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STOCK OPTIONS: BETTER GOVERNANCE TO EASE MARKET INTEGRATION AND COMPETITIVENESS

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Abstract

As markets become global, corporate governance practices should follow in convergence. Yet pay-setting processes are falling behind. This research deals with a highly controversial issue in executive pay: stock options plans. It expects to contribute to the current debate on such a heated corporate governance matter by presenting a systematic comparative analysis of stock option design in large capitalization companies in the United States (U.S.) and Spain. Such companies are the entire population of the *Dow Jones Industrial Average* and the *Ibex 35* indices. The specific design features to be examined are: strike price, vesting period, option maturity, trading constraints following option granting and option repricing. A blend of the optimal contracting and the managerial power approaches are applied to explore for significant deviations from the incentive-alignment paradigm.

1. Introduction

Academics and practitioners alike are continuing to praise corporate governance as a crucial element in promoting sound and trustworthy firms, more than ever in this post-Enron/Parmalat environment. The identification of key issues in governance is a critical step towards gaining trust –and access to capital-in the global investment community. And executive compensation is one of these focal areas of modern corporate governance.

Executive compensation relies heavily on equity-based systems, so as to tie managers' wealth to firm value. In turn, employee ownership arguably has a positive impact on profitability. A stock option plan is one way to achieve employee share ownership. Such a system allows designated employees to benefit financially in the appreciation of their employer's stock through the purchase of an ownership interest in the business.

Many believe executives are better motivated if they have a stake in their company's stock performance. But careful attention should be paid to the compensation contract design, reflecting the board's ability –and willingness- to impose meaningful standards. For the most part, rewards have been so far constructed in a way that encourages management to show steep earnings growth, which in turn cultivates undue risk taking and even fraud. Contract design should play a central role to avoid the shift towards this shorter term, more volatile view.

The mainstream idea of incentive contracting is to align the interest of employer and employee, or principal and agent. Shareholders' (principals) goal is to see the value of their stock holdings increase, and granting stock options to management is one way of making managers (agents) focus on this issue.

Compensation systems serve three functions: to compensate managers for completed work, to reduce principal-agent costs by more closely aligning managers' interests with those of shareholders, and to recruit or retain management. Stock options are not the most efficient form of compensation to achieve all three goals: their comparative advantage lies in their ability to align incentives.

The fundamental objective of granting stock options is therefore to align management's interest with shareholders', alleviating the agency problem in the sense of Jensen and Meckling (1976). And evidence suggests that such is a growing concern for shareholders. According to data extracted from Compustat's ExecComp database using grant-date option values for the period 1992-99, stock options' share of executive total pay among U.S. S&P 500 companies, grew from 21% to 47%.

Stock options have therefore gained enormous popularity in recent years; they account for a significant share of the executive compensation package yet remain its fastest growing component. Building on their relevant role in executive pay practices, this research joins the debate around the efficient design of stock option contracts.

2. Purpose of this Research

The proposed study consists of a systematic comparative analysis of stock option design in large capitalization listed companies in the United States and Spain. The unit of analysis is therefore the stock option plan currently in place in such companies.

The rationale for the comparison is that stock options are a fairly widespread compensation practice in the U. S., which implies a much steeper learning curve compared to the Spanish case, where this pay system is still emergent. Recognizing for market and cultural differences, it is believed that stock option design in American companies can provide valuable insights towards increased incentive-alignment in Spanish firms.

The extensive ongoing debate among academics and practitioners around stock option plans providing outrageous compensation clearly de-linked from performance, accounts for the relevance of this study.

This research is essentially exploratory since there are no earlier studies of similar nature. The idea is to look for patterns in the contractual design of stock option plans, presumably deviating from the incentive-alignment paradigm. Even if prospective causes for such deviations are provided and interviews will be conducted to investigate these issues in more depth (explanatory research), rigorous causality studies and hypothesis testing should be subject of future research.

3. Research Objective

The focus of this research project is on large publicly traded companies. By conducting a comparative analysis of stock option design in the U.S. and Spain, this study aims at identifying those terms and conditions that give raise to agency problems by deviating from the incentive-alignment paradigm -maximizing incentives and minimizing compensation costs.

