STOCK INCENTIVE PLANS IN EUROPE: EMPIRICAL EVIDENCE AND DESIGN IMPLICATIONS

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Abstract

Traditionally, stock incentive plans have been used by American companies for two primary purposes: as tools of corporate governance to align the interests of top managers and shareholders, and to motivate managers to maximize shareholders' value. Recently, just as the misuse of stock option plans is the subject of scathing criticism, such plans are seeing widespread dissemination in several European countries. Empirical studies conducted by both consulting companies and management scholars outline the increasing diffusion of stock incentive plans designed by European companies and the main features of these plans. The characteristics of the process through which they are designed and of the equity incentives implemented raise the concerns of investors and academics about the ability of such plans to align managers' interests to shareholders'. Since stock incentive plans were created and developed in the Anglo-Saxon capitalistic system, the last part of the paper reviews the reasons why firms should set up these plans. The aim is to ascertain whether European companies have good reasons to create SIPs and if the features of the incentive plans designed by these executives are consistent with achieving these goals. To answer these questions, a theoretical model is presented to provide a framework for designing stock incentive plans that are tailored to the characteristics of the company, specific aims it wishes to pursue, and the relative institutional environment.

Keywords: shareholders, corporate governance, stock incentive plans, Europe

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The author acknowledges the support of research grants from the Bocconi University of Milan.

"Stock-option grants, properly constructed, can be highly effective in aligning the interests of corporate officers with those of shareholders. Such an alignment is an essential condition for maximizing the long-term market value of the firm. Regrettably, some current issuance practices have not created the alignment of incentives that encourages desired corporate behaviour. ... There have been more than a few dismaying examples of CEOs who nearly drove their companies to the wall and presided over a significant fall in the price of the companies' stock relative to that of their competitors and the stock market overall. They, nonetheless, reaped large rewards because the strong performance of the stock market as a whole dragged the prices of the forlorn companies' stocks along with it", Alan Greenspan, Financial Markets Conference of the Federal Reserve Bank of Atlanta, 3 May 2003.

Introduction

Stock incentive plans (hereafter SIPs), one of the pillars of Anglo-Saxon capitalism, had never before enjoyed much popularity in Europe. In these

countries, in fact, pay packages traditionally offered to managers included a base wage plus cash bonuses when specific goals were reached (annual or multi-year). However, normally these schemes did not include rewards linked to the value of the company's stock. This situation changed drastically in the late '90s, when several European firms began to implement SIPs that granted employees options on purchasing or subscribing stock.

Somewhat ironically, SIPs became popular in Continental Europe just when such plans were under heavy attack by governmental authorities and the American economic press (clearly apparent in the opening quote). In actual fact, recent events (e.g. the collapse of Enron and Worldcom) have opened to debate the entire Anglo-Saxon system of corporate governance, not only the compensation mechanisms of top management. In any case, within the context of this far-reaching issue, the stock option problem is not to be neglected; it centers on how effective these plans are in bringing about desired behaviours in employees.

Since SIPs are becoming more commonplace among European firms, and in light of the heated



debate generated at a global level on the effectiveness of such instruments, this paper addresses the issue with the aim of: (a) outlining the technical characteristics of SIPs, (b) assessing the dissemination of SIPs implemented by European firms and the specific features of these plans; (c) proposing guidelines for designing SIPs, taking into account the characteristics of the firms that intend to adopt them, the goals these firms wish to pursue, and the institutional environment in which they operate.

Stock incentive plans

Stock incentive plans are motivational tools which link employees' compensation to the value of company stock. From a technical standpoint, though such plans can take on very different forms, they can be classified into two main categories:

- 1) *stock option plans*, in which the recipient has the option to buy or subscribe company stock;
- 2) non stock option plans, which involve employee rewards (either stocks or cash), again, linked to the value of the company's stock.

In designing an incentive plan, a firm should carefully consider whether to grant shares or options, since this choice changes the characteristics of the incentive (see appendices, Exhibit 1: The main differences between option and share plans).

1) Stock option plans

Stock options are motivational contracts which grant one or more employees the option to buy or subscribe company stock. Once issued, after a certain amount of time has passed (the *vesting period*) these options give employees the right to buy stocks within a given time period (*exercise period*) at a set price (*exercise price*). For example, a typical stock option plan might grant the CEO of a firm 100,000 options that allow him or her, after two years from the date of issuance, to subscribe the same amount of stocks at 100 euro over a 5-year period.

