

MANAGERIAL APPRAISAL AND COMPENSATION: THE CASE OF SPAIN

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RESEARCH PAPER No 413 BIS March, 2000

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Abstract

This paper explores some fundamental tasks associated with corporate governance: manager appraisal and compensation. Most of the empirical research in this area has been centered on Anglo-Saxon countries. Some European countries, such as Spain, have a very different governance tradition. Given this context, the work presented here has two objectives: 1. To describe existing appraisal and compensation practices in Spain, comparing them with those used in the USA. 2. To study the determinants of CEO compensation, and the relationship between CEO compensation and certain Board practices, using agency theory.

KEY WORDS: Appraisal, compensation, Spain, agency.

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I. Introduction

The issue of top management appraisal and compensation has received widespread attention, both from researchers and from society at large. The large sums of money paid to some CEOs during the 1990s while, at the same time, companies were improving their results by downsizing and restructuring have drawn a lot of public criticism (for instance, *Business Week*, 1997). The critical focus has extended to the Boards of Directors that awarded all the stock options that, once exercised, explain such large sums of money.

Research on top management compensation has been under way for more than 70 years and has produced more than 300 studies, reviewed by Gómez-Mejía (1994) and Gómez-Mejía and Wiseman (1997). The *Academy of Management Journal* has even set up a Special Research Forum on Managerial Compensation and Performance (April 1998).

Against this background, there can be no doubt that this is an important topic today. Top executives have great influence on strategic decisions, implementation issues and, therefore, firm performance. The main responsibility of the Board of Directors is to supervise the top management team and their strategic management of the firm. To do this, Boards of Directors use appraisal and compensation systems as a mechanism to align executive incentives with the best interests of the firm's strategy.

In this paper we focus on the way boards use these mechanisms to supervise the top management team. Our aim is to find out how boards use appraisal and compensation systems, and what are the determinants of CEO compensation.

Most of the existing empirical studies are based on Anglo-Saxon economies, particularly the US. In Spain, studies of this kind are almost non-existent, though recently we have seen some first steps in this direction (e.g. Ortin and Salas, 1997 and 1998).

Studies of governance practices in Spain are also very thin on the ground. Alvarez, Gallo and Ricart (1999), working in the context of a broader study of governance practices in Spain, looked at various aspects of the roles, characteristics, composition and processes of Boards of Directors, Executive Committees and CEOs. However, any study of governance practices is incomplete if it does not explicitly consider the processes these bodies use to exert their influence on the organization. One important set of processes is that related to "managing managers", i.e. the systems used to manage the company's top management team. In this paper we report some of our conclusions regarding the use of two such processes: appraisal systems and compensation systems. We study the current state of the use of appraisal and incentive systems for top executives in Spain, and we use these data to examine the determinants of CEO compensation.

The paper is organized as follows: Section II explains the sample we have used, the questionnaire, and the broader context of our research. Section III presents current practice in manager appraisal in Spain and compares it with standard practice in the US. It also discusses the limited use of incentive compensation in Spanish companies.

Section IV analyzes, based on an agency model, the determinants of incentive compensation for CEOs. We find that most of the standard hypotheses formulated in other contexts hold for Spain, in spite of the insufficient use of these practices. Finally, Section V offers some conclusions.

II. The questionnaire and the sample

The information needed to carry out the investigation was obtained by means of a questionnaire (reproduced in Appendix 1), adapted from the broader study on governance practices reported in Alvarez, Gallo and Ricart (1999). Obviously, in this paper we use only those parts of the questionnaire that relate to the issues under study. However, as our aim is to study appraisal and compensation systems in relation to the use that CEOs and Boards actually make of them, we shall use information from different parts of the questionnaire.

The survey was sent to a total of 5,565 large and medium-sized companies. Specifically, this universe was obtained from the Dun & Bradstreet database, taking all the companies that had invoiced more than 3,000 million pesetas in 1995 or that had more than 150 employees (or that met both requirements simultaneously).

498 companies answered the questionnaire, giving a response rate of 9%. Together these companies represent a sales turnover of 10.1 trillion pesetas and a total of 444,948 employees (3.7% of the Spanish workforce in 1995). This is probably the largest sample ever obtained for the purpose of researching governance practices in Spain.

The questionnaire was divided into four parts. The first part asked for some general information –the data used so far to define the sample. The second part asked for information about governance and management bodies: Board of Directors, Executive Committee, and CEO. The response to Question 18 is of particular interest, as it tells us how the responsibilities are distributed among these three bodies (see Alvarez, Gallo, and Ricart, 1999). The third part concerned the responsibility structure. And the fourth part contained the main questions about appraisal and compensation systems. Elsewhere (Alvarez, Gallo, and Ricart, 1999) we have reported on governance practices in Spain. Here we shall concentrate on the last part of the questionnaire, although we shall relate it to other parts when we come to analyze the determinants of CEO compensation.

Some cautions are necessary about the questionnaire. The questionnaire was sent to the Chairman or the CEO. The idea was that, although a single person filled in the questionnaire, his or her position would be high enough to give an overall view of the company. As we can see in Table 2.1, this is the case in our sample. Fourteen percent of those who answered were Chairman of the Board of Directors, 55% were CEO, and only in 13% of cases did another manager answer the questionnaire.

| Chairman of the Board of Directors | 14% |
|------------------------------------|-----|
| CEO | 55% |
| Director | 11% |
| Manager | 13% |
| Other | 6% |

Table 2.1. Who answered the questionnaire?

We have classified the data for analysis in three ways:

- 1) *Type of ownership*. The person who answered the questionnaire self-classified his or her company. The choices were: Family business, State-owned enterprise, Subsidiary of a foreign multinational, or other not included in any of these groups. We denoted this last type of firm as "Non-family" because the companies in this group are Spanish private companies not controlled by a family.
- 2 *Type of structure*, which can be functional, divisional, or matrix/network.
- 3 Size by number of employees or sales.

