

**BEYOND THE DISCIPLINARY ROLE OF GOVERNANCE: HOW BOARDS AND DONORS
ADD VALUE TO SPANISH FOUNDATIONS**

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Abstract

Foundations play a key role in the development of modern societies, helping to funnel private wealth to social services and educational and research activities. Using a sample of Spanish foundations, we present evidence on the effect of the board composition and institutional donors on foundations' organizational efficiency. We show that board size and independence do not directly impact the entity's efficiency. Instead, the heterogeneity of knowledge inside the boardroom and the proactive character of trustees have a positive influence on resource allocation. We confirm the benefits of a private institutional donor who effectively monitors managerial decisions.

Key words:

Board composition, donation structure, governance, nonprofits, Spanish foundations

BEYOND THE DISCIPLINARY ROLE OF GOVERNANCE MECHANISMS: HOW BOARDS AND DONORS ADD VALUE TO SPANISH FOUNDATIONS

1. INTRODUCTION

During last decades we have seen important growth in nonprofit organizations and an increased involvement of these organizations in the development process of a country's society. Nonprofits are supposed to be specially shaped to assist the governments in the country's progress, because they combine the best characteristics of for-profit corporations and governments (Gauri and Galef, 2005).

In the nonprofit world, there is one legal status that has acquired exceptional relevancy. We refer to the foundations that, due to their idiosyncratic characteristics, are experiencing remarkable growth. These foundations are independent entities that have their own boards, and whose endowments, by the express wish of their private or public founders, are tied to the pursuit of objectives of general interest. In the aggregate, these foundations act as a conduit that transfers private wealth today to charitable beneficiaries in the future (Sansing and Yetman, 2006).

From the era of Andrew Carnegie and John D. Rockefeller to the start of this century, the growth of nonprofit foundations reflects the evolution of philanthropy (Fleishman, 2007). Nonprofit foundations have been a popular and effective method for wealthy families and private corporations to create a legacy of philanthropy. A contemporary and outstanding example of this trend is the Bill and Melinda Gates Foundation, which dedicates its endowment (about US\$31.9 billion by October 2006) to enhancing healthcare and reducing extreme poverty worldwide.

Although the philanthropic phenomenon is more closely related to the United States than to Europe, in recent years we have witnessed its growth in Europe. According to the data of the European Foundation Centre, at the beginning of this century European foundations allocated more than €51,000 million, mainly to social services (Spain, United Kingdom, Holland, and Germany), arts and culture (Belgium and Italy), education (Finland), health (France), or science (Sweden) (EFC, 2005).

"It seemed as if Europe was about to rediscover itself through the eyes of an American legacy. What Tocqueville had detected in the formative process of the United States –the role of freely founded associations formed by active citizens- became an important point of reference in Europe" (Evers and Laville, 2004:1).

Beyond their purely philanthropic role, European nonprofit foundations have acquired a unique role in the European research activities and funding. Due to their economic independence and autonomy in their decision making, foundations have been described as "philanthropic venture capitalists" that add value by taking risks, fostering innovation and testing feasibility, and implementing new concepts (European Commission, 2005).

As the size and scope of foundations grows, the society's concern over the allocation of their voluntary contributions increases, and so too does the need for an effective governance model that guarantees the optimal allocation of the nonprofit resources.

Although nonprofit practitioners have indicated that good governance is critical to the success of these entities (European Commission, 2005), there are few studies that have analyzed the relationship between the governance mechanisms and the organizational performance (e.g., Bradshaw et al., 1992; Callen and Falk, 1993; Callen et al., 2003; Brown, 2005; O'Regan and Oster, 2005; Andrés et al., 2006) and even less focus on the foundations (e.g., Stone, 1975; Sansing and Yetman, 2006).

In this paper, we examine the role of the governance mechanisms in the foundations and provide empirical evidence on the foundations of a particular European country, Spain. The main growth of the Spanish third sector coincided with the introduction of the democracy in the 1970s. In 2001, Spanish foundations managed more than €1,700 million and employed 80,000 workers. Using unique data from a survey that comprised 144 entities during the year 2004, we explore the influence of the board and the donors on the foundation's efficiency.

In contrast to what codes of best practices indicate, our results show that there is no "one size that fits all," and that it is not always advisable to increase the number of independent directors on a board. According to our data, size and independence do not have a direct effect on a foundation's efficiency. Instead, their directors' diversity of knowledge emerges as particularly relevant to determining the best allocation of the foundation's resources. Additionally, although foundations lack owners in a legal sense, we find that some types of donors carefully monitor the allocation of their contributions and thus become a positive influence on the entities' efficiency.