It is commonly held that by linking employees' compensation to the value of company shares, stock option plans align the interests of managers with those of shareholders, and motivate the former to maximize the value of the firm's stock. ² The way the incentive works is simple: employees are stimulated to drive up stock value because when this amount exceeds the exercise price on their options, they can buy and sell company shares, making a profit on the difference between the purchase price and the selling price. Referring to the example above, if the market price hits 105 euros, the options can be exercised and, if there are no sales restrictions, the stock option plan would allow the CEO to earn 500,000 euros.

The underlying logic here is based on the assumption that if an incentive plan inspires managers to generate higher share value, distributing this value among shareholders and employees would satisfy everyone involved. The effectiveness of a

stock option plan should be measured by comparing the amount of financial resources that the shareholders or the firm has to hand over to recipients with the greater economic value that they realize because of the incentive scheme.

The features of stock option plans vary widely, depending on the following variables:

- a) The number and qualification of the people involved. *Non-compensatory* or *broad-based stock option plans* are offered to all employees in a firm to encourage their identification with company's objectives, while *compensatory* or *executive stock option plans* are reserved exclusively for certain managers to encourage them to create value.
- b) The method of determining exercise price. Fixed stock option plans set exercise conditions when options are issued (i.e. on the grant date); in other words the grant date coincides with the date when exercise conditions are set (i.e. measurement date). Instead, variable stock option plans set the measurement date some time after the grant date (the measurement date may even correspond to the exercise date) on the basis of a pre-set parameter. Lastly, indexed stock option plans link the exercise price to an indicator which reflects the current stock market trend.
- c) The link between the stock option plan and performance variables. *Market performance plans* make the possibility of exercising options, and the final benefit to the employee, contingent on the trend in market value of the stock. With *enterprise performance plans*, instead, options may be exercised only after certain pre-set parameters, indicative of company performance, are fulfilled (e.g. turnover, ROI, ROE, etc.).
- d) Requisites for exploiting tax benefits, when applicable. *Incentive stock option plans* respect certain guidelines set down in US fiscal directives; for this reason recipients enjoy some tax benefits. *Non qualified stock option plans* do not adhere to guidelines set out in US tax regulations, and consequently do not offer any special fiscal benefits to grantees.
- 2) Non option stock plans or stock purchase plans.

Non option stock plans offer employees company stock or cash rewards. These plans include a wide array of tools, such as:

- a) *incentive plans*, where stock is granted as a reward for attaining certain goals;
- b) *share ownership plans*, where granting stock is part of a more general employee shareholding scheme.

Incentive plans include a wide range of incentive mechanisms. Phantom stocks, for example, involve a reward of stocks and/or cash, based on how much the price of the company's stock has risen during a given period of time, in addition to dividends that may have been distributed. This tool is very common when "real" stocks can not be



granted, in cases when, for example, the firm is not listed. Stock appreciation rights give the manager a cash award equal to the difference between market value of the stocks and exercise price. This solution is particularly popular not only with managers, who can avoid the financial lock-up that buying shares entails, but also with firms, which can cut transaction costs on transferring shares. Finally, performance shares grant stock awards to managers who contribute to bringing about significant medium-long term results.

Also, share ownership plans include a wide array of incentive mechanisms. Stock grants assign shares, free or under especially favorable conditions, to employees. Restricted stock plans give employees stocks that they have to sell back to the firm if specific corporate goals are not reached. In other words, these plans include lock-up clauses that prohibit sale of shares on the market. Employee Share Ownership Plans (ESOPs) are a special technical scheme (with fiscal incentives in the US) by which shares are issued to employees (usually for free) and a trust fund is established which handles stock for employees until they leave the firm.

The use and the characteristics of SIPs in Europe

In the US, a manager's pay package is traditionally made up of four components which correspond to different objectives: a fixed wage, variable short term compensation, variable long-term compensation and fringe benefits.³ In Europe – especially in continental countries – a manager's remuneration is less complex, and short and medium-long term variables have less impact. Over time, short term variable compensation has become more significant, and fringe benefits have begun to carry more weight. Nonetheless, up until a few years ago stock incentives linked to medium-long term company goals were almost non-existent.

