

РАЗДЕЛ 2  
ОРГАНИЗАЦИЯ РАБОТЫ  
СОВЕТОВ ДИРЕКТОРОВ

SECTION 2  
BOARD  
PRACTICES



STOCK OPTION PLANS FOR CEO COMPENSATION

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**Abstract**

Stock options plans (SOPs) can be used as a CEO remuneration instrument. Our study examines the dimensions of SOPs, the types of SOP used by Spanish firms to reward the CEO, and the effect of different SOP types on CEOs' behavior. The results show that traditional options "at the money" are the most used by Spanish firms. Although this SOP type is not the most appropriate from the optimum contract theory approach, it offers high potential gains to the CEO. It may therefore increase the capacity of companies to attract and retain competent executives.

**Keywords:** Stock option plans, CEO compensation, Incentives

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**1. Introduction**

The remuneration of the chief executive officer is considered to be a strategic management tool available to the Board of Directors. For Lawler (1990,1991), the remuneration system of top managers permits the company: 1) to attract and retain competent executives, 2) to influence their behaviour, incentivising them to develop strategies that create value and 3) to modify or reinforce the corporate culture. The remuneration system of top management integrates decisions regarding the level of remuneration, its mix between fixed and variable, and the mix of variable remuneration between short and long term. Two types of plans can be differentiated in long term variable remuneration: 1)

those that link management reward to accounting measurements of the firm's internal performance, and 2) those that relate executives' remuneration to the price of the shares. Within this second category are the stock option plans (SOPs) which, for Murphy (1999), constitute an important theme for research in the area of top managers' remuneration.

Our study focuses on an area unexplored in Spain: the SOPs subscribed by firms to reward the CEO. Our objectives are: 1) to analyse the types of options used and 2) to reflect upon the possible effects of the different types of SOPs on the behaviour of their beneficiaries. The conclusions of the study contribute to the development of knowledge in a subject that has been little studied in Spain due, on the one hand, to the lack of

transparency regarding the remuneration of top management and, on the other, to its newness as a remuneration tool, given that SOPs began to be used as systems of remuneration of top management in the late 1990s.

The paper is structured as follows. In the first part we examine the pros and cons of SOPs, their dimensions and types, and their influence on the behaviour of managers. Then we analyse the SOPs subscribed by the 115 listed firms most representative of the General Index of the Madrid Stock Exchange, during the period from 1998 to 2001. To finish we discuss the results.

## 2. Pros and Cons of Stock Option Plans

According to the theory of agency, the manager's risk aversion and his pursuit of his own interest leads him to direct his actions towards achieving his own interests, which do not always coincide with those of the shareholders. Jensen and Meckling (1976) show that the manager who owns a fraction of a firm will expend resources to the point where the marginal utility derived from the firm's expenditure equals the marginal cost of his own portion of the firm. As the manager's ownership claim falls, his incentive to contribute significant effort to increase the value of the firm falls. The mission of the Board of Directors is to monitor the top managers so that they act in accordance with the interests of the shareholders. One mechanism of control available to the Board is to implant SOPs. Since SOPs give the recipient the right to purchase shares of company for a pre-specified term at a pre-specified strike price, which is usually at money, it only awards the manager the appreciation part of the stock price. The manager would try to take more creative activities to increase the value of his option and the expected share price would rise due to the manager's effort. SOPs have advantages over annual incentive plans based on accounting measures, and also over other types of incentives based on market measurement.

Against annual incentive plans based on accounting measurements, SOPs stand out: a) for their ability to harmonise the interests of the top management with those of the shareholders and b) because the share price is a more objective measurement than those of an accounting nature.

Although financial accountancy measures such as profit, profit per share, return on investments, etc., are much used in the design of incentive plans for top management because of their influence on the market value, some studies (Beaver, Clarke and Wright, 1979) showed a low or medium correlation between these indicators and returns to shareholders. This result may be because:

1. Annual profits do not show the future impact of present decisions. For example, even though a substantial investment in research and development may have a depressive effect on profits in the short term, it can have a

positive effect in the long term. The implementation of measurements of yield such as ROI may motivate managers to reduce expenditure on R&D, marketing, etc. which are necessary to improve long term competitiveness. The results of the study by Hoskisson, Hitt and Hill (1993) revealed that, when the intensity of R&D of the industry, the size and diversification of firms is monitored, incentives based on accounting measurements were negatively related to the intensity of firms' R&D.

2. The growth of profits adds value only if the return on investments exceeds the return required by the investors (Buchman, 1991). Accounting profits do not reflect the changes in the cost of capital needed to finance the investments of the firm. Inflation and the higher risks taken by the investor may increase the cost of capital. Hence, unless the additional profits are sufficient to counteract the increase in the cost of capital, the value of the firm descends, even if profits increase. The low correlation between annual profits and the share price obtained by Rappaport (1986) was attributed in large part to the cost of capital. Therefore, rewarding managers for profits without "charging" them for the capital used may generate distortions in investment.

The second advantage of SOPs over plans based on accounting profits derives from the fact that the latter can easily be manipulated by managers, as they can be inflated or reduced by accounting procedures (stock valuation, methods of depreciation etc.) or by policies of deferment of income or expenditure (Gomez-Mejia and Balkin, 1992). Smith (1992) describes twelve practices of "creative accounting", all of them legal, used by British firms to massage their profits and returns. Also, Healy (1985) revealed that managers modify spending policies and accounting procedures in order to achieve the annual bonus.