We develop these arguments and results as follows. First, we revisit the traditional studies on nonprofit governance and identify those mechanisms that are effective in the nonprofit world from a traditional view of the agency theory. Second, we introduce the cognitive dimension to build an extended model of governance. This framework helps us define our hypotheses on the mechanisms that affect the foundations' efficiency. Next, we describe our data collection, empirical model and variables, and the statistical technique we use to contrast their significance. Finally, we present the results of the model estimation and the primary conclusions we derive from our empirical analysis.

2. NONPROFIT GOVERNANCE FROM A DISCIPLINARY VIEW

Agency theory has been the dominant theory used to explain problems of corporate governance. According to agency theory, the firm is a nexus of contracts between principals (primarily owners) and agents (managers). As owners delegate their control over decisions to the managerial team, the latter can behave opportunistically and expropriate the wealth of the principals. In this context, agency theory defines corporate governance as a set of mechanisms that constrain the managerial decisions and, by limiting their discretionary behavior, reduce the threat of expropriation.

The search for an effective model of governance for the foundations leads us to apply the traditional arguments of the agency theory to the relationships established in this kind of nonprofit. However, extrapolating the agency framework to the nonprofit world becomes more complex, since in the nonprofit setting there are no legally defined ownership rights, and because there are no legal owners in nonprofits, some of the governance mechanisms that are useful in for-profit corporation are questionable or vague.

We refer particularly to managerial remuneration, the takeover market, and the owners' active monitoring. In foundations, since they are not for profit, some forms of incentive remuneration are illegal, and when these forms do exist, they do not influence the managers' performance or organizational effectiveness (Hartarska, 2005). Additionally, since there are no strong takeover markets (Glaeser, 2003; O'Regan and Oster, 2005) or owners with legal control rights (Hansmann, 1980; Brody, 1996; Glaeser, 2003), the responsibility for monitoring and counseling the managers mainly devolves to the board and, when they exist, those donors who are especially committed to the nonprofit's mission. According to previous studies, the board and the significant donors are the only effective mechanisms of governance in the nonprofit world (O'Regan and Oster, 2002, 2005; Callen *et al.*, 2003; Andrés *et al.*, 2006).

On the one hand, as the legal governing body of the organization, the foundation's board of trustees is responsible for monitoring and counseling the nonprofit managerial team. On the other hand, some significant donors are specially involved and qualified to govern. Key

donors are motivated to monitor the entity because they assume any cost (economic or not) that derives from an inadequate management of the nonprofit's resources. Key donors are also empowered to control, because their contributions are vital to the financial survival of the foundation, so they acquire a *de facto* right to make organizational decisions.

Under a traditional agency framework, both board and donors basically play a monitoring role. Thus, they can only add value to the organization by avoiding the resources expropriation. However, this narrow focus of the governance role is frequently criticized, and even more when it is used to explain the nonprofit world (Miller, 2002).

3. AN EXTENDED MODEL OF NONPROFIT GOVERNANCE

To overcome some of the shortcomings of the traditional agency framework, we introduce an extended model of governance that establishes more complex links between governance and value creation. This model is inspired by Charreaux (2004, 2005), in which he constructs a theory of corporate governance where disciplinary and cognitive aspects are simultaneously at work. By including the disciplinary model of governance, we can consider the effects of conflicts of interest among the stakeholders of the organization in relation to resource allocation. Further, by introducing a cognitive dimension, we assume that the system of governance also influences the strategic decisions, particularly those related to the innovation process (Charreaux, 2005).

The inclusion of the cognitive dimension in the model of governance for the nonprofit sector is especially pertinent, given the environment in which nonprofit organizations function and the higher involvement of their boards. On the one hand, whenever there is a high level of information asymmetry and uncertainty, both customers and donors seem to have more trust in nonprofit organizations than in for-profit corporations (Arrow, 1963; Hansmann, 1980). The occurrence of information asymmetries and high uncertainty not only supposes a source of agency problems and a need for effective mechanisms of control (Jensen and Meckling, 1976), but also generates the need for more critical and reflective processes of interactive decision (Forbes and Milliken, 1999). In such environments, it is advisable to take advantage of mental schemes that differ or conflict. The presence of this type of cognitive conflict in a group stimulates discussions and the consideration of more alternatives or viewpoints, and a more accurate evaluation of the different options. This careful decision-making process helps to create value in environments where there is high uncertainty (Forbes and Milliken, 1999).