This situation has dramatically changed. In fact, some recent empirical studies conducted both by consulting companies and management scholars showed that SIPs are now widely used in many European countries. In particular, two reports on the adoption of equity incentives by European and global companies showed that an increasing number of large firms consider these mechanisms a permanent and essential part of their remuneration package.⁴ If in Anglo-Saxon countries (such as the US and the UK) stock options and other forms of SIPs have been used by nearly all large companies for at least a decade, in many countries in continental Europe the growth of these incentives is more recent. However, data show that long-term incentives are now used by 80% or more of companies in continental Europe.

The most prevalent SIPs involve large stock options, granted by the great majority of companies.

These are followed by perfomance shares and restricted plans, chosen by a small number of companies in all countries with the exception of Netherlands and UK, where they are widely used. Use of stock option plans is now a common practice in most European countries for senior managers, and SIPs determine a significant portion of their total remuneration. Moreover, a large number of companies have extended participation in equity incentives to include lower level employees.

Following this general trend, some management scholars analyzed the dissemination and the characteristics of SIPs designed by the companies located in their own countries. A study focused on Germany shows that at the end of the '90s an increasing number of companies began to make executive compensation dependent on the market value. ⁵ Companies explain the introduction of equity incentives by referring to their widespread implementation in the US and the desire to bring management into line with the principle of shareholder value creation.

The plans in question usually include a very large number of employees to minimise the political costs that could arise if lower level managers do not participate to the incentive scheme. German Stock Corporation Law was not equipped to deal with these programmes and in some way obstructed their diffusion or forced companies to circumvent the hurdles using complicated and time consuming techniques, such as issuing conversion bonds instead of options. Since a new law passed in May 1998, option grants can now be fulfilled more easily and their dissemination has increased (probably also due to the fact that disclosure regulation remained unchanged).

An evaluation of the characteristics of SIPs introduced by German companies sheds doubt on their efficacy in attaining the desired objectives. The prevalent plans are not structured in such a way as to provide the right incentives, nor are they socially or economically sound.

A study on the French experience shows that in this country too during the '90s an increasing number of companies introduced equity incentives to align managers' and employees' interests with those of shareholders. ⁶ Equity incentives are now common among large companies; in fact, such mechanisms distribute an amout of money that exceeds other components of CEOs' compensation. The French situation gives rise to some concerns regarding both the process by which companies determine their remuneration practices and disclosure to investors. First, the composition of the remuneration committee is often influenced by the CEO, who may sometimes even sit on the committee. Second, shareholders have access to a limited amount of information and ignore the details of SIPs. Third, auditors are only responsible for giving an opinion on terms and conditions by which the exercise price is fixed.



A recent study on large Italian companies underlines both the increasing diffusion of SIPs and the prevalent characteristics of equity incentive plans. The event that prompted the adoption of these plans in Italy was the Tax Reform of January 1998 which provided strong incentives for beneficiaries.

The equity incentive plans: i) assign above all stock options and, less often, stocks; ii) traditionally involve managers of the company or of the group; iii) fix the exercise price at the average official share price on the stock exchange in the month prior to issuance (in compliance with fiscal regulations to allow access to tax benefits); iv) rarely link the right to exercise options to the attainment of either individual or company goals; v) are aimed at improving economic competitiveness of the pay package, increasing company loyalty and drive employees to create value for shareholders. Finally, the study underlines the risk of abuse associated with the diffusion of these instruments, because the limited information disclosed by companies does not allow investors to understand the details of the plans.

A study focused on UK shows that almost all large companies have stock option schemes for the board and senior management. In the UK, where companies have more experience in the use of these instruments, SIPs create clear financial incentives for CEOs to increase shareholder wealth.

Moreover, in this country executive options are increasingly characterised by performance criteria (such as earnings per share) that must be met before options can be exercised. Even in the UK, however, there are some doubts about the appropriate use of these instruments. On the one hand, some directors express concerns regarding the so called "line-of-sight", i.e. the ability of beneficiaries to influence share prices.

On the other hand, some investors suspect that companies introduce performance criteria to conform to the requirements of the Greenbury Code, but they do not impose demanding targets for exercising options. In sum, the UK experience confirms that the use of SIPs has been influenced by the spreading of US practices around the world and that these instruments involve complexities that are difficult to solve.