As the learning curve is much steeper in the U.S. -where stock options have been widely adopted-, the data collected from the American sample are likely to be used as benchmark to analyze the Spanish counterpart.

The ultimate goal of this research is to develop a systematic analysis of the contractual features that could be refined under an incentive-alignment perspective, according to the rationale provided by the joint application of the optimal contracting and the managerial power approaches. The specific features to be examined will be: strike price, vesting period, option maturity, trading constraints following option granting, and option repricing practices.

4. Theoretical framework

4.1 From Contractual Theory Downward

The dilemma lying at the very heart of recent corporate scandals was first identified by Adam Smith, and further discussed by Berle and Means in their seminal work 'The Modern Corporation and Private Property' (1932). They attribute the conflict of interest that leads to the so-called agency costs to the wide dispersion of shareholders that paves the way to increased managerial power.

Yet the ultimate theoretical foundation of this study is provided by the contractual theory of the firm. The modern theory of the firm as a nexus of contracts originated in Ronald Coase's insight that firms exist as less costly alternatives to market transactions. In a world of zero transaction costs, economic coordination would be achieved entirely by means of contracting among individuals in a free market. Because of the costs of negotiating and enforcing contracts, however, some coordination can be achieved more cheaply through firms.

This network of contracts is likely to give raise to conflicting interests. These conflicts that arise when people engage in cooperative endeavors are eventually due to people's self interests, as agency theory postulates (Jensen and Meckling, 1976). The fiduciary duties embedded in this agency relationship link one party that owns the asset (the principal) to another (the agent) that should manage it in the principal's best interest. Because such conflicts of interest cause problems and therefore losses to those involved, the parties themselves have a strong motivation to minimize these so-called *agency costs*. The conservation of value principle is the basic force that motivates both principal and agent to minimize the sum of the costs of writing and enforcing (implicit and explicit) contracts through monitoring and bonding.

This structure of principal and agent can be readily applied to model corporate relationships, clearly those of shareholders (principals) and managers (agents). Their misalignment of interests reaches its peak in large, publicly traded companies, where dispersed ownership leaves individual shareholders with only a fractional interest in the firm's profits. In such companies, rational-apathy induces shareholders to loose monitoring of managers, on top of actually having limited opportunities to observe management's actions. Under the assumption that monitoring is costly and imperfect, the agent has an incentive to consume perquisites (such as luxurious office space and jet aircraft) so long as she owns less than 100 percent of the firm. This is because she gets all or most of the benefits from the perquisite but bears no cost –or only a fraction through her ownership claims if any. Under this agency-driven incentive model, agency costs are mitigated when the risk-neutral manager increases her stockholding, so she internalizes the cost of the perquisites consumed. Linking compensation to performance –for instance through stock option plans-, is viewed as an efficient means to prompt managers to increase their share of ownership in the firm, and therefore act as owners.

The choice of compensation mix emerges then as a remedy for the agency costs generated by the misalignment of management and shareholder interests in the dispersed ownership company. Contract design and the pay-setting process aimed at fixing agency problems are explained by two at times diverging, at times complementary approaches: the so-called 'optimal contracting' and 'managerial power'.

The dominant theory in the executive compensation literature is that referred to as 'the optimal contracting approach'. Under this approach, executive compensation practices in large, listed companies are viewed as being designed to minimize agency costs arising in the relationship between executives (agents) and shareholders (principals). To bridge the gap between ownership and control, equity-based compensation –for instance a stock option plan- is granted to reduce the moral hazard problem coming from executives owing too little of the firm they manage.

Another perspective into the study of executive compensation is the so-called 'managerial power approach', that focuses on the role of managers in shaping executive pay practices. Evidence suggests that executive compensation is significantly influenced by managerial power and by managers' interest in extracting rents.

4.2 The Incentive-Alignment Paradigm

Attention should be drawn to the low correlation between pay and performance. Compensation that grows faster than performance accounts for its failure as an incentive-alignment tool. The broader picture should be taken into account, the whole curve that relates compensation with performance rather than just the lowest tier. It is about a steeper curve, not just about the sign of the slope.