Against other types of incentives based on market measurements, e.g. the granting of restricted shares, SOPs have the advantage of their lower cost, as the firm only refunds the appreciation over the exercise price. "For a company with an average dividend yield and a stock price that exhibits average volatility, a single stock option is worth only about one-third of the value of a share" (Hall, 2000, p. 124). This occurs because the holder of the option receives only the marginal appreciation over the exercise price, while the shareholder gets all the value plus the dividends. For this reason the firm, for the same cost, can offer the manager three times as many options as shares. In view of their advantages, SOPs have been recommended, by both the academic and professional sectors, as an effective means of aligning the interests of top management with those of shareholders.

The recommendations of specialists, together with the tax advantages, the accounting norms<sup>1</sup> and the constant increase of environmental turbulence, which promotes greater management discretion<sup>2</sup> and makes monitoring more difficult, have favoured the growing use of SOPs to reward top managers in the U.S.. Several studies reveal their use in the Anglo-Saxon environment. For example, Yermack (1995) points out that the percentage of the CEO's remuneration paid in stock options rose from 20% in 1984 to 30% in 1991, and Murphy (2002) underlines that, between 1992 and 2000, this percentage rose from 25% to 40% for S&P 500. In Spain, though their use is not as widespread as in the United States and the United Kingdom, SOPs are becoming more and more popular. Some studies confirm the effectiveness of SOPs, showing their positive impact on: a) the performance of the firm, measured by financial returns and the growth of earnings per share (Kumar and Sopariwala, 1992, Ferris *et. al.*, 1997), b) the growth of investments congruent with the interests of the shareholders (Agrawal and Mandelker, 1987, Lacker, 1983), c) the development of a long term vision (Hagerty, Ofer, and Siegel, 1991), and d) the share price (Masson, 1971; Lacker, 1983). But other more recent ones question their positive effect on results. For example, Ofek and Yermack (2000), observing that top managers tend to exercise their SOPs as soon as they are able to, and sell practically immediately all the shares acquired, conclude that stock option exercise has little substantive impact on managerial ownership. Other studies associate the stock option plans with: 1) reductions in R&D (Henderson and Fredrickson, 2001), 2) cutback in the level of dividends paid (Bartov, Krinsky and Lee, 1998; Lambert, Lanen and Lacker, 1989, Fenn and Liang, 2001), and 3) increase in the levels of repurchase of shares (Bartov, Krinsky and Lee, 1998). Altogether, these studies support the criticisms made by outside observers who maintain that SOPs "confer greater riches on top executives, with little connection to

corporate performance and motivate corporate leaders to pursue short-term moves that provide immediate boosts to stock values rather than build companies that will thrive over the long run" (Hall, 2000, p. 121-122). Also, authors like Bebchuk *et al.* (2002) maintain that SOPs do not solve the problem of agency and that top managers use them to obtain a higher remuneration than they would achieve with other types of remuneration.

### 3. Dimensions and Types of Share Option Plans

In order to reduce the conflict of agency, SOPs have to be well designed, which is not frequently the case. According to Hall (2000, p. 126), "most of the companies I've studied don't pay a whole lot of attention to the way the grant options work... assume that the important thing is just to have a plan in place, the details are trivial". This may lead to the implementation of plans in which the incentive effect does not compensate the costs to shareholders (Aboody, 1996). Therefore, the effectiveness of SOPs can be increased by appropriate design.

SOPs are complex systems of remuneration because their design involves many decisions. The most important are: beneficiary group, basis of allocation, exercise price, establishment of conditions and duration of the plan (see table 1).

#### **Beneficiary Group**

The first decision when designing a SOP is to determine which group of members of the firm it is aimed at. Currently, both in continental Europe and in the Anglo-Saxon countries, SOPs, traditionally considered to be systems of remuneration for key managers and personnel, are being extended to all staff (Canyon and Freeman, 2001, Murphy, 2002).

The most critical maintain that this generalisation is due more to tax and accounting norms in force in the UK and USA than to strategic considerations. On the basis of the theory of expectations, they argue that stock options can only motivate top management, because the rest of the employees find it difficult to see the connection between their efforts and the price of the shares (Huddart, 1994). They also maintain that this expansion dilutes shareholders' earnings, reduces the cash flows necessary to be able to make investments, and reduces liquidity if firms establish buy-back programmes to prevent dilution of capital (Bens *et. al.*, 2000). However, other authors (Pinder, 1997, Newman and Krzystofiak, 1998) maintain that the extension of SOPs to all the staff should increase the performance of the firm because it improves the employees' morale and job satisfaction, and incentivises greater cooperation and greater commitment among its employees. These arguments are supported by some empirical studies (Blasi, Conte, Kruse, 1996; Canyon and Freedman, 2001)

<sup>1</sup> Under US regulations, the expenditure caused by the remuneration of managers based on share options with pre-fixed exercise price and maturity has to be charged to the profit and loss account for the differential margin at the time of delivery between the share price in the stock market and the exercise price fixed. Options whose exercise price coincides with the share price at the time of the grant of the plan are therefore considered by the firm as free of charge in the short term because they are not computed as expenditure. ]