The continued spread of SIPs in European countries suggests that the question for the future is not whether to use equity incentives, but which type of plan to select and how to design its features, balacing company objectives and characteristics on the one hand, and local regulations and market practices on the other hand.

Future changes related to corporate financial accounting, tax treatment, public disclosure requirements and shareholders guidelines will probably reduce the effects of some environmental conditions that favored the diffusion of equity incentives around the world. Moreover, these changes will force many companies to closely

examine the design of SIPs in order to most effectively deploy them.

Discussion

The use of stock option plans by US public companies is currently at the heart of intense debate. Supporters consider these plans essential components of corporate governance which serve to align the interests of managers and shareholders. Opponents, instead, believe that such plans are utilized by top management to misappropriate a large portion of the firm's share value (see appendices, Exhibit 2: Stock incentive plans: from the optimal contracting view to the rent extraction view). In light of this debate it is wise to reflect on whether stock option plans undertaken by European firms are consistent with both these firms' characteristics, and with the stated objectives of the plan itself.

To answer this question, first reference must be made to a conceptual model that provides a guideline for SIP design based on three variables (a) institutional environment, in particular economic and fiscal regulations; (b) structural traits of the firm, first and foremost the ownership structure and company culture; (c) the objectives that management hopes to achieve with the plan (see Figure 1).

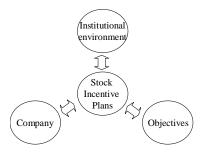


Figure 1. The conceptual model for designing effective stock incentive plans

The institutional environment deeply affects the features of the stock incentive plan, in particular by means of economic and fiscal regulations. Regarding the first, accounting practices for stock options have prompted their widespread use and determined their characteristics in several countries. In the US, for example, Opinion 25 of the Accounting Principle Board (APB) in 1975 stated that the cost of a stock option plan was equal to the difference between market value of stocks and the exercise price of options on the measurement date. According to this criterion, the firm sustains an expense only if the exercise price was lower than the market price on the grant date or the measurement date. This rule, only recently modified after much controversy, not only spurred the dissemination of stock option plans, but also favored the use of fixed plans rather than indexed plans. 9 Moreover, in Germany before the introduction of the "Gesetz zur Kontrolle

Trasparenz im Unternehmensbereich" in May 1998, it was not possible to directly assign stock options and, for this reason, companies created equity incentive plans for employees through the issuance of convertible bonds. These instruments mimic stock option plans because they allow the beneficiaries both the right to receive a periodic income and the right to convert bonds to shares at a fixed price (Bernhardt, 1999)

Fiscal regulations, too, have a considerable impact on the use of SIPs and how they are drawn up. In fact, these plans must comply with requirements set down by law in order to allow beneficiaries to take advantage of relative tax benefits (which usually entail income tax deferment or tax breaks). For example in Germany, the unfavourable tax treatment of stock option plans both for the company and the employees prevented the widespread dissemination of equity incentives. In France, the use of SIPs became common only when the law exempted gains resulting from the exercise of company share options from employees' payroll tax.

Naturally it is economically convenient to adopt plans that adhere to the guidelines set out by the institutional environment. However, if the intention is to design an effective governance or motivational tool (and not simply reduce labor costs and their impact on the profit and loss account ¹⁰) even more critical are the traits of the company in question and the goals it hopes to achieve with the plan. This is why the following pages describe the main objectives that a firm might attain by introducing a SIP, the company context where these objectives take on significance, along with the features of a plan that would be consistent with the attainment of these objectives.

Theoretical analysis and empirical evidence have brought to light the fact that SIPs can contribute to attaining the following objectives: 11

Align the interests of managers and shareholders. Encourage value creation in the medium to long term. Attract highly qualified personnel and cultivate their loyalty. Enhance employees' identification with the company.

a) Align the interests of managers and shareholders

The primary concern of American experts is that without a controlling shareholder, managers would be free to pursue their own economic interest to the detriment of the maximization of the shareholders value. 12 Certain mechanisms serve to mitigate this problem and bring managers' and shareholders' interests into line. 13 Operating outside the firm is the market for corporate control and the market for goods. On the inside, the composition and structure of the Board of Directors play a part (through the presence of independent directors, the separation of the role of Chairperson and CEO, the formation of ad hoc committees, etc.) along with the

increase in the debt ratio which restricts free cash flow and the introduction of SIPs which link top managers' compensation with share value. A recent study confirms the effectiveness of SIPs as tools linking managers' compensation to the company's share value. According to this study, in fact, stock option plans account for 98% of the correlation between the CEO's compensation and company performance, while base pay and bonuses only impact by 2%. ¹⁴