Pay for performance is a repeated cliché in boardrooms, yet easier said than done. The reason that is likely to account for such recurrent failure is that companies seldom look at the historical relationship between executive pay and corporate performance, along with its projected future relationship following changes in compensation practices.

The incentive-alignment paradigm hereby proposed rests on a straightforward but efficient premise: executive pay should correlate with stock price net of market factors. One way to do so is to benchmark stock price appreciation over the long run against a peer group of companies that represent competitors for market, capital and executive talent. Such could be the overall yardstick; particular company and market situations might account for justified deviations. Those specifics cannot be incorporated in a construct like incentive-alignment, which is broad by nature. However, performance-based features like making payoff and vesting contingent on achieving certain goals, or regulation of trading following option granting and exercising or ban on repricing, are contractual steps in the right direction.

The theoretical framework proposed, with particular emphasis on the 'optimal contracting' and 'managerial power' approaches, will be confronted with the data previously collected from the different sources, in the process of identifying shortfalls from incentive-alignment in stock option plans.

5. Stock Option Design

Stock option plans are the large contracts that govern stock options programs. Stock option agreements are the individual option grants, vesting schedules, and other employee-specific information.

5.1 Terms under analysis

Executive stock options offer large potential wealth, but they come with the risk of overexposure to the employer's stock. A disciplined framework for deciding the strike price, the vesting requirements, the time to expiration, the trading constraints and the possibility of repricing can help shareholders and option holders balance out their benefits and risks.

6. Proposed Approach

6.1 Methodology

This research draws on the triangulation of data collection and analysis, followed by semi-structured interviews, thereby ensuring reliability and internal and construct validity. Both qualitative and quantitative sources will be used, from primary documents (companies' public filings), secondary documents (such as available surveys and media reports) to cross-sectional interviews with key actors in the stock option contract design. Multiple sources of evidence are likely to diminish any propensity for bias. The basic proposition is to link all data collected to theory in an inductive process.

The study will be conducted on large, publicly traded firms. In the markets targeted for this comparative analysis, the proxy for such large, listed companies, is the stock market index. The most representative indices have been chosen, i.e., the *Dow Jones Industrial Average (DJIA)* for the United States and the *Ibex 35* for Spain. Such indices track the performance of a specific portfolio of large capitalization stocks considered to represent those particular markets.

The choice of large capitalization stocks is due to the fact that it is indeed in large publicly traded companies -where dispersed ownership is at its highest- that stock option plans are widely adopted as a remedy for agency problems.

Additionally, by observing the whole population of companies included in the index, the usual burdens arising from sample selection and significance are bypassed. Inferential error caused by sampling error is eliminated since data are gathered from the entire population under study.

6.2 A word on Triangulation

Triangulation is the application and combination of several research methodologies in the study of the same phenomenon. It has become the preferred line in the social sciences, as an alternative to traditional criteria like reliability (repeatability) and validity (closeness to the truth). The strength of qualitative research lies in validity –that is, good qualitative research, using a selection of data collection methods, really should touch the core of what is going on rather than just skimming the surface. The validity - whether the findings in the study are true and certain- of qualitative research methods is greatly improved by using a combination of research methods, as proposed by triangulation.

This study blends two types of triangulation: data triangulation and methodological triangulation. Data triangulation involves the use of different sources of data, while methodological triangulation literally means the use of multiple qualitative and/or quantitative methods. If the findings from all the methods –mainly document analysis and interviewing as far as this research- draw the same or similar conclusions, then validity has been established.

By altering the research methods in light of the information resulting from the broad-based data analysis, the study follows an iterative approach sensible to the richness of the subject matter. Such sensitivity is deemed necessary to explore the drivers of stock option design in the companies selected for the interview process.

6.3 About the sample

In these large publicly held firms –often called 'Berle and Means'-type as a result of such authors studying the consequences of separation between widespread ownership and control in modern corporations- the monitoring of management by suppliers of funds relies on open contracts and principal-agent structures. Such companies with disseminated capital are the dominant type in the United States and Great Britain, while account for an increasing share of the market in Continental Europe following firms' improved access to capital markets as a source of financing. Specifically in Spain, for the proposed market proxy, 18 out the 35 firms included in the index show this disseminated ownership structure (Trías, 2003).