We analyzed the relationship between size, type of ownership and structure to check the validity of the sample (Table 2.2). It can be seen that the State-owned and Family companies are smaller than the other types. By type of structure, the functional companies are the smallest.

| | | Type of ownership | | | | | |
|-----------|---------------|---|-----------|-----------|--|--|--|
| Averages | Multinational | Multinational State-owned Family N | | | | | |
| Employees | 765.94 | 1,050.29 | 565.81 | 1,384.32 | | | |
| Sales* | 22,205.30 | 22,205.30 10,988.3 11,867.2 18,096 | | | | | |
| | | Type of structure | | | | | |
| | | Functional Divisional M | | | | | |
| Employees | | 481.9 | 992.7 | 1,077.70 | | | |
| Sales* | | 11,912.60 | 20,642.60 | 24,518.60 | | | |

Table 2.2. Relationship between size, type of ownership and structure

* In million pesetas.

** Numbers in bold indicate significant results (p < 0.05).

We studied whether there were any differences in profitability or productivity in the companies that make up the sample, according to the above typology (structure, ownership and size). We used the Profits/Sales ratio as an indicator of profitability. The average for the total sample is 5.55%, with a standard deviation of 7.2%. We found no statistically significant differences, as can be seen in Table 2.3.

| | Profits/Sales | | | | | | | | |
|-----------------------|------------------------------------|---|---------|-------|---------|--|--|--|--|
| | Type of ownership | | | | | | | | |
| | Multinational | Multinational State-owned Family Non-family Total | | | | | | | |
| Number of companies | 141 | 27 | 99 | 124 | 391 | | | | |
| Average profitability | 0.0480 0.0515 0.0566 0.0642 0.0555 | | | | | | | | |
| Standard deviation | 0.0621 | 0.1367 | 0.06118 | 0.07 | 0.07232 | | | | |
| р | 0.896 | 0.978 | 0.705 | 0.425 | | | | | |

Table 2.3. Profitability by Type of Ownership

Another of the ratios studied is Sales Turnover/Employee as an indicator of productivity. The overall average is 45.9 million pesetas per employee. We looked for significant differences based on type of ownership, type of structure, or size. The only statistically significant difference we found (Table 2.4) is that average sales per employee is 30.8 million in the Family businesses, whereas in the Non-family and Multinational companies it is over 51 million.

| Sales (in millions of ptas.)/Employee | | | | | | | | |
|---|---|--------------|-----|-------|-----|--|--|--|
| | Ту | pe of owners | nip | | | | | |
| Multinational State-owned Family Non-family Total | | | | | | | | |
| Number of companies | 158 | 33 | 120 | 133 | 444 | | | |
| Average | 51.3 46.4 30.8 53.0 45.9 | | | | | | | |
| Standard deviation | 5.5 14.9 2.7 6.5 | | | | | | | |
| Z | -0.85 | -0.03 | 3.6 | -0.98 | | | | |

Table 2.4. Productivity and Type of Ownership (Numbers in **bold** are significant at p<0.05)

One possible explanation of this result is that, at present, most Family businesses still operate in labor-intensive industries. The result confirms that although Spanish Family businesses are following the general trend in Europe of increasing sales per employee, they are still some years behind.

In the rest of the paper we use data from the last part of the questionnaire, interlinked with some governance issues, to analyze appraisal and compensation systems in Spain.

III. The Board's role in managing managers

One of the key responsibilities and roles of any Board is the management of the Top Management Team, and in particular of the CEO. In order to be actively involved in the key task of ensuring that the company has the right team of managers to put its strategy into practice, the Board needs to use certain management systems. And the most important of these are those directly related to managerial behavior.

In this paper we shall study two of these key systems: Manager appraisal and compensation. Both are very important for this key task of the Board. Appraisal is necessary for two purposes: On the one hand, appraisal of managers' performance is a key ingredient of the reward system and a way to improve individual and collective performance. We also rely on appraisal to orient each individual manager's career and to be sure that we are developing our human resources to build the team we will need in the future. Remember that the Board is there not to manage the company but to ensure it has the right strategy and a team capable of putting that strategy into effect.

Compensation is another key element of a firm's reward system and has a very strong influence on the behavior of its top management team. It is important to know the form, composition, level, characteristics, determinants, etc. of compensation if we wish to understand the real use Boards make of this powerful mechanism for managing the top management team.

In an earlier study (Alvarez, Gallo, and Ricart, 1999) we found that the level of involvement of the Board of Directors in decisions relating to the selection, appraisal, compensation, and separation of key managers was relatively low, as only around 50% of the Boards in our sample took decisions in such matters. The percentage was particularly low with regard to appraisal (45%).

In this section, we will study the practices actually used today and their main determinants. The section is divided into two parts. In the first part, we will describe current appraisal practices in Spain and compare them with the practices used in the USA. In the second part, we will study compensation practices. The following section will be devoted to the determinants of CEO compensation and the relationship between CEO compensation and Board practices.

Appraisal (1)

The most traditional and best-known personnel appraisal systems originated in the United States as a consequence of legal requirements: a series of lawsuits over discriminatory work efficiency appraisals generated a body of legislation. In 1978, the United States Congress approved the Civil Service Reform Act, which made formal appraisal systems obligatory for most federal agencies. In 1992, in a survey of private Fortune 100 companies, it was shown that 95% had a formal personnel appraisal system (Wilson, 1995). In another survey conducted in 1996 and answered by 756 American firms, it was shown that 95% had appraisal systems for middle managers and 83%, for senior managers (Bohl, 1996).

⁽¹⁾ This section is based on Alvarez, Gallo, and Ricart, *Prácticas de Gobierno en España*, Estudios y Ediciones IESE, 1999. Many of the ideas were previously developed by J. L. Alvarez.