<sup>2</sup> Various research studies (Gaver and Gaver, 1995; Yermack, 1995; Rajagopalan and Finkelstein, 1992) reveal that firms whose contexts provide their CEOs with a high level of discretion use SOPs more frequently because these contexts make monitoring difficult, and the Board of Directors seeks to align managers' and shareholders' interests by implementing systems of incentives, such as stock options. ]

which show that granting share options to all the staff has a positive influence on performance. For Conyon and Freedman (2001), the granting of options to all the staff is effective, even when the number of options granted is small, because it encourages the feeling that we're all in the project together. Moreover, this system of remuneration offers firms the possibility of rewarding the staff

while preserving liquidity to be able to finance new investments. Since the need for liquidity to finance investments can prevent payment of competitive salaries to attract and retain qualified staff, SOPs free firms from this pressure, as well as offering a stimulus to attract and retain managers and employees with the possibility of sharing in the firm's future earnings (Core and Guay, 2001).

**Table 1.** Dimensions and alternatives in the design of SOPs

Dimension	Alternatives
Beneficiary Group	<ul style="list-style-type: none"> <li>• CEO, top management and other key staff</li> <li>• All the staff</li> </ul>
Basis of Allocation	<ul style="list-style-type: none"> <li>• Fixed value plans</li> <li>• Fixed number plans</li> <li>• Mega-grant plans</li> </ul>
Exercise price	<ul style="list-style-type: none"> <li>♦ Price at which the beneficiary can exercise the purchase of the shares:               <ul style="list-style-type: none"> <li>• Fixed price:                   <ul style="list-style-type: none"> <li>- With possibility of review.</li> <li>- Without possibility of review.</li> </ul> </li> <li>• Price adjusted to a predefined index</li> </ul> </li> <li>♦ In relation to the share price at the start of the plan:               <ul style="list-style-type: none"> <li>• Grant of options "at the money".</li> <li>• Grant of options "in the money".</li> <li>• Grant of options "out of the money".</li> </ul> </li> </ul>
Establishment of conditions	<ul style="list-style-type: none"> <li>• Restrict exercise of the option.</li> <li>• Prohibit sale of the shares acquired for a certain period of time.</li> <li>• Limit amount of reward.</li> <li>• Slow vesting.</li> </ul>
Duration of plan	Exclusion period + exercise period.

### ***Basis of Allocation***

The Board may choose among three types of SOPs: 1) fixed value –the beneficiaries receive options of a predetermined value every year over the life of the plan, 2) fixed number –each year of the life of the plan the beneficiaries are granted a fixed number of options and the exercise price is determined on the basis of the share price of the corresponding year, and 3) megagrants –the beneficiaries are granted a fixed number of options at an exercise price determined at the start of the plan.

Fixed value plans, which control the percentage of remuneration taking the form of options, have the advantage of allowing remuneration of executives to be determined in accordance with wage surveys. The disadvantage of these plans, however, is that they weaken the connection between remuneration and performance, because in the years when the shares are worth more, the managers receive fewer options (Hall, 2000). This problem does not exist in fixed number plans and in megagrants because these types determine a number of options and not a monetary value. The value of the options therefore changes with the quotation of the shares.

Megagrant plans permit managers to obtain greater gains than fixed number plans if the share price increases during the period of the plan. However, if the share price falls, the options can be

so devalued that the manager may lose all hope of obtaining gains with the plan, thus disincentivising him to strive to increase the share price or incentivising him to seek another firm and obtain new options. Furthermore, he will not receive new options that will enable him to offset those that have lost value as occurs in a multi-annual plan.

### ***Exercise Price and Establishment of Conditions***

The price at which the beneficiary can exercise the purchase of the shares can be: 1) a fixed price, with or without the possibility of review in the event of significant falls in the share price, and 2) a price adjusted to a predefined index, such as the general stock market index, or one for the industry or a group of shares (*benchmark*). Relative to the price of the shares at the start of the plan, the following alternatives exist: 1) options "at the money" - exercise price equal to starting price, 2) options in the money -exercise price lower than the starting price, and 3) options out of the money -exercise price higher than starting price. When designing SOPs different conditions can be established to limit the right of exercise, the amount of the remuneration or to stipulate the manner of exercising the options.

From the combination of these dimensions arise different types of options (Table 2).

**Table 2.** Types of options

Traditional options	These establish a fixed exercise price and the only condition required of the beneficiary to exercise the purchase of shares is to remain in the firm.
Repriceable options	These are traditional options that have the possibility of modifying the exercise price in the event of a substantial fall in the quoted share price.
Indexed options	These are options that establish an exercise price linked to a predefined index, such as the general stock market index, or one for an industry or a certain group of shares ( <i>benchmark</i> ).
Conditioned options	These are options that establish a fixed price, conditioning the exercise of the right to purchase to remaining in the firm, but with further conditions, such as the achievement of objectives ( <i>performance vested options</i> ) and participation in capital.

#### - Duration of the Plan

The duration of the plan is determined by the sum of the exclusion period – from the approval of the plan to the exercise period - and the exercise period – the period within which the manager can exercise the option right.