Average firm size in the samples is not considered binding. The comparison is still appropriate as long as each firm's market capitalization is large enough to be included in the referred stock market composites. Even if it is a well-known fact that salaries for CEOs are positively related to firm size (traditionally measured using company revenues), this study does not deal with the absolute monetary value of the executive's salary but rather with its relative form, i.e., the weight of stock option compensation and specifically the contractual design of such plans.

The first relevant conclusion that can be drawn from the samples is the relative lower adoption of stock option plans by large cap firms in Spain. While a 100 percent of companies listed in the *DJIA* grant stock options, this figure drops to 57,14 percent (20 out of 35) for the *Ibex 35* composite. It should be noted that for the purpose of this study, stock option and stock appreciation right plans are equally considered in analyzing their contractual design.

6.3.1 What is an index?

An index is a statistical measure of the changes in a portfolio of stocks representing a portion of the overall market. It would be too difficult to track every single security trading in the market. To get around this, a smaller sample representative of the whole market is taken.

The *Dow Jones Industrial Average (DJIA)* contains 30 of the largest and most influential companies in the U.S.. It is arguably the most recognized in the world and the one that is frequently referred to as 'The Market'. The *DJIA* covers all major areas of the U.S. economy, except for the transportation and utility sectors. The original *DJIA* was simply an average of stock prices. Today it uses a price-weighted methodology. In this system, the weight of each security is the stock's price relative to the sum of all the stock prices. The problem with price-based weighting is that a stock split changes the weight of a company in the index, even though there is no fundamental change in the business.

Most indices –such as the *Ibex 35*- weight companies based on market capitalization. If a company's market capitalization is 1.000 and the value of all stocks in the index is 100.000, then the company would be worth 1% of the index. These types of systems are made possible by computers –most are calculated by the minute and so are very accurate reflections of the market.

The Ibex 35 gathers the 35 most liquid stocks trading in the network of Spanish stock exchanges, called *S.I.B.E. (Sistema de Interconexión Bursátil)*, throughout a given time frame. It is rebalanced every six months to make sure that all stocks included in the index meet liquidity and market capitalization requirements.

6.4 Prospective semi-structured interviews

If, as expected, this comparative study shows noteworthy deviations from the incentive-alignment paradigm in Spanish firms, further analysis will follow. A series of semi-structured interviews will be conducted with management and board members of such companies along with compensation consultants around stock option design and implementation issues. The particular companies as well as the potential questions will result from the broad-based comparative analysis.

Semi-structured interviews closely meet the needs of this research as they allow the interviewee to express her opinions, concerns and feelings. Even though disclosure of compensation practices is mandatory for publicly traded companies, specifics driving the company's pay philosophy remain unpublished. Those drivers are likely to shed light on compensation contract design, particularly on stock option's controversial terms and conditions. The less-intrusive approach of this technique makes it especially useful to deal with sensitive issues, such as executive compensation.

Unlike the questionnaire framework, where detailed questions are formulated ahead of time, semi-structured interviewing starts with more general questions or topics. Their fairly open framework favors a two-way communication that allows the conversation to flow where it needs in order to gain relevant –and often hidden- information for the study.

Semi-structured interviews can be easily used in combination with other methods, making them particularly suitable to the triangulation approach proposed.

The following table summarizes its major benefits along with the disadvantages that should be taken into account:

Table 1: Semi-structured interviews pros and cons

Advantages	*Disadvantages*
Gives freedom to explore views or opinions in more detail	Must be carefully planned so as not to make questions prescriptive
Allow comparisons	Sample should be large enough for comparisons to be drawn
Confirm what is already know but also provides opportunity for learning	Time consuming and resource intensive
Can be used for sensitive topics	Confidentiality has to be ensured

Source: Proprietary

7. Regulatory Framework

7.1 Overall U.S.-Spain Comparative Analysis

A remarkable pro-active regulatory approach to corporate governance issues has emerged in Spain. This may come as a result of a relative lack of commitment on the side of listed companies to bind themselves by non-enforceable bodies like Codes of Best Practices and other recommendations of similar nature.