The results we obtained from our survey reveal that the situation in Spain is not on a par with that in the US. The first question in this section asked the companies whether they had a formal appraisal system for their managers. As Table 3.1 shows, only 50% have established such systems. Bearing in mind the size of the companies in the sample (sales above 3,000 million pesetas and/or more than 150 workers), this result is very significant: formal manager appraisal systems are not widely used in Spain. This is all the more significant if we consider that the practices of the companies in our sample, given their size, can be assumed to be more advanced than those of Spanish companies in general.

| Does your company have a formal manager appraisal system? | | | | | |
|---|------------------|-------|--|--|--|
| | | YES | | | |
| | | 49.4% | | | |
| Type of ownership | Multinational | 62.1% | | | |
| | State-owned | 51.3% | | | |
| | Family | 27.4% | | | |
| | Non-family | 52.2% | | | |
| Type of structure | Functional | 34.0% | | | |
| | Divisional | 60.5% | | | |
| | Matrix | 62.3% | | | |
| Total sales | more than 10,000 | 59.0% | | | |
| | 5,000-10,000 | 49.6% | | | |
| | less than 5,000 | 36.8% | | | |
| Number of employees | more than 500 | 61.3% | | | |
| | 200-500 | 49.0% | | | |
| | less than 200 | 39.2% | | | |

Table 3.1. Does your company have a formal manager appraisal system?

Looking at the data by type of ownership, we find that 62% of the Multinational firms have formal appraisal systems. In the case of State-owned and Non-family firms the percentage is above 50%. Finally, Family businesses behave differently, with only 27% using formal systems. Again, Family businesses adopt practices that we could describe as less "systematized" or less formal.

There are also differences according to type of structure. Only 34% of the companies with a functional organization have formal appraisal systems. In contrast, the figure grows to 60% for companies with more complex and highly differentiated structures.

These findings reflect the existence of a correlation between type of ownership and responsibility structure: Family businesses are more likely to adopt a functional structure, while Multinational and Non-family businesses tend to have a divisional or matrix structure. Higher structural complexity may be expected to require the use of more sophisticated integration mechanisms, so companies with a divisional or matrix structure should rely more on the use of appraisal systems.

Size also plays a role in the adoption of formal appraisal systems. Large companies with more than 500 employees or a turnover above 10,000 million pesetas have a rate of adoption closer to 60%, while small companies, with a turnover under 5,000 million or fewer than 200 employees, adopt such systems in less than 40% of cases. However, the use of formal systems can be considered very low for all sizes of company in our sample.

Sometimes, particularly in small companies, managers argue that a formal system is not needed because they all know one another and perform appraisals on a daily basis. We believe this line of argument to be mistaken. First, a regular, written formal system always offers better protection against arbitrariness and discrimination, which are more common in small organizations, where the power differences are more pronounced. Second, daily assessments are necessary but not sufficient. The attention and concentration demanded by a regular, written system complements the daily assessment and development of subordinates. Finally, an informal system does not provide the same commitment and rigor as a written system.

There have been several empirical studies of the positive impact of performance appraisals on a company's financial results, although none of them is absolutely conclusive. The results of our study suggest that companies which use formal appraisal systems are more profitable than those which do not (6.4% vs. 5.0%) (2). If we analyze profitability by type of ownership, we find that the differences are significant in State-owned and Non-family companies, while in Family businesses and Multinational firms the manager appraisal system does not have a significant impact.

| PROFITS / SALES ratio | | | | | | |
|-----------------------|----------------------------------|-------------------------------------|--|--|--|--|
| | Companies with formal systems | Companies without formal systems | | | | |
| MULTINATIONAL | 5.26% | 4.5% | | | | |
| STATE-OWNED | 10.22% | -1.4% | | | | |
| FAMILY | 5% | 6.2% | | | | |
| NON-FAMILY | 7.9% | 5.0% | | | | |
| TOTAL | 6.4% | 5.0% | | | | |

Table 3.2. Profit impact of formal appraisal systems(Numbers in bold are significant at p<0.05)</td>

One important aspect of the assessment process is deciding who should be included in it. Latham and Wixley (1993) study the characteristics, advantages and disadvantages of the most common practices discussed below.

The most common practice is appraisal by the immediate superior. This has some advantages in hierarchical organizations as the superior is responsible for his or her subordinates' development and compensation. He or she therefore has the knowledge and motivation to carry out the appraisal. However, experience shows that appraisals tend to be biased by the way the superior would have done the job him or herself, or are based merely on results.

Other less standard practices are rapidly gaining popularity in the US. One of them is peer appraisal. This was still rare in the 80s. Antonioni (1996) reports that 18% of US companies

use peer information in their appraisals. And the proportion is higher among the more advanced companies. Peer appraisals have many advantages. Peers tend to have better information and knowledge to carry out the appraisal, as well as a clearer understanding of the task performed by the person being appraised. Furthermore, one can measure several parameters and obtain a more reliable estimation. However, it is advisable that peer appraisal be carried out in conjunction with appraisal by the superior, and it is very important that it be anonymous.

Another practice that is gaining ground is subordinate appraisal. This kind of appraisal shares some of the advantages of peer appraisal and is an important source of feedback for management. Bernardin *et al.* (1993) indicate that subordinate appraisal is very useful for judging the way a superior manages and relates to subordinates but should not be used to assess other managerial practices (such as budgeting or resource allocation), where subordinates do not have criteria on which to base a judgment.

Lastly, we are currently seeing the emergence of integrative systems such as 360 degree appraisal, which includes all of the above plus self-assessment by the appraisee. Usually, the superior uses all of this information to prepare the feedback interview. Companies such as ATT, Bank of America, GE, Caterpillar, Chrysler, and others use this system. Interviews with 280 Mid-West companies revealed that 12% of them used 360° appraisal. Even in Spain, some companies such as AGF-Unión y el Fénix and Campofrío are experimenting with them. Some researchers indicate that employees are reluctant to be appraised in this way if promotion decisions are at stake. However, 90% of the companies using it use it as a tool to decide wage increases, promotions and separations (Bohl, 1996).