An empirical study has recently analysed the ownership structure of listed companies in a number of European countries using the information that should be disclosed according to the European Directive on relevant shareholdings. The results show that in listed companies in Austria, Belgium, Germany and Italy, the leading shareholder controls in average more than the 50% of voting rights; in the Netherlands, Spain and Sweden he or she controls a percentage of voting rights between 35% and 45%. Only in UK the leading shareholder does not play an important role, and he or she owns only the 9.9% of the voting rights, a percentage slightly higher than in the US. ¹⁵

The highly concentrated ownership structure typical of largest companies in continental Europe suggests that aligning interests of top managers and shareholders can be done effectively even with instruments other than SIPs. In fact, concentrated ownership structures allow majority shareholders to nominate themselves or appoint their own nominees as members of the Board of Directors. Consequently, managers are restricted in their pursuit of personal objectives to the detriment of shareholders. If anything, in this situation majority shareholders, who are often members of the Board or take on managerial roles in the firm, might grant themselves exceedingly generous stock option packages in order to gain control over a large portion of the firm's value.

In summary, in firms with a concentrated ownership structure the goal of aligning the interests of management and shareholders can be effectively achieved by using tools other than SIPs, which may instead play a complementary role. In this case such plans should exclusively target top managers who are not leading shareholders (directly or indirectly) of the company. Furthermore, these plans should be similar to those aimed at creating shareholder value (see the following point).

b) Encourage value creation in the medium to long term

SIPs can be created to encourage employees to have a more entrepreneurial attitude, and to pursue value creation in the medium to long term. In this case plans primarily focus on the firm's top management, since these executives control the managerial levers that can shape the process of value creation for the firm. However, these plans can be effectively opened up to a large number of



employees if: (a) the firm shows interesting growth potential; (b) several employees play key roles in implementing the company's business strategy; (c) managerial style and firm culture encourage active participation from all collaborators. ¹⁶

If the aim is to encourage capital growth in the medium to long term and to limit the chances that employees take on speculative behaviour in the short term, the vesting period has to involve a certain percentage of options over a 3-5 year period. Moreover, the plan has to include lock-up clauses that prohibit employees from immediately selling stock accorded them by the plan. ¹⁷

To highlight the link between employee behaviour and the value creation process, exercise rights on options can be subordinate to reaching certain company objectives (such as ROI or market share) which are fundamental to realising company strategy.

The number of options granted to recipients should be decided by taking into account both the minimum variable compensation required to motivate employees to create value, and the need of not creating an excessive wage gap among company employees. A reasonable compromise might be an incentive equal in value to a few years' salary.

Lastly, the exercise price should be equal to the market value of shares on the grant date. This price should also be linked to the fluctuations of a benchmark stock index, to disassociate the trend of share value from events having nothing to do with managers' actions¹⁸ (see appendices, Exhibit 3: Fixed or indexed stock option plans).

c) Attract high qualified personnel and cultivate their loyalty

The aim of SIPs might also be to attract highly qualified professionals and to cultivate their loyalty, especially when there is great demand for these people on the job market. The implicit motivational power of equity incentives plans brings about a process of self-selection, attracting people who are confident of their abilities and willing to risk part of their pay. If, on the other hand, a potential employee were afraid of not reaching company performance levels, he or she would choose not to work for the firm offering this kind of incentive plan.

SIPs not only promise higher monetary compensation when company goals are reached. Such plans also give employees the chance to fulfill their need for esteem and self-realization inherent to incentive mechanisms and associated with owning shares. What is more, in a job market where tools of this kind are common (such as Silicon Valley) a potential candidate may well turn down a job offer if the proposed pay package does not include an incentive plan.

In a normal business situation with a less than brilliant stock market, at present it does not appear that firms in Continental Europe need to offer SIPs to attract and keep high-level employees. These

instruments could be used, instead, when a firm is just starting up or is striving for a turnaround, i.e. when it is important to attract managers with a strong entrepreneurial instinct and to motivate them to create shareholder value.