On the other hand, in addition to the specific studies on the nonprofit sector, the board's involvement in strategic planning is often highlighted, as is its influence on the organizational performance (Bradshaw et al., 1992; Brown, 2005). Even when compared with their counterparts in the corporate sector, the boards of trustees stand out for their level of commitment to the strategic planning and decision processes (Judge and Zeithmal, 1992). Certainly, eliminating this role from the analysis of the model of governance would diminish its explanatory power.

The inclusion of a cognitive dimension presupposes the redefinition of some of the good practices related to the effectiveness of the governance mechanisms. First, board composition, which is traditionally defined in terms of size and independence, requires a more complex definition. When adding the cognitive dimension to the board, the accumulation of heterogeneous knowledge and the proactivity of the members becomes more important than the number of trustees or its objectivity. Second, the presence of significant donors in a foundation not only means a careful monitoring, but also a decision-making, control that translates into an efficient allocation of the nonprofit resources.

So, to examine their influence on the entity's efficiency, we will go along with the main characteristics of the board and the weight and nature of the major donors of a foundation.

3.1. Board of trustees

Using an extended model of governance, we can examine the functions and composition of the board of trustees from a less parochial, more global perspective. Trustees do not limit themselves to monitoring the managerial team. They also play an active part in the strategic decision-making process, the definition of the organizational mission, and the agreements on resource allocation. Therefore, the composition of the board (size, independence, and individual characteristics of the trustees) must be defined not only in terms of increasing its disciplinary ability, but also in terms of introducing the knowledge that is critical to constructive decision making.

Size and independence

As we note above, traditional agency theory defines the monitoring effectiveness of the boards in terms of size and independence. Agency theory proponents argue that a substantial increase of the board size could result in a slowdown in decision making and an increase in costs (Yermack, 1996; Callen *et al.*, 2003; O'Regan and Oster, 2005). And, when considering the independence of the board, both codes of good governance and researchers emphasize the benefits of an increase in the number of outsiders. The directors' independence assures their objectivity when monitoring the managerial team, thus reducing the managers' opportunistic behavior and increasing the organizations' efficiency (Baysinger and Hoskisson, 1990; O'Regan and Oster, 2005). However, there is no conclusive empirical evidence on the influence of board size and independence on the organizations' efficiency.

When we introduce the cognitive role of the board, the effect of board size and independence becomes more ambiguous. The inclusion of more directors in the board implies more access to sources of information (Hambrick and Mason, 1984; Olson, 2000) and a major volume of cognitive resources for decision making (Bantel and Jackson, 1989; Olson, 2000). Therefore, a bigger board might not always have a negative influence on the efficient resources allocation. When we focus on the nonprofit sector, this statement is even more appropriate. Because boards of trustees represent the "voice of the society" (Herzlinger and Krasker, 1987: 104), its size should reflect many different interests, so its size should be bigger, and the board members must assume more tasks than do their for-profit corporation counterparts (Houle, 1989; O'Regan and Oster, 2005).

However, the independence of the board is not such a favorable factor when we incorporate the cognitive dimension. The presence of independent directors (outsiders) in the board can harm the innovation and creativity of the organization (Hill and Snell, 1988; Baysinger and Hoskisson, 1990). Additionally, in the nonprofit sector, where the trustees are normally unpaid helpers, the voluntary character of the outsiders might reduce the amount of effort and time they give to their roles as directors (Brody, 1996).

So, according to all these arguments, we cannot define the influence of both size and independence of the board on the organizations' efficiency in advance. Our definition needs to be supplemented by a description of the resources (such as knowledge and attitude) that any new director needs to bring to the board. Thus, we hypothesize that:

Hypothesis 1: Board size and independence do not have a direct effect on the nonprofit foundation's efficiency.

Knowledge and proactive character of the trustees

As a mechanism for creating value through the contribution of experience and knowledge (Donaldson, 1990; Castanias and Helfat, 1991), the board benefits from the different kinds of knowledge that the individual board members bring to the board, not only in the corporate

sector (Boeker and Goodstein, 1991; Judge and Dobbins, 1995), but also in the nonprofit area (Bowen, 1994). Thus, our second hypothesis is:

Hypothesis 2: The cumulative knowledge of the board has a positive effect on the nonprofit foundation's efficiency.