In 360° appraisal systems, certain procedural elements are very important. Identifiable information should be kept anonymous; evaluators should be selected by objective criteria; feedback should be given in writing. Antonioni (1996) reports that between 15% and 20% of managers receive unexpected negative feedback. Therefore, feedback and associated action plans are fundamental.

Current practice in Spain is far from this more advanced model. As Figure 3.1 shows, most appraisals involve the direct superior (79%) and, to a much lesser degree, the CEO (49%). The role of the Human Resources Manager is secondary (24%). Only 12% of the companies use two superiors. And subordinate appraisal is used in only 4% of cases, which corresponds to the level that prevailed in the US a decade or more ago This suggests that we can expect to see rapid growth in this area in the near future.

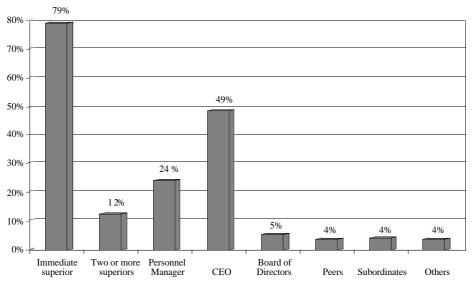


Figure 3.1. Participants in manager appraisal

Some of the data on processes are very interesting. Of the companies that carry out appraisals, most (80%) do so once a year, 16% twice a year, and 4% more frequently. However, only 70% of these appraisals use formal documents and, more surprisingly, only 79% are discussed with the person being appraised. 3.7% are sent to the appraisee without any discussion, and 17.5% are kept secret. One may wonder what the feedback effect of secret appraisals is likely to be.

There is no denying that appraisal systems have their critics (Ghorpade, Chen and Caggiano, 1995), who highlight their limitations. One may even add that the corporate situation today is hardly conducive to a full appreciation of such systems. Years of downsizing and restructuring have created an image of appraisal systems as a tool for selecting those who will have to leave the company (Kennedy, 1999). Nevertheless, appraisal systems are a great help in managing managers and an important governance tool.

As with any other system, the important thing is what they are used for, and how they are used. Therefore, a few recommendations may help complete the picture we have given of current practice in large companies in Spain. We shall use Antonioni (1996) for this complementary task:

The first important point is that before implementing an appraisal system one must clearly define the mission and scope of the system, so that managers understand what to expect of it. Appraisal systems may be used to discover managers' strong and weak points, so as to assess their potential and help them in their career decisions. They may also be used as means to improve performance (and often, therefore, to provide input for the compensation system). Finally, they may be used as a mechanism to improve communication inside the organization. Some of these uses may be incompatible to some degree. We therefore need to clarify the mission, and sometimes we will have to implement different systems if we want to pursue different objectives. It is usually advisable to separate career decisions such as promotion, separation or rewards from the use of appraisal systems for manager development.

In terms of process, appraisal systems must use clear and well designed instruments. Evaluators should be trained and should be selected using objective criteria associated with the intended use of the system. It is usually good to provide written feedback to the manager being appraised, followed by a careful discussion of the appraisal. Finally, every appraisal must end with a specific action plan to use the information gained to improve behavior, knowledge, attitudes or performance, depending on the system's mission. Whatever the case, appraisal systems should never be used as a tool to spy on people.

From our data, we can conclude that Spanish practices leave a lot to be desired. The larger, more complex and more highly differentiated companies are the ones that make most use of formal systems and advanced personnel practices. Nevertheless, all Spanish companies have a lot of catching up to do in relation to practices in the US.

Finally, we must stress that we do not by any means believe that appraisal will solve all the problems of Spanish business. Using these systems in a misguided or unethical way is even more dangerous than not using them at all. However, we do strongly believe that they can be a great help to Boards that want to be active, and so we encourage Spanish companies to advance in this direction and hope that their efforts will eventually be reflected in better performance.

Compensation (3)

One very powerful governance mechanism is the way we compensate managers, particularly the CEO (Gómez-Mejía, 1994). This is so basically for three reasons. First, because it affects managers' strategic decision making –and we want to make sure that compensation does not distort this type of decision either towards too conservative an approach or towards excessive risk-taking. Second, managerial compensation has a major impact on perceptions of the equity of the entire reward system. It is a reference point for all stakeholders. Finally, executive compensation has a cascade effect on the compensation of the company's other employees.

Executive compensation is a complex matter and may take very different forms. However, in this document we will focus only on cash compensation and will differentiate between the fixed part of this cash compensation and the variable part. We will not analyze other forms of long-term compensation such as stock options, which are only just emerging in Spain. Nor will we deal with other types of non-cash compensation such as company cars, insurance, schooling, and so on.

A recent survey by Towers Perrin in the US reports that 57% of management compensation is linked to results, while in 1989 the figure was only 37% (Schmitt, 1996). However, our Spanish data give a very different picture. As Table 3.3 shows, average variable compensation is only 19% of total cash compensation for top level managers, decreasing to 13% for managers at the third level. These figures reflect the low penetration of incentive compensation in Spain.

| | Percentage fixed compensation | Percentage variable compensation |
|-----------|-------------------------------------|--|
| Level I | 81 | 19 |
| Level II | 83 | 17 |
| Level III | 87 | 13 |
| p < 0.001 | | |

Table 3.3. Percentage of fixed and variable compensation

As with appraisal systems, incentive compensation is used more in large companies than in small ones, although the percentage is low in all companies in Spain compared with US standards.

In our questionnaire, we also asked about the factors used to set both fixed and variable compensation. Starting with fixed compensation, Table 3.4 shows the relative importance of each relevant factor. It can be seen that a manager's position in the organizational hierarchy is the most important factor (7.5 on a 10-point scale), followed at a distance by knowledge and competencies, and goal achievement.