However, this is not to say that in the future incentive plans will not become an indispensable tool for achieving company goals if they were to become a standard feature in pay packages for highlevel personnel (e.g. top managers). If this were the case, the SIP should include a short vesting period to allow employees to quickly become shareholders, and a lock-up period long enough to tie employees to the firm for an extended period time.

Enhance employees' identification with the company

Some firms, in particular those with a company culture which encourages active involvement, may implement SIPs to stimulate employees to interiorise company goals. In this case, the incentive plan would complement a set of managerial practices utilized to promote a sense of responsibility and entrepreneurship among employees.

In order for a similar plan to bring about the desired effects, top managers must be totally convinced of the benefits that can result. They must effectively communicate the rights and duties of "owners" to employees and give them periodically information on company performance. Management should also allow employee participation in decision-making processes. ¹⁹

To achieve this aim, the plan has to be addressed to all company or group personnel to avoid discrimination that might give rise to barriers or divisions between classes of employees. Usually only staff with minimal seniority or those with short-term contracts are excluded from the plan; this means shares are only distributed to people who have certain commitment level to the firm.

The plan in question should also assign shares rather than options to make the connection between the value of the incentive and the value of company shares immediately clear. Due to the inherent complexity involved in quantifying the value of stock options at a given point in time, such instruments are rarely used for lower-level employees — except a number of high tech companies in US.

To encourage employees to identify with medium to long term company goals, and to discourage short-term opportunistic behaviour, the plan should include a lock-up period from around 3 to 5 years. Also, the plan should grant a relatively small number of shares. This ensures that the personal wealth of employees is not overly sensitive to stock price variations, and that the value of shares held by shareholders is not excessively diluted. ²⁰ To deal with this trade-off, firms normally decide the number of shares to issue to each employee by looking at parameters related to the personal profile



of recipients, such as contract qualification, seniority, and annual income.

Lastly, the plan should set a relatively advantageous purchase price, somewhere between the nominal value and the market value of the stock. Or to encourage employees to subscribe, stocks could be issued at no charge.

Conclusions

The paper has both academic and managerial implications.

Academic implications. The paper aims at attracting the attention of management scholars to stock incentive plans put into effect by European firms. Such plans are an intrinsic aspect of Anglo-Saxon capitalism and they became commonplace across Continental Europe in the late '90s. Despite the importance this phenomenon has taken on and the risks associated with it, few studies have yet analysed the dissemination and characteristics of stock incentive plans outside of the US. A reason that partially explain the lack of empirical studies on this phenomenon is related to the arduous task of gathering the data needed to reconstruct the technical aspects of SIPs set up by European companies. In this regard, the supervisory and regulatory body of European Stock Exchanges should require that listed firms outline the main features of their plans in a detailed prospectus which should be made readily available to investors. Otherwise, not only scholars, but also investors are unable to understand the technical aspects of the incentive plan. Consequently they can not express an informed opinion on the effectiveness of the plan in question in contributing to reaching the company goals that inspired it. Despite this problem, the lack of empirical research on such a key tool, one that is subject of intense debate, represents a serious gap in management studies.

The paper also aims to stress that SIPs cannot be considered a homogeneous category of instruments, because there are major differences between, for example, stock option and non-stock option plans. Furthermore, even single equity incentive schemes (such as stock options plans) do not have homogeneous charateristics, and can be designed in different ways in order to achieve a wide array of objectives.

Theoretical models should recognize these differences and move from a universal approach, i.e. one that encourages the mere introduction of SIPs to align managers' and shareholders' interests, to a

contingency one, i.e. one that defines equity incentives plans in relation to certain company and environmental characteristics.

Managerial implications. Companies are realising that compensation practices are a strategic tool for improving their long-term performance.²¹ It is not surprising, then, that firms in Continental Europe have begun to utilize SIPs, though much later than their American counterparts.

The experiences underway in several European countries are an initial attempt to implement technically complex instruments. Designing such instruments, in fact, involves a number of hidden dangers that often lead to failed attempts to reach the company goals these plans were intended to achieve. Careless design can, in some cases, result in plans do not completely satisfy both shareholders and recipients.

Therefore, European firms should thoroughly study the costs and benefits associated with these tools before adopting them unquestioningly in the wake of American experience.