#### 4. Types of SOPs and their Influence on Managers' Behaviour

Traditional options have been questioned because they link the manager's compensation to the absolute share price, a variable that does not always correlate with the creation of value. Although in the long term the performance of the company is what drives changes in the share price, factors external to the firm cause fluctuations which in some cases can be very large. Patterson and Smits (1998) found that 70% of share price variations of U.S. firms were due to such factors. If the impact of these factors is so great, it calls into question the incentivising capacity of the plans, because they may allow the manager to obtain a reward without having made any effort, simply taking advantage of a "lucky break" propitiated by external factors, or deprive him of it even though he deserves it (Bebchuck et. al., 2002).

The positive influence of external factors in the quoted price of shares leads the executive rewarded by conventional options to obtain a higher reward than he deserves. Thus, the manager can obtain a high reward even though the returns of his company do not exceed the average for the sector (Johnson, 1999). A negative influence of external factors on the share price, however, means that the manager obtains no reward even though by his management the firm has achieved higher returns than its competitors. The implantation of conventional options therefore especially favours mediocre managers who, as a consequence of the positive impact of external factors on the share price, will receive higher compensation than they deserve, and will suffer no disadvantage in unfavourable situations. Consequently, this type of options wastes shareholders' money and at the same time sends inappropriate messages to managers. It also helps to

increase the scepticism of employees, customers, and the general public about this compensation mechanism, which tends to look more like a lottery than a performance-dependent compensation system.

Repriceable options are even more questionable. As well as suffering the same defects as the above, they foment even more the decoupling of managerial reward from shareholder return, by establishing clauses that permit changing the exercise price if the share price falls significantly. The lack of linkage between managerial reward and shareholder return that exists in conventional options and in repriceable options can be overcome by two different designs. The first consists of indexing the exercise price of the option to the performance of the sector or market to filter out changes in the stock price that are not due to the manager's efforts. The second conditions vesting to the achievement of certain objectives linked to the creation of value.

Indexed options reward the differential between the value of the company's shares and the named index. Thus, the manager will only obtain the reward if the share price of his company exceeds the index. This type of options encourages the manager to concentrate his efforts on exceeding the return of the index – return of certain competitors, average return of the industry, etc.. Consequently, indexed options create a more powerful incentive per dollar value than conventional options (Johnson and Tian, 2000) and reward the manager for his efforts by isolating the part of share value arising from external factors beyond the manager's control (Kerr and Bettis, 1987). Performance vested options, like indexed options, prevent the manager obtaining a reward thanks to a "lucky break" due to the influence of external factors on the share price. On the other hand, restricted stock options, conditioned to a participation in capital, i.e. those options that require the 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 for improving the future performance of managers is to link the beneficiary to the fate of the firm even before receiving the incentive. The literature indicates that the CEO, to reduce his risk, tends to sell the shares as soon as he has exercised

the option (Carpenter and Remmers, 2001; Heath et al, 1999; Ofek and Yermack, 2000; McGuire and Matta, 2003). Therefore, the requirement that managers possess a certain number of shares in order to exercise the options will encourage them to keep at least some of the shares acquired.

Indexed options and performance vested options are easier to justify to shareholders. However, they are the least valued by managers because they provide them with a lower potential gain than conventional options and repricable options. According to Murphy (2002), the probability of obtaining a reward with an indexed option is 50%, whereas a conventional “at money” option allows gains in 80% of cases. Consequently, the implantation of conventional option plans and repricable options may play an important role in attracting and retaining top managers.

Independently of the type of option used, the way the exercise price is determined affects both the cost of the plan and the managers’ motivation. The lower the exercise price in relation to the initial price, the higher the cost for the company. Regarding the motivational impact, some authors (Bebchuk, Fried and Walker, 2002) consider that the grant of in-the-money options rewards the beneficiary unduly, as instead of giving him an incentive to strive, it lulls him to sleep. Nevertheless, the granting of in-the-money options can be used to attract and retain talented managers, as they offer the beneficiary greater potential gains than “at the money” or “out of the money” options. According to Hall and Murphy (2000), executives prefer a small number of options at a low price to a greater number at a higher price. The attraction and retention of managers, and their decisions can be affected by decisions on: a) the duration of the plan and the exclusion and vesting periods, and b) clauses that slow vesting, limit the amount of reward and restrict the sale for a certain time of acquired shares.

The duration of the plan is determined by the sum of the period of exclusion (from the approval of the plan until the exercise period) and the exercise period, during which the manager can exercise the option right. Establishing a period of exclusion encourages retention of the manager and motivates him to focus on long-term decision making because during this period he cannot exercise the right to buy. Likewise, the establishment of clauses that slow

vesting, or restrict the sale of shares for a certain period of time after exercising the right, will have repercussions for long term orientation, as it de-stimulates initiatives developed to artificially increase the share price in the short term: the price of the shares will decrease when the market discovers these manoeuvres. The CEO can manipulate the value of the stock when the exercise date approaches by controlling the publication of news about the firm, using privileged information or by repurchasing the firm’s own shares in the market. Finally, slow vesting also encourages retention, because the manager would lose the outstanding option rights if he left the firm before the end of the exercise period. Aiming to recruit high prestige managers in tight labour markets, some companies may be obliged to offer option plans with very short exclusion periods and no slow vesting clause, so that the option to buy can be exercised quickly. This action is very frequent when the managers whom it is desired to hire lose the options granted when they leave the company.