⁽³⁾ This section is based on Alvarez, Gallo, and Ricart, *Prácticas de Gobierno en España*, Estudios y Ediciones IESE, 1999.

| Position in the organizational hierarchy | 7.5 |
|--|-----|
| Knowledge and competencies | 6.4 |
| Goal achievement | 6.1 |
| Potential | 5.7 |
| Style, age and seniority | 4.3 |

Table 3.4. Factors used to set fixed compensation

With regard to variable compensation, Table 3.5 shows the main factors. The most important one (7.8) is individual goal achievement, closely followed by company performance. The others are all much less important. We also asked what measures (there can be more than one) were used to assess company performance for the purpose of deciding executive compensation. The dominant measure, used in 81% of the companies in our sample, is accounting profits. ROE and market share are each used in 30% of the companies. Next came ROA, with 20% of the firms, and EVA, with 14%. Measures linked to stock prices were used only on rare occasions.

| Individual goal achievement | 7.8 |
|--|-----|
| Economic results | 7.6 |
| Personal ability | 4.6 |
| Development of subordinates | 4.6 |
| Position in the organizational hierarchy | 4.4 |

 Table 3.5 Factors (0-10) used to set variable compensation

In summary, before we move on to the detailed analysis of the determinants of CEO compensation, it is fair to say that the use of incentive compensation in Spain is still very limited. Factual information, confirmed by certain studies (for instance, Ortin and Salas, 1998), tells us, however, that its use is increasing every year in spite of the low inflation rates currently prevailing in Spain. Therefore, one may expect rapid improvement in this respect, bringing our behavior closer to that prevalent in other western economies.

IV. Determinants of CEO compensation (4)

We believe that it is worth studying the determinants of incentive compensation, as well as the relationship between incentive compensation and corporate performance, using agency theory as a theoretical framework (Holmstrom, 1979).

As is standard, we assume that the Board of Directors represents the interests of the shareholders, who are the owners. Therefore, the Board, will be the "principal", and its goal will be to maximize its own utility by maximizing the company's utility. The CEO will be the "agent". His objective will be to maximize his expected utility, which depends on his remuneration, and his task will consist in managing the company in such a way as to accomplish the shareholders' objectives.

⁽⁴⁾ This section is based mostly on Corrales (1998).

To achieve their goals, the shareholders (represented by the Board of Directors) will design a compensation and incentive system that aligns the CEO's goals with their own. The CEO's compensation will be composed of incentives based on his behavior, and incentives based on the outcome of his behavior.

In the case of behavior-based incentives, the CEO will receive a fixed salary (Eisenhart, 1985, 1988) and, if appropriate, subjective variable incentives (Govindarajan and Gupta, 1985; Fisher and Govindarajan, 1993; Bushman *et al.*, 1996).

The other alternative is compensation based on company outcomes. In this case, depending on the attainment of certain target indicators of company performance, the CEO will receive an objective variable incentive (Fisher and Govindarajan, 1993; Munter and Kren, 1995).

In practice, contracts are a combination of these three types of incentives: fixed salary, subjective variable salary, and objective variable salary. The purpose of agency theory in this context is to determine the optimal blend of supervision- and outcome-based incentives. This blend will be the result of balancing provision of the right incentives for decision making with the amount of risk being transferred from the principal to a risk-averse agent.

In the situation we are concerned with here, the Board as principal plays two roles. It defines the incentive contract for the CEO (agent), and it also decides the level of supervision the Board will exercise over the CEO's behavior. Our hypothesis will take the interplay between these two factors into account.

Hypothesis

According to the standard literature on agency theory, the factors that affect executive compensation are: the level of monitoring, the programmability of the task, the ability to measure outcomes, the manager's risk aversion, and the uncertainty of results. We will look at each of these factors in turn. Finally, we will formulate a hypothesis linking the use of incentive pay with company performance.

1. Monitoring

The Board of Directors could be an efficient tool for supervising the CEO, leading to a decrease in the agency cost by transmitting the risk to the agent for measurement by performance indicators (Eisenhardt, 1989; Munter and Kren, 1995). A standard assumption is that Board composition is an indicator of the Board's effectiveness in monitoring the agent's behavior (Finkelstein and Hambrick, 1996, Chap. 7). One important element of Board composition is the number of outsiders: Having a greater number of outside directors will enable the Board to exercise a higher level of supervision; consequently, a greater proportion of CEO compensation will be based on CEO behavior (Baysinger and Butler, 1985; Beatty and Zajac, 1994). As a consequence:

H1a. The proportion of outsiders on the Board will be positively correlated with the proportion of behavior-based CEO incentive pay.

Another way to assess the level of Board supervision is by seeing how active the Board is in the company. The more active the Board is, the better it will be able to assess the

CEO's behavior, and therefore the greater the proportion of behavior-based incentive compensation (Patton and Backer, 1987).

H1b. The Board's activity in governance decision-making will be positively correlated with the proportion of behavior-based CEO incentive pay.

2. Programmability

The "programmability" of a task could be defined as the extent to which the activity a person carries out is predefined. Therefore, the more operational the task to be done by the agent, the more programmable it will be. The fact that an activity is more programmable directly affects the agent's monitorability, as it reduces the cost of information (Eisenhardt, 1985). Compensation will therefore be more behavior-dependent.

One of the organizational characteristics that could influence the programmability of the CEO's tasks is the type of activity the company is engaged in. Companies whose decision-making processes are a priori more definable will have a higher level of activity programmability (Thompson, 1967; Fisher and Govindarajan, 1993). We claim that primary production and manufacturing have more programmable activities. Therefore, we make the following hypothesis:

H2a. The proportion of behavior-based CEO incentive pay will be higher in primary production and manufacturing companies.

Another organizational characteristic that should be taken into account is the level of decentralization or autonomy within the company. According to Eisenhardt (1989), this variable affects task programmability. A higher level of decentralization –generally associated with divisional and matrix structures– is associated with a lower level of programmability in executive decisions.