The theoretical model proposed here represents a useful tool for designing a stock incentive plan. This model shows how plans should be set up, taking into account the characteristics of the company, the goals it wishes to achieve with the plan, and the regulatory conditions set by the institutional environment.

In other words, the model underscores the fact that SIPs are not a cure-all for solving a number of business problems, nor should they be utilized to misappropriate large sums of money.

Only if we take on a contingency viewpoint, and see the needs of the firm on one hand and the potential of incentive plans on the other, can we design plans that produce desired results.

Equity incentive plans are complex instruments, because it is not simple to calculate the value of incentive granted to employees, especially if plans involve options.

There is also little transparency inherent to such plans, because sizeable sums of money could be transferred while leaving no trace on the company's books. For this reason, these tools should be designed following certain procedural guidelines to ensure that the process is an objective one.

For example, a *compensation committee* made up of independent administrators should oversee the design of the equity incentive plan, and to substantiate its effectiveness a *fairness opinion* should be sought from an independent expert.



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- ²² B.J. Hall, The pay to performance incentives of executive stock options", working paper, NBER, August, 1998.
- ²³ To achieve the same outcome with a plan that grants stock to employees, stock should not be rewarded until the end of the timeframe in question, that is, when the company can ascertain how much progress has actually been made toward reaching pre-set goals. In this way, the two types of plans tend to give rise to fairly comparable results.
- ²⁴ To avoid the risk of this aversion to distribution of profits, the SIP should explicitly take into account the size of the dividend awarded to allocate to shareholders in order to decide on compensation. For example, the exercise price could be modified on the basis of value shares would lose due to the distribution of wealth to shareholders.
- ²⁵ L.A. Bebchuk, J. Fried and D. Walker, Executive compensation in America: optimal contracting or extraction of rents?, NBER, working paper, December, 2001. L.A. Bebchuk, J. Fried and D. Walker, Managerial power and rent extraction in the design of executive compensation, NBER, working paper, July, 2002.
- ²⁶ J.C. de Swaan and N. Harper, Getting what you pay for with stock options, *McKinsey Quarterly*, n.1, 2003.



Appendices

Exhibit 1: The main differences between option and share plans

Though there are some basic similarities, plans that grant the right to subscribe or buy company shares differ from plans that issue company stock, either free or at below-market prices. Both link employees' compensation to the value of the firm's risk capital. However, there are several differences:

- a) Risk profile. The risk of lose of value (*downside risk*) is higher on options than on stock because if share prices dip below the exercise price, the holder of a stock option loses the entire value of the incentive, while with stock the investment value decreases proportionally to the reduction in the market value. For this reason, some managers (in addition to stock options) insist on a protection clause that guarantees a minimum compensation if the value of the stock makes it unprofitable to exercise the option.
- b) Motivational effect. Though both plans provide a direct link with share value created in the period, stock option plans are stronger motivators because for the same degree of variation in share value there is a relatively larger percentage variation in the amount of compensation. A significant leverage effect is innate to stock option plans, which grows as the exercise price rises. For the same value transferred to managers, an *at the money* option plan (i.e. exercise price equal to share value) has a 70% greater sensitivity that a stock granting plan. And an *out of the money* plan (i.e. exercise price greater than share value) has an even higher sensitivity. ²²
- c) Financial resources required. In stock granting plans, unless stock is free of charge, managers have to invest a set amount of money immediately, which is locked up for a certain period of time. In stock option plans, instead, managers invest only at a later date, and only if it is convenient to do so (that is, if share value is higher than the exercise price).
- d) Correlation with the attainment of certain company goals. When stocks are granted on the spot, there is no clear, direct link between compensation and specific goals the company seeks to achieve in the medium to long term (which may involve turnover, profit, cash flow, etc.). In the case of options, on the other hand, this link can be easily created by making the achievement of company goals a precondition to exercising options. ²³
- e) Impact of dividend policy. Unlike owning company shares, when managers hold stock options their attitude toward dividend policy changes, because the distribution of profits reduces the market value of shares and with it the value of options. Consequently, firms with stock option plans are more likely to buy back their own stock rather than distribute a high flow of dividends to shareholders. ²⁴

Exhibit 2: Stock incentive plans: from the optimal contracting view to the rent extraction view

The use of equity incentive plans is the topic of heated debate in the US. On one side there are supporters who assert that pay packages, specifically stock options, are vital tools for ensuring that large public companies function properly (this is

the so-called *optimal contracting view*). On the other side are opponents who consider these plans a way for top managers to misappropriate a sizeable portion of the wealth produced by the firm (the *rent extraction view*). ²⁵

Both sides recognize that the main problem of corporate governance in American public companies centers on the gap between the people who own cash flow rights (the shareholders) and those who control the most important company's decisions (the managers). However, supporters and opponents have different opinions on the effectiveness of SIPs set up by American companies to deal with this potential conflict of interest.