## 5. Empirical Analysis

### 5.1. Data

The data used in this study correspond to the types of SOPs used in the 115 most representative firms of the General Index of the Madrid Stock Exchange, during the period between 1999 and 2001, both inclusive. The data are from Comisión Nacional de Mercado de Valores (National Commission of the Stock Market).

### 5.2. Results

The data gathered indicate that only 32 of the 115 firms analysed (27,8%) use some type of SOP as a mechanism of remuneration.

#### Beneficiary Group

The 32 firms that have implemented SOPs limit this incentive to the top manager group. In 23 firms, the plans include the CEO, while 9 firms exclude the CEO given his participation in the capital of the firm (table 3).

**Table 3.** Stock option plans

Stock option plans (SOPs)	Freq.	%
CEO included in the group “top management rewarded with options”	23	20%
CEO excluded from the group “top management rewarded with options”	9	7,8%
▪ Total “top management remunerated with options” group	32	27,8%
▪ Not used	83	72,2%
Total	115	100

#### Base of Allocation

In the 23 firms that reward their CEOs by means of SOPs, we identified 39 plans, distributed between

megagrant plans and fixed number multi-year plans. Of the two alternatives, the first type is more frequent (table 4). In the case of multi-year plans,

30.4% were of two and three years and 69.6% concentrated the grant of options at a particular time, though not all these plans establish the same conditions for the totality of the grant. Specifically,

there are four plans in which the grant is divided into groups and different exercise prices are set for each group of options.

**Table 4.** Type of plans by base of allocation

		%	Frequency
Base of allocation	Mega-Grants:		
	- Identical conditions	52.1%	12
	- Different conditions	17.5%	4
	Total	69.6%	16
	Multi-year		
- Two years	21.7 %	5	
- Three years	8.3%	2	
Total	30.4 %	7	
Total firms		100%	23
Total of plans: 39			

### Duration of the Plan, Exclusion Period and Restrictions During the Exercise Period

The duration of incentive plans, determined by the sum of the exclusion period and exercise period, varies from 2 to 10 years; their average duration is

5.2 years. The exclusion period, during which the CEO cannot exercise the right of purchase, varies between 1 and 5 years; the average is 2.2 years (see table 5). Also, as can be seen in table 6, in 59% of the plans the exclusion period is less than three years.

**Table 5.** Duration of the plan and of exclusion period

	Mean	S.D.	Max.	Min.
Duration of the plan	5.2	0.26	10	2
Exclusion period	2.2	0.14	5	1

**Table 6.** Exclusion period

		Frequency	%
Exclusion period	Less than three years	23	59%
	More than three years	16	41%
	Total	39	100

### Exercise Price

The exercise price of the 39 SOPs identified in Spanish firms is a fixed value. The way it is established varies, however (see table 7):

- In 46.2% of the plans, the exercise price coincides with the starting price. These are options granted "at the money".

- In 28.2% of cases, the exercise price is lower than the starting price. Therefore, the options are granted "in the money". The average discount represents 21.55% of the starting price and varies between 3% and 79.6%. - In 25.6% of the plans, the exercise price is higher than the starting price of the shares. These are options granted "out of the money". The average premium is equivalent to 35.3% of the starting price and varies between 0.6% and 135% of this price.

**Table 7.** Determination of the exercise price

Exercise price	%	Freq.	Mean	Max.	Min.
Subject to review	0	0			
Adjusted to an index	0	0			
Fixed	Equal to starting price (Grant "at the money")	46.2%	18		
	Lower than starting price (Grant in the money)	28.2%	11	21.55%	79.6%
	Higher than starting price (Grant out of the money)	25.6 %	10	35.3%	135%
Total options based incentive plans	100%	39			

Therefore, in none of the SOPs implemented by Spanish firms to reward their CEOs did we identify

provision for review of the exercise price in the event of significant falls in the share price, or plans that establish exercise prices adjusted to an index.

## Establishment of Conditions

In all the plans, the exercise of the right to buy shares is subject to the CEO remaining with the firm; labour loyalty is therefore required (table 8). In some cases, performance and patrimonial loyalty clauses are added to this condition. As shown in table 8, the right of exercise is conditioned:

- In 20.5 % of the plans to the achievement of objectives such as ROE, ordinary results, revaluation of the share, or profits per share, established in all cases in absolute terms.

- In 10.3% of the plans to the possession of a certain number of shares and to their preservation

throughout the period of the plan (patrimonial loyalty).

Other noteworthy aspects are (table 8):

- Only one of the plans limits the amount of the reward that the CEO can obtain. Furthermore, in this plan the right of exercise of the options is conditional to the achievement of objectives.

- In 28.2% of the cases clauses are established that slow the vesting of the right of purchase during the exercise period; i.e. the plans specify both the dates and the maximum number of options to be exercised on each date.

- 20.5% of the plans establish clauses that restrict the sale of the shares acquired during a period that varies between 1 and 2 years.

**Table 8.** Establishment of conditions

Conditions		%	Freq.
Labour loyalty	Required	100%	39
	Not required		
Performance	Required	20.5%	8
	Not required	9.5%	31
Patrimonial loyalty	Required	10.3%	4
	Not required	89.7%	35
Limitation of the amount of the reward	Required	2.5%	1
	Not required	97.5%	38
Slowed vesting	Required	28.2%	11
	Not required	71.8%	28
Restriction on sale of shares	Required	20.5%	8
	Not required	79.5%	31

## Types of Options

Analysing jointly the exercise price and the existence of conditions that limit the right of exercise, we observe that, to reward the CEO, Spanish firms (see graph 1):

- Do not use indexed options, nor repricable options.