H2b. The proportion of behavior-based CEO incentive pay will be higher in companies with a functional structure.

Another organizational characteristic that affects the programmability of the CEO's tasks is the company's size. According to Eaton and Rosen (1983) and Holthausen and Larcker (1991), an increase in company size is associated with an increase in monitoring difficulty and cost. The larger the company, the more difficult it will be to obtain information to evaluate the efficiency of the decisions taken by the CEO.

H2c. Company size will be negatively correlated with the proportion of behaviorbased CEO incentive pay.

3. Ability to measure outcomes

Holmstrom and Milgrom (1991) highlight the difficulty of associating good indicators with the behaviors we wish to induce. The agent's efforts will be devoted to tasks that are easier to measure and easier to associate with a particular incentive. We also have to be alert to the CEO's ability to "manipulate" some tasks' performance indicators.

Market ratios are usually considered better tools for evaluating CEO activity (Fama, 1980). Therefore, it will be easier to associate indicators with these measures.

H3. The proportion of behavior-based CEO incentive pay will be smaller in listed companies.

4. Risk aversion

In an agency model, the second-best solution involves a tradeoff between risk-sharing and the provision of incentives. When the principal is risk-averse, the agent will share more risk, even at the cost of going above the necessary risk to provide adequate incentives.

A family business has less opportunities for diversification of risk. Therefore, in a family business, one may assume that the principal will be more risk-averse than in other types of business. Furthermore, a family business has greater restrictions in the use of compensation based on shares or stock options. These two factors –greater risk aversion and limitation in other compensation instruments– should generate a tendency to compensate the CEO with a larger proportion of outcome-based compensation, so that the CEO takes a greater share of the business risk.

H4. The proportion of behavior-based CEO incentive pay will be smaller in Family companies.

5. Uncertainty about the results

Other factors that the CEO cannot control could affect the company's results. Uncertainty increases the risk premium of risk-averse agents and/or principals. Conversely, decreases in uncertainty should allow principals to better define objectives and should therefore be associated with a larger proportion of outcome-based compensation. State-owned firms compete in regulated industries with lower competitive uncertainty (Ittner, Larcker and Rajan, 1997). Therefore:

H5. The proportion of behavior-based CEO incentive pay will be smaller in Stateowned companies.

6. *Company performance*

The basic agency theory assumption is that compensation contracts can be written to give incentives to managers to maximize the company's performance (Finkelstein and Hambrick, 1996). A large number of empirical studies have shown that CEO compensation systems focus on achieving this goal (Larcker, 1983). We are assuming, however, that the firms that are not making any use of incentive systems are not properly optimizing and, therefore, their performance should be lower.

H6. Companies that have CEO incentive systems will perform better.

Methodology

Dependent variables

Some previous works (Gómez Mejía, Tosi and Hinkin (1987); Tosi and Gómez Mejía (1989); Beatty and Zajac (1994); Munter and Kren (1995)) use the ratio of fixed salary to total salary as "the proportion of behavior-based CEO incentive pay", while the ratio of the variable part to the total is taken to represent "the proportion of CEO incentive pay based on outcomes".

Other authors (Ouchi (1977); Fisher and Govindarajan (1993); Bushman, Indjejikian and Smith (1996)) try to differentiate, within the variable part, between a portion based on subjective criteria (leadership abilities, human development, strategic ability, etc.) and a portion established by objective criteria (economic indicators). According to these authors, behavior-based compensation will be the sum of the fixed salary and the variable part allocated using subjective criteria, while the variable part determined using objective criteria will represent the proportion of outcome-based CEO incentive pay. In this paper, we have used both methods of measuring compensation.

In the first case, the dependent variable is fixed salary over total salary (FS/TS), which represents the proportion of behavior-based CEO compensation. We use the natural logarithm of this variable, which we call logSF.

To calculate the dependent variable under the second assumption, we need to define what portion of variable compensation is determined by subjective criteria and what portion by objective criteria. To do this, we use a question from the questionnaire in which we asked the respondent to rate, from most important to least important (1 = most important, 5 = least important), the factors that determine variable compensation (reported in Table 3.5 in aggregate terms):

- 1. Company's financial performance
- 2. Individual goal achievement
- 3. Position in the organizational hierarchy
- 4. Personal ability
- 5. Development of subordinates

We used these data to run a factorial analysis and obtained two main factors, shown in Figure 4.1. It is easy to see that the second factor (which weights the first and second variable) can be associated with variable compensation based on objective criteria, while the first factor (which weights items 3 to 5) corresponds to variable compensation based on subjective criteria.

Using these factors, for the second set of assumptions, we define the proportion of behavior-based compensation as the sum of fixed salary and variable subjective salary divided by total salary ((FS+VSS)/TS). Again, we use the natural logarithm, called log SFVS.

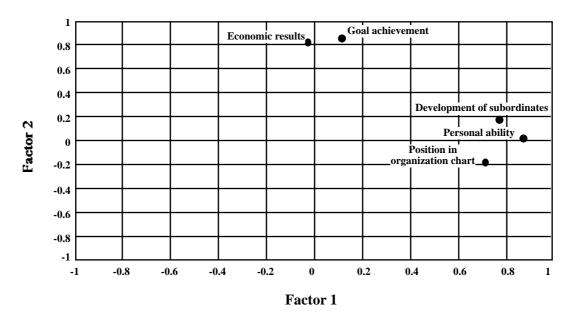


Figure 4.1. Factor chart of objective and subjective criteria

Independent or explanatory variables

The model's independent variables, as necessary to analyze the stated hypothesis, are:

Monitoring

- Proportion of outside directors (OD)
- Activity of the Board of Directors (ACT)

Programmability

- Primary production or manufacturing industry (PROD)
- Functional structure (FUN)
- Size (Employees/100) (EMP)

Measurement

- Listed on the stock market (LIS)

Risk aversion

- Family firm (FAM)

Uncertainty

- State-owned firm (ST)

All the variables except EMP (Size) and OD (% of outsiders) are dummy variables.