The (mis)perception of corporate governance as an investment issue, and more specifically as a means to compete for funding in the market is likely to be the appropriate approach to this problem. As per the quality and quantity of information on how they are managed and their overall degree of disclosure, corporate governance does not seem to rank high in corporate strategy for Spanish firms. This, in turn, may have triggered the need for an increased regulatory approach of enforceable nature.

On the other side of the Atlantic, there seems to be a more receptive approach to corporate governance as a competitive advantage in the access to capital markets. The higher comparative dispersion of capital in U.S. relative to Spanish firms is likely to account for a fair share of this noticeable difference, which in turn induces the former to rely more heavily on capital market financing. As a result, U.S. firms show a faster adoption of corporate governance best practices, particularly in terms of information disclosure. Accordingly, regulation is likely to come for the most part ‘from within’ –for instance in the form of Stock Exchange requirements- rather than under general laws or similar government-driven regulation.

Even if corporate scandals may suggest the need for more active, preventive regulation, it should be taken into account that increased regulation implies a trade-off between certainty –proper of its mandatory nature- and restraining the initiative and often broader scope of self-regulated agents.

The business law along with the labor law and tax treatment on stock options will be extensively discussed in the final paper.

8. Accounting Debate

The accounting rules for stock options have received a great deal of attention in the past few years and now are back on the table. Those in favor of expensing the options—something not currently required—argue that options are a form of compensation and therefore should be expensed. They claim that because options were not expensed, stock prices were artificially high and contributed to the recently burst "bubble" in the market.

Critics of mandated expensing -for the most part, companies in the technology sector- argue in turn that so doing will depress earnings and thus make it more difficult to raise capital and retain employees.

Others just argue that provided there is full disclosure -either as a footnote or as charge to earnings-, the market is indifferent to the accounting rules for stock options. In theory this view may be justified. In practice, however, information that is disclosed but remains off the accounting statements is unlikely to be fully incorporated into the stock price.

Updated insights on this relevant issue will be presented in the thesis paper.

9. Conclusions

Executive stock options offer large shared benefits for both management and shareholders, but unless carefully designed, their potential may evaporate.

By developing a systematic comparative analysis of stock option design in large capitalization listed companies in the U.S. and Spain, this explanatory research expects to contribute to the current debate on stock options as efficient corporate governance tools. A blend of the optimal contracting and the managerial power approaches will be applied to identify significant deviations from the incentive-alignment paradigm.

The bottom line for executive compensation is that investors who railed at overly generous stock-option grants are likely to also rail at any other seemingly outrageous compensation plan. The acid test of a long-term incentive-compensation plan should provide the right answer to the following question: Is it designed to deliver a set percentage of monetary value to an executive -regardless of what happens to the company- or is it designed to reward good performance? Plans that serve the latter purpose stand a good chance of overcoming the toughest shareholder activist.

Many skeptics have criticized options because they motivate managers to boost short-term share prices at the expense of long-term shareholder value (Elson, Helms and Moncus, 2002). However, stock options are useful because they tie executive compensation to firm's profitability, increase management's appetite for risk by granting a proprietary interest in the company and minimize turnover rates (Johnson and Tian (b), 2000). Besides, as noted by Bebchuk, Fried and Walker (2002), even if stock-based incentives may motivate some to influence stock prices, indeed no contract will perfectly align managers' and shareholders' interests.

Leads to future research are also suggested throughout the study. In particular, the effects of board's stock ownership on executive pay are a relevant issue that offers ample room for further research. Cyert, Kang and Kumer (2002) have shown for instance that CEO pay is negatively correlated to the share ownership of the board's compensation committee. Another interesting finding posted by these authors that could be tested on a Spanish sample, is that CEO pay is 20-40 percent higher if the CEO is the chairman of the board. Also dealing with ownership structure, Benz, Kucher and Stutzer (2001) show that the presence of a large outside shareholder is likely to result in closer monitoring and in turn reduce managers' influence over their compensation. Along similar grounds, Hartzell and Starks (2002) find that more concentrated institutional ownership leads to lower executive compensation. Such claims can certainly lead to further empirical research.