- Traditional options are used more than conditioned options. Of the total, 69,2% of the plans are traditional options and 30,8% are conditioned, of which 20,5% condition the right of exercise to prior achievement of certain objectives: ROE, ordinary results and profits per share; and the remaining 10,3% to the possession of a certain number of shares.

If the exercise price is compared with the price of the shares at the start of the plan we observe that:

- Of the 69,2% of the plans that we have counted as traditional options, 28,2% are granted at the money, 25,6% in the money and 15,4% out of the money.

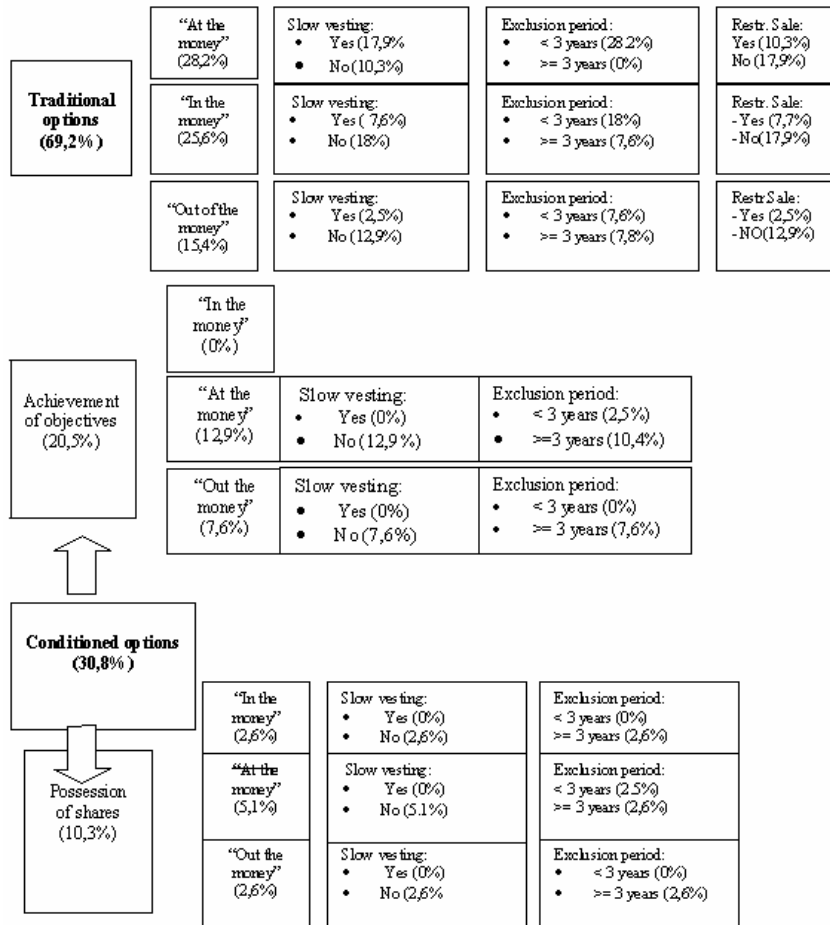
- Of the 30,8% of plans computed as conditioned options, 2,6% are granted in the money, 18% at the money, and 10,2% out of the money.

So, of the total of traditional options, 41% are granted at the money, 37% in the money and 22% out of the money, and of the total of conditioned options, 59% are granted at the money, 8% in the

money and 33% out of the money. These results allow us to conclude that: 1) the grant at the money is the most frequent in both groups, 2) the grant in the money has more weight in the traditional options and 3) the grant out of the money is more frequent in the conditioned options.

Analysing the amplitude of the exclusion period, we observe that in 59% of the plans it is less than three years (table 7), which raises doubts as to the capacity of these plans to retain managers and to encourage a long term orientation. However, as we have shown earlier, this incapacity can be made good by slowing the vesting during the exercise period and restricting the sale of the shares acquired for a certain time. In order to examine this possibility, we have analysed these three dimensions jointly, crossing two variables: 1) the existence of slow vesting; and 2) sum of the exclusion period and restriction of the sale of shares acquired (table 9). We observe that there are 8 plans (20,5%) which do not slow the vesting, and the sum of the exclusion period and the period of restriction on the sale of the shares acquired is less than three years. Nevertheless, taking into account the existence of other multi-year plans, or even mega-grant plans that do not establish the same conditions for all the options, only three plans can encourage the manager to start manoeuvres to artificially increase the share price. These are traditional options, two granted at the money and one in the money.





Graphic 1. Types of Share Option Plans

Table 9. Crossed Table of the variable "sum of exclusion period and period of restriction of sale of shares"

		Slow vesting		Total	
		No	Yes		
Sum of exclusion period and sale restriction period	Less than three years	No other plan	3 (7,7%)	1 (2,5%)	4 (10,2%)
		Other plan	5 (12,8%)	6 (15,4%)	11 (28,2%)
		Sum	8 (20,5%)	7 (17,9%)	15 (38,4%)
	More than three years		20 (51,3%)	4 (10,3%)	24 (61,6%)
Total			28 (71,8%)	11 (28,2%)	39 (100%)

6. Discussion and Conclusions

Stock options can be used as an instrument of CEO remuneration. Their implementation requires decisions to be made about several dimensions: beneficiary group, base of allocation, exercise price, establishment of conditions, duration of the plan, exclusion period, and exercise period. From the combination of these dimensions different types of SOPs are obtained.