To study the last hypothesis, the company's performance was measured using two indicators: profits over sales (P/S) and profits per employee (P/E).

Results

Correlation matrix

Table 4.1 shows the correlation matrix of independent variables. There are no major correlations between variables, which avoids co-linearity problems in the models:

| Variable(1) | ACT | OD | PROD | FUN | EMP | LIS | FAM | ST |
|-------------|-------|-------|-------|-------|-------|-------|-------|----|
| ACT | 1 | | | | | | | |
| CE | 0.12 | 1 | | | | | | |
| PROD | -0.10 | -0.07 | 1 | | | | | |
| FUN | 0.01 | 0.02 | 0.15 | 1 | | | | |
| EMP | -0.01 | 0.02 | -0.02 | -0.10 | 1 | | | |
| СОТ | 0.00 | 0.05 | 0.12 | -0.12 | 0.24 | 1 | | |
| FAM | 0.03 | -0.18 | 0.19 | 0.16 | -0.06 | -0.05 | 1 | |
| PUB | 0.00 | 0.25 | -0.17 | 0.07 | 0.09 | -0.03 | -0.14 | 1 |

Table 4.1. Correlation matrix of independent variables (n = 374)

It is interesting to outline the most significant correlations. In particular, State-owned companies are positively correlated with the proportion of outside directors, which is understandable, because in State-owned firms Board appointments are political. On the other hand, State-owned companies are negatively correlated with primary production activities and manufacturing, which is also understandable, as most State-owned firms are in public services, transport and finance. Family businesses are negatively correlated with the proportion of outsiders on the Board. There is also a correlation between Family companies and primary production activities and manufacturing, as well as between Family companies and functional structure. Finally, there is a positive correlation between listed companies and the number of employees, which shows that listed companies are usually larger.

Empirical results

We used multiple regression to test the first eight hypotheses. The following Table shows the results of the first model. The independent variable is log FS (fixed salary), which represents the proportion of behavior-based compensation.

The variable that measures the Board of Directors' activity shows a significant and positive relationship (p<0.05). It confirms the positive relationship between the Board of Directors' level of activity and behavior-based compensation foreseen in hypothesis 1b. We cannot confirm hypothesis 1a (a positive relationship between behavior-based compensation and the proportion of outside directors). This relationship is not sustained by the model, as is consistent with our current understanding of the relationship between Board composition and Board effectiveness (Dalton *et al.*, 1998).

The positive relationship between behavior-based compensation and companies specializing in primary production (PROD) is confirmed (p<0.001), thus sustaining hypothesis 2a. The same goes for hypotheses 2b and 2c. Both the FUN and the company size (number of employees –EMP–) variables are significant.

| Multiple linear regression | | | | | | |
|----------------------------|-------------------|---------------|--------|---------|---------|--|
| Companies wh | nich pay incentiv | ves (374) | | | | |
| Dependent var | iable: log SF | | - | - | - | |
| F = 10.930 | p = 0.000 | $R^2 = 0.232$ | | | | |
| Variable (1) | Coefficient | St. dev. | Beta | t value | р | |
| Ind. term | 1.884 | 0,01 | | 190.829 | < 0.001 | |
| ACT | 0.020 | 0.008 | 0.127 | 2.427 | 0.015 | |
| OD | -0.0001 | 0.000 | -0.049 | -0.895 | 0.371 | |
| PROD | 0.031 | 0.009 | 0.196 | 3.605 | < 0.001 | |
| FUN | 0.015 | 0.009 | 0.091 | 1.690 | 0.091 | |
| EMP | -0.002 | 0.000 | -0.310 | -5.748 | < 0.001 | |
| LIS | -0.012 | 0.013 | -0.047 | -0.868 | 0.386 | |
| FAM | -0.065 | 0.010 | -0.346 | -6.346 | < 0.001 | |
| ST | 0.019 | 0.016 | 0.063 | 1.156 | 0.248 | |

Table 4.2. Results of the first model

We cannot confirm hypotheses 3 and 5. In hypothesis 3 we conjectured a negative relationship between the proportion of behavior-based compensation and listed companies (LIS). However, given the low percentage of listed companies in our sample, it is not surprising that the coefficient, while having the right sign, is not significant. In hypothesis 5 we conjectured a negative relationship between the proportion of behavior-based compensation and State-owned companies (ST). Again, the percentage of State-owned enterprises (8%) may be too low to get any significant sign. However, in this case the sign of the coefficient is not the one we hypothesized.

Finally, there is a significant negative relationship (p<0.001) between the proportion of behavior-based compensation and Family business (FAM). With this result, hypothesis 4 is confirmed.

Table 4.3 shows the results of running multiple regression for the second model. We used log SFVS (fixed salary + subjective variable salary) as a dependent variable.

Hypotheses 1b, 2a, 2b, 2c and 4 are confirmed again, strengthening our theoretical model and giving more validity to the conclusions reached before.

Finally, hypothesis 6 conjectured better performance in the group of companies that apply CEO incentives than in those that do not. We ran a t-test for the difference in the averages of the two indicators of financial performance, profits over sales (P/S) and profits per employee (P/E). The following table shows the results of this analysis.

| Multiple linear regression | | | | | | | | |
|----------------------------|---|---------------|--------|---------|---------|--|--|--|
| Companies w | hich pay incent | ives (374) | | | | | | |
| Dependent va | riable: log (SF- | +SVS) | | | | | | |
| F = 10.792 | p = 0.000 | $R^2 = 0.231$ | | | | | | |
| Variable(1) | Coefficient | St. Dev. | Beta | t value | р | | | |
| Ind. term | 1.929 | 0.005 | | 376.277 | < 0.001 | | | |
| ACT | 0.018 | 0.004 | 0.222 | 4.220 | < 0.001 | | | |
| OD | -0,0001 | 0.000 | -0.054 | -0.976 | 0.329 | | | |
| PROD | 0.015 | 0.004 | 0.186 | 3.395 | 0.001 | | | |
| FUN | 0.010 | 0.005 | 0.111 | 2.049 | 0.040 | | | |
| EMP | -0.001 | 0.000 | -0.290 | -5.366 | < 0.001 | | | |
| LIS | -0.009 | 0.007 | -0.069 | -1.264 | 0.206 | | | |
| FAM | FAM -0.029 0.005 -0.306 -5.588 < 0.001 | | | | | | | |
| ST | 0.008 | 0.009 | 0.048 | 0.884 | 0.377 | | | |

