechanisms very common in other countries (for example in Anglo-Saxon countries).

However, these arguments are not acceptable. First, the outside consultant may be vulnerable to pressure from the CEO. He knows that displeasing the top executive will mean the end of further lucrative work with the audit or human resources departments. Second,

in 77 per cent of SOPs, catalogued as traditional options, the length of the exclusion period is less than three years and there aren't clauses that slow the vesting of the right of purchase during the exercise period. It can therefore be questioned whether the aim of these plans is to retain the CEO. They clearly encourage a short-term orientation and may even offer an incentive to actions aimed at artificially increasing the share price (e.g. buying back shares of the firm that are on the market).

Although the results of this study cannot be extrapolated to other countries, they allow a debate to be opened in the European countries where research into the design of stock option plans is very under-developed. Thus, we consider that future studies should attempt to answer the following questions: what factors affect the design of SOPs in other European countries? In which countries is CEO power a determinant of the design of SOPs?

As in the Anglo-Saxon countries, in Europe codes of good governance have been developed that establish a set of 'best practice' recommendations regarding the behaviour and structures of the board of directors. Thus, another important theme to investigate is the repercussion of compliance with the codes of conduct on the design of SOPs, in different European countries.

Although the codes of good governance published in the different countries agree in their general recommendations – to include a significant number of independent directors, to reduce the size of the Board, to separate the posts of CEO and Chairman, transparency of remuneration, etc. – they present some differences that could have repercussions for the design of SOPs. For example, while the Cadbury and Greenbury reports (United Kingdom) recommend total transparency regarding the remuneration of executive directors, the Olivencia and Aldama reports (Spain) only recommend partial transparency (reporting the remuneration of executive directors in the aggregate). Furthermore, while in the United Kingdom most firms follow this recommendation, in Spain, it is the least obeyed, according to the Spanish Supervisory Agency (CNMV). Total transparency in disclosure of executive pay and disclosure of how market movements affect options values would help outsiders understand executives' compensation arrangements and thereby check the use of their less desirable elements.

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Also, while the codes of good governance in the Netherlands and Germany make several suggestions for the design of SOPs (for example, that exercise of options should be linked to relative company performance targets (Pilv, 2003)), in Spain the Olivencia report confines itself to recommending variable remuneration.

Another important subject for research in the European setting is the influence of SOPs on managers' behaviour, because unfortunately we are not aware of any paper that analyses this. Some studies carried out in the Anglo-Saxon sphere (Brian et al., 2000) and in Japan (Kato et al., 2005) revealed wide differences. In the U.S. it is evident that SOPs contribute to reducing dividend payouts (Lambert et al., 1989), and have little impact on CEO ownership levels (Ofek and Yermack, 2000; McGuire and Matta, 2003). In contrast, Kato et al. (2005) found that in Japan the SOP increases the overall ownership of the board and found no evidence of dividend reductions.

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- 1 For this author, the current design of SOPs may be one of the causes explaining these 'strange' effects. Since managers present aversion to losses, they will tend to take a relatively conservative attitude, with the ultimate aim of protecting the current value contained in their SOP, instead of embarking on business initiatives to increase the value of the firm.
 - 2 The CNMV requires listed firms to provide up-to-date information on the different systems of remuneration linked to the price of shares, such as share option plans. Royal Decree 1370/2000, of 19 July 2000, on reporting of significant participations in listed companies and of acquisitions by the latter of their own shares, establishes that listed firms have the obligation to report the granting and approval of option plans within a period of seven working days following the signing of the contract, agreement or decision by which those option rights are recognised, acquired or transferred.
 - 3 Unlike other tests, such as Student's *t* test for difference of averages that require normality in the distribution of the random variables that are being analysed, Mann-Whitney's test requires no hypothesis as to the type of distribution.
 - 4 Melle-Hernández (2003) analyses whether the Spanish market values positively or negatively the adoption of SOPs; Álvarez and Neira (2005) the types of options used to remunerate the CEO, and Deyá (2005) studies the effects of SOPs in the framework of the Behavioural Agency Model.

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