In this study, we have identified the types of SOPs used by Spanish firms to reward their CEOs. The results of this analysis confirm that:

1.- SOPs do not have the importance that they have acquired in the Anglo-Saxon countries, only 20% of the 115 listed firms most representative of the General Index of the Madrid Stock exchange

using them to remunerate their CEO. The difference in the use of SOPs between Spanish firms and, specifically, those of the USA to reward their CEOs may be due to the different structure of ownership. Whereas in the USA the wide dispersal of ownership may compel the Board to use stock options as a mechanism of alignment of interests between owners and the management, the concentration of ownership existing in Spain permits direct control of the management.

2.- SOPs are limited exclusively to the group of top managers. This practice of allocation again differentiates Spanish firms from those of the Anglo-Saxon countries, where it is increasingly common to make SOPs extensive to all the staff (Conyon and Freeman, 2001, Murphy, 2002). From this we can deduce that Spanish firms do not use SOPs as a

mechanism to strengthen or create a culture of cooperation and an organisational commitment in all the members of the firm.

3.- The base of allocation most used is the mega-grant, i.e. the grant of the options is concentrated in one specific financial year. When the price of the shares increases, this form of allocation offers more potential profit to managers than multi-year plans. However, when the share price goes down, mega-grants favour demotivation and the flight of the beneficiaries to competing firms, above all when the fall in the share price is caused by outside forces.

4.- Traditional options are the most used, in 69,2% of cases. Of the remaining plans, 20,5% are options conditioned to the achievement of objectives (performance-vested options) and 10,3% are conditioned to the possession of shares. No plans use indexed options or repricable options.

5.- The grant of options “at the money” is the most frequent, both in the case of traditional options and in that of conditioned options. Comparing the importance of grants in the money and out of the money, we observe that the first is more frequent among traditional options, while the second has more weight among conditioned options.

So, the types of SOPs used to reward Spanish CEOs are fairly similar to those used to reward US CEOs, in that: 1) indexed options are not common (Murphy 1985), 2) the use of “performance vested options” is rare, being implemented by only 5% of the 250 largest American listed firms (Levinshon, 2001), and 3) the grant of traditional options “at the money” is the most frequent type (Murphy, 2002, Bebchuk et al, 2002). The fact that traditional options are the most used type and most of those are granted at the money and in the money, and that even, in some cases, the exclusion period is shorter than three years and there are no clauses that compel slow vesting or limit the sale of the shares acquired, permit us to conclude that the majority of SOPs designed by Spanish firms offer high potential gains, with implications for the attraction, retention and motivation of executives. This expectation of gains may increase the attraction and retention of competent executives, but decrease the motivation to seek new investment opportunities that result in the achievement of a profitability higher than the industry average. These plans encourage the CEO to perceive that, to obtain profits, it is not necessary to strive to increase the share price, but it is sufficient to take advantage of the upward trend of the market.

On the basis of these conclusions we can ask the question: What is the reason for the non-existence of indexed options and the proliferation of traditional option plans, especially granted at the money?

Although there are several arguments in the literature that allow this result to be explained, some of them are disputable. For example, authors such as Janakiraman et al, (1992) maintain that indexed options are not used because they are not an

incentive to CEOs to disinvest from unattractive business and reinvest in industries with greater opportunities (Janakiraman et al, 1992). This type of options will reward the CEO of a firm whose shares are falling more slowly than those of its industry, even though the correct decision would be to disinvest from that sector and reinvest in other more attractive ones. However it is not clear that reinvestment in other industries is a desirable option for shareholders, due to their capacity to diversify their portfolio and to their choice – to invest in a particular industry, accepting the risk specific to it (Bebchuk et. al., 2002). But, even accepting the argument of Janakiraman et al (1992), the options could be linked to a broader index (the stock exchange index rather than the industry index), which would solve the problem indicated by the authors.

Levmore (2001) maintains that indexed options are not used because this type incentivises the choice of highly risky strategies. Indexed options, by rewarding the differential between the value of the shares and that of the selected index, could encourage CEOs to forgo projects of higher value in favour of those that present greater volatility relative to the said index. However, even assuming that indexing reduces the quality of the projects selected, this negative effect could be offset by the potential profits deriving from the indexing – greater incentives to create value in any project selected (Bebchuk et. al. ,2002).

Other arguments, in our opinion more convincing, which allow us to explain the designs of option plans, arise from the perceived value/cost approach (Murphy, 2002) and from the Management Power theory (Bebchuk et al, 2002,).