Table 4.3. Results of the second model

 Table 4.4. Performance comparison between companies that apply incentives and companies that do not

| Variable (1) | With incentives $(n = 374)$ | | | Without incentives (n = 91) | |
|-------------------|-----------------------------|---------------|----------------------|-----------------------------|-----------|
| | Averag | e Std. I | Dev. | Average | Std. Dev. |
| P / E (mill.ptas) | 3.39 | 9.5 | 2 | 0.83 | 6.30 |
| P / S (%) | 6.13 | 6.8 | 4 | 3.57 | 8.46 |
| | A | Average diff. | | | |
| P / E (mill.ptas) | | 2.56 | (p<0.05) | | |
| P / S (%) | | 2.56 | (p<0 . | 05) | |

We can see that the average of P/E and P/S is larger in the companies that apply incentives. In both cases the difference is statistically significant (p<0.05). These results confirm hypothesis 6.

Discussion

Table 4.5 shows the conclusions of our analysis of the determinants of CEO compensation. As in other parts of this paper, it is important to stress that while the number of outsiders on the Board is not significant, the monitoring hypothesis holds true when we use the Board's activity. Once again, composition is not a good indicator of governance excellence (Dalton *et al.*, 1998).

Table 4.5. Conclusions

| | HYPOTHESIS | CONCLUSIONS |
|----------------------------------|---|-----------------|
| | H1a: The proportion of outsiders on the Board is positively correlated with the proportion of behavior-based CEO incentive pay. | NOT ACCEPTED |
| Monitoring | H1b: The Board's activity in governance decision-making is positively correlated with the proportion of behavior-based CEO incentive pay. | ACCEPTED |
| | H2a: The proportion of behavior-based CEO incentive pay is larger in primary production and manufacturing companies. | ACCEPTED |
| Programmability | H2b: The proportion of behavior-based CEO incentive pay is larger in companies with a functional structure. | ACCEPTED |
| | H2c: A company's size is negatively correlated with the proportion of behavior-based CEO incentive pay. | ACCEPTED |
| Ability to measure outcomes | H3: The proportion of behavior-based CEO incentive pay is smaller in listed companies. | NOT ACCEPTED |
| Risk aversion | H4: The proportion of behavior-based CEO incentive pay is smaller in Family companies. | ACCEPTED |
| Uncertainty about the results | H5: The proportion of behavior-based CEO incentive pay is smaller in State-owned companies. | NOT ACCEPTED |
| Company performance | H6: Companies that have CEO incentive systems have better financial performance. | ACCEPTED |

Most of the basic hypotheses are confirmed. Board supervision and task programmability have a positive correlation with the proportion of fixed pay. Size and the principal's risk aversion (Family business), on the other hand, have a negative correlation with the proportion of fixed pay.

The most interesting result is that, in spite of the limited use of incentive pay, the companies that use this mechanism show better performance. This means that the companies that make no use of incentive systems are not acting in an optimal way in the management of their CEO. We can therefore safely advise Spanish Boards of Directors to pay more attention to management compensation, to increase the proportion of variable pay, and to design it according to prevailing theoretical recommendations, even if they come from other contexts, as they are applicable to the case of Spain.

V. Conclusions

This paper has presented a snapshot of the current situation concerning the use of manager appraisal and incentive pay in Spain. It is based on a large sample of almost 500 medium-sized and large companies in Spain. The sample is strongly representative of the current reality, obviously relating to a particular moment in time (the questionnaire was administered in 1996).

When we compare the current situation in Spain with the situation in the US, and in most western countries, we find a limited use of formal appraisal systems and incentive compensation. Appraisal is a fundamental management and governance task to allow top managers to learn, improve and develop, and thus to improve firm performance.

We saw that only 50% of the companies in our sample use any type of formal appraisal system. Of those that do have a formal system, 20% do not discuss the results of the appraisal with the manager concerned. Furthermore, most appraisals are strictly hierarchical and are more oriented towards short-term results than towards developing the Top Management Team the company may need for the future. We were also able to link the use of formal appraisal systems with better financial performance.

On the incentive compensation front, the picture is equally unencouraging. The companies in our sample make limited use of incentive pay. Only 19% of the total compensation of top level executives (CEO) is variable. Furthermore –and this is consistent with prevailing attitudes towards appraisal systems– variable compensation is based mostly on short-term individual results and accounting measures of performance. All in all, CEO attention is too centered on the short term, which makes us wonder about the effectiveness of Board activity.

Our study of the determinants of CEO variable compensation confirmed most of our hypotheses. Firms use less incentive (outcome-related) compensation when the Board is more active in monitoring, when the principal (owner) is less risk-averse, or when the task is more programmable (whether we consider simple sectors such as manufacturing or primary production, smaller size, or simpler structures such as the functional organization). Incentive pay is associated with better economic performance, both in terms of profitability and in terms of productivity.

Overall, we can conclude that while Spanish practices clearly lag behind those of other western countries, all the signs are that with increasing globalization and deregulation in Spain, they will rapidly catch up. There is nothing in our analysis to suggest that, apart from the greater concentration of ownership and the effect this has on corporate governance, the Spanish context is sufficiently different to prevent these practices from having the same positive effect they have been found to have in other contexts. Therefore, we can expect to see a rapid development in the near future. Some factual data in the business press already indicate this trend. \Box

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