According to the first position, the Board of Directors is nominated by shareholders for the purpose of creating optimal conditions for managers to pursue shareholders' interests. The compensation scheme is one of the tools that the Board can use to reach this goal. The ideal pay package should not only attract and keep highly skilled executives, but should also give them a strong incentive to work for the shareholders' best interests. To attain these objectives, focus must center on the size of the compensation offered, and more importantly the makeup of the pay package, with particular attention to linking managers' compensation to share value. The effect of this link is both to attract managers who are willing to risk a part of their pay, and to motivate these managers to make decisions with the aim of enhancing the value of the company's shares.

Recently, some scholars have attacked this position, insisting that stock option plans are tools used by top management to misappropriate a large portion of the firm's share value. As proof, these experts point to the design process for such plans, as well as their features. As for the first factor, they argue that the bodies responsible for designing stock option plans, such as Boards of Directors or Compensation Committees, are strongly influenced by the CEO and corporate managers.

As regards the second point, scholars say that SIPs make the process of transferring wealth highly unintelligible from the outside. This is why such plans are especially well-suited to managerial misappropriation. In fact, SIPs motivate value creation to some extent, transfer a portion of wealth that is difficult to estimate, attract the public's attention only when options are exercised, do not appear on the balance sheets as an explicit cost, and enjoy favorable status from a taxation standpoint.

An analysis of the features of stock option plans that big American corporations offer to top managers seems to confirm this theory: almost no company links exercise price on options to a stock market or sector index; the exercise price on nearly all options is equal to the share value on the grant date; when market prices drop firms tend to cut the exercise price on options, while during a bull run this price remains unchanged; there are no rigid restrictions on selling shares acquired through exercising options, etc.

Neither market pressures (managerial work, corporate control and goods) nor the threat of legal action seem to be strong enough to ward off the risk of managerial misappropriation. The major impediment to this kind of behaviour is the disinclination of the Board to approve plans that public opinion may consider immoral.



Exhibit 3: Fixed or indexed stock option plans

The stated aim of SIPs is to create a direct connection between managers' compensation and the value of company stock, so as to motivate these people to do their utmost to create share value. However, this value does not depend solely on good decision-making by top managers. Value creation is also strongly impacted by variables beyond their control. In fact, a recent study conducted by a well-known consulting firm shows that 70% of the share value created by a company from 1991 till 2000 was the result of market and sector

variables; only 30% was due to particular traits of the individual firm. ²⁶ When fixed stock option plans are introduced (i.e. plans with a stable exercise price for the entire duration of the plan) there is a chance that firms reward undeserving managers who produced unsatisfactory results in a favorable stock market climate. Vice versa, other managers who play an active role in achieving brilliant results might receive no compensation if this happens coincides with a downturn on the stock market. Though it is not possible to completely isolate the effects that certain external variables have on stock market trends, stock option plans can be designed so that they are more or less consistent with the goal of creating share value. The most commonly used variable to shore up the relationship between managers' compensation and company performance is exercise price on options. Some companies attempt to solve this problem by setting a higher exercise price on options than the share price on grant date. The advantage of this method is that only managers who reach a minimum performance on share value creation are rewarded. However, this does not guarantee that a strong link is created between compensation and the differential between company share performance and the overall stock market trend. The most effective way to handle this problem is to design indexed stock option plans. This type of plan links the exercise price on options with the trends of certain variables. The most common procedure is to link the exercise price to a stock exchange index. In doing so this price fluctuates by the same percentage variation as the stock market from the grant date till the exercise date. A variation of this method is to adjust the change the stock index by using the firm's beta coefficient, which measures the variability of the value of the company's share capital with respect to the variability of the overall value of the stock market. An additional variation calls for linking the exercise price to an indicator for the sector in which the firm operates or to an index which represents trends in share prices of direct competitors.