### **Perceived Value/Cost**

According to the perceived value/cost view, risk-averse and undiversified executives perceive that stock option compensation is highly risky and give the option a lower value than would be given to it by an investor (Hall and Murphy, 2002). Unlike the latter, who is only exposed to systematic risk, the manager is affected by the total risk. Hence the return expected by the manager is too low to compensate him adequately for the risk that he runs. Meulbroek (2001) maintains that the value of a traditional option for a manager is reduced by the volatility of the firm. For example, the value of traditional stock options for a manager of an Internet firm is 53% of their market value, while for a manager of a NYSE firm it is 70%. This value may be even more reduced in the case of indexed or conditioned options, or those granted out of the money, because with these designs the probability that the option plan will end in a positive result is reduced. Murphy (2002) maintains that the probability of obtaining a reward with indexed options is less than 50%, while that of a traditional

stock option, granted at the money and with duration of 10 years, is 80%.

Boards may also perceive, wrongly, that traditional option plans granted at the money are a low-cost form of compensation, because they are granted without paying out any money and without registering them as expenditure. Both in the USA and in Europe there is no obligation to make a charge to the firm's Profit and Loss account when the exercise price is the price of the share at the time of handing over the options.<sup>3</sup> Therefore, unlike the other types of options (traditional options in the money or out of the money, indexed options and restricted options), traditional options granted at the money may be perceived as gratis because, as they are not entered in the accounts, they do not reduce the firm's profits.

Thus, the fact that for the manager the most valued type of options is the traditional option granted in the money and at the money, together with the Board's perception that the least costly is the traditional option granted at the money, may explain the proliferation of the latter type (Murphy, 2002).

### Theory of Managerial Power

The use of options that offer high potential gains and low risk of loss may be due to managerial power, defined by Lambert, Larcker and Weigl (1993:441) as "the capacity of the manager to influence or impose upon the board or compensation committee that his wishes regarding compensation be fulfilled".

Managerial power may arise from different sources: weak governance structures, expertise in a critical area (expert power) and prestige (prestige power) (see Finkelstein, 1992).

The power of top management to influence the design of its system of compensation increases with weak governance structures (dispersion of ownership, and deficient structure and working of the board).

There is evidence to support the hypothesis that the CEO takes advantage of the weakness of the firm's governance to achieve a system of compensation in accord with his interests: high reward and low risk (Gomez Mejía and Balkin, 1992). Studies such as that by Tosi and Gomez Mejia (1989) conclude that, in firms with dispersed ownership, the influence exercised by the CEO and external consultants on the process of CEO compensation is greater than in firms with ownership concentrated, and consequently the level of risk of the CEO's compensation package is also lower in firms with dispersed ownership. This result is coherent with those obtained by earlier studies (Gomez Mejia, Tosi and Hinkin, 1987) which reveal that, in owner-controlled firms (concentrated

ownership), the most important determinant of the CEO's level of compensation is performance, while in management-controlled firms (with dispersed ownership), the most important determinant is size. Other studies (Boyd, 1994, Mangel and Singh, 1993, Conyon and Peck, 1998) also found a negative relation among different aspects that enhance the effectiveness of the Board, such as non-duality of President/ CEO office, the Board's participation in the capital of the firm, the presence of independent directors, the existence of compensation committee and the CEO's level of compensation.

The CEO's capacity to influence Boards that function deficiently in firms with dispersed ownership may therefore explain the non-existence of indexed options and the use of traditional options granted in the money and at the money and with short exclusion periods. This type of options may be used with the intention of camouflaging high compensation and thus to avoid possible scandals and outside criticism (Bebchuk et al 2002).

The power of the top management may also derive from the possession of leadership and management skills, as well as the prestige achieved.

According to the theory of resources and capacities, a firm can deliver a sustainable competitive advantage if it possesses resources that are valuable, rare, and difficult for competitors to imitate or acquire. Superior managerial skills meet these criteria, so they can constitute a critical resource (Castanias and Helfat, 1991). The notion that managerial skills are valuable is traditional in strategy research. Given the complexity of managerial work, the many leadership skills that must be developed, and the need to develop industry and firm specific knowledge to guide decision making, superior managerial capabilities also appear to be rare (Combs and Skill, 2003). Finally, superior managerial skills are difficult to imitate because they are generally learned through experience and are thus difficult to codify and teach (Castanias and Helfat, 1991). Superior managers can be hired away from their current employers, but doing so is costly (Harris and Helfat, 1997)

For all these reasons, their skills, knowledge and prestige give managers great power when negotiating their compensation contract. Furthermore, the competition among firms for talented executives has intensified in the last two decades as a consequence of the increased level of uncertainty in the business environment. In unstable environments, Boards may be forced to design option plans that offer a high potential profit and little risk of loss (e.g. traditional options in the money) in order to attract or retain talented top managers.

To sum up, the design of option plans can be explained by the power of top management derived both from weak governance structures and from the manager's possession of superior skills and prestige. However, the two influences can have different consequences that should also be investigated in the

<sup>3</sup> However, from 2005 onwards, international accounting norms establish that stock options must be accounted for as expenditure.

future. Probably the effect on the firm's performance of options with high potential gains, such as traditional options, will be different according to the source of the manager's power. It is to be expected that when the SOP is determined by managerial power derived from weak structures of governance, the implementation of traditional option plans will have a negative influence on the firm's results, whereas when it is influenced by expert power or prestige, the relationship between the implantation of the plan and the results of the firm will be positive. For this reason we consider that the effect of traditional options on performance may be contingent upon the source of the manager's power. This would explain the divergent findings of different studies that analyse the influence of the implantation of options on the firm's results.

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