But it is not only the cumulative of knowledge that influence the organizational efficiency. According to previous studies, the heterogeneity of this knowledge is even more important, because it favors the creativity of the board (Bantel and Jackson, 1989) and increases the decision-making capabilities of the group. Heterogeneous groups can offer many possible solutions to a problem, because they have many different sources of information (Hambrick and Mason, 1984). Also, groups with diverse points of view can better select the best option for each problem (Olson, 2000). Thus, heterogeneous groups seem to favor the optimal allocation of nonprofit resources. Hypothesis 3 tests this effect.

Hypothesis 3: The diversity of trustees' knowledge has a positive effect on the nonprofit foundation's efficiency.

Nevertheless, the breadth and heterogeneity of knowledge on the board does not guarantee an effective use of that knowledge (Forbes and Milliken, 1999). The extended model of governance differs from the resource dependence theory by considering not only the accumulation of resources (e.g., knowledge, skills, and capabilities), but also its active use. Although earlier evidence is limited, it suggests that the most effective boards show the highest levels of dynamism and proactivity (Axelrod et al., 1990; Chait et al., 1996). Therefore. We hypothesize that:

Hypothesis 4: Trustees' proactive character has a positive effect on the nonprofit foundation's efficiency.

3.2. Significance and nature of donors

In addition to the board, there is another governance mechanism that can also influence the efficient allocation of a foundation's resources. Similar to the shareholders of a public company, but without residual economic rights, significant donors can (and do) monitor resources' allocation in the nonprofit organizations (Olson, 2000). These stakeholders have been called "quasi-owners" (Ben-Ner and Van Hoomissen, 1994). They have also been considered the best way to encourage the board to take on its monitoring role (Vanderwarren, 2002).

Nowadays, it is very common to find wealthy families and corporations financing foundations that become the family's or firm's public image in the society. When donors make a substantial contribution to a foundation, they are usually interested in the efficient use of their contributed funds, especially if they are a private company or a public donor (O'Regan and Oster, 2002; Andrés *et al.*, 2006). Thus, we can argue that:

Hypothesis 5: The presence of a significant donor, especially when that donor is a public institution or a private company, has a positive effect on the nonprofit foundation's efficiency.

4. DATA AND MODEL DESCRIPTION

We used a mail survey to obtain the necessary data for our study. Since the essential source of both money and resources for the nonprofits is voluntary contributions, we expect nonprofits to have a high level of transparency and visibility. Nevertheless, the scarcity of data has been an obstacle for the researchers interested in the nonprofit world (Hartarska, 2005). In Spain, there are more than 7,000 registered foundations, although more than two thirds of them are inactive entities (García et al., 2004). In October 2004, we sent more than

2,200 questionnaires to those Spanish foundations that were listed in a national register, but ignored *ex ante* if all of them still existed. According to the statistical data, our operative population was about 650 entities.

We contacted foundations by mail, e-mail, and telephone, and received a total of 144 responses (124 with complete information). This response level represents an answer rate of about 22% over the expected active population (19% if we consider only complete questionnaires).

In economic terms, our 124 foundations manage more than €360 million in 2003, which comprises more than a third of the total resources spent by Spanish foundations (EFC, 2005).

4.1. Variables and description of the sample

In Table 1, we summarize the general description of the sample and the different variables we use for proving the hypotheses.

[table 1 here]

We measure the foundations' efficiency with three different variables. The first is a traditional ratio (ADEF), usually defined as administrative or technical efficiency. This ratio indicates the portion of costs dedicated to administrative functions, so the lower the value, the smaller amount of administrative expenses, and, in the end, a better result for the entity.

According to some previous nonprofit studies (Callen and Falk, 1993) and watchdog agencies (Sargeant and Kaehler, 1998), donors' principal concern is the average percentage of their contributions that is dedicated to the principal organization's mission. However, it is easy for the managers to manipulate the quantities integrated in administrative costs. To avoid this problem, we think it may be advisable to calculate other measures of efficiency. To do so, we include two additional measures, the Data Envelopment Analysis (ECEP1 and ECEP2). This kind of analysis has been widely used to value the efficiency of those organizations that use multiple inputs to obtain multiple outputs. It has been also used whenever the definition of prices and the weight of each input and output or the specification of the production function is problematic (Färe et al., 1985). Data Envelopment Analysis generates a multidimensional measure of efficiency that consists of all the inputs and outputs without including prices for factors or distributed services. Thus, this method has become popular, especially in the public and voluntary sectors (Callen and Falk, 1993).

To calculate our measures of efficiency, we include people (workers and volunteers); facilities (total assets and money); and total income as operational inputs, and the resources dedicated to the mission, the number of activities, and their geographical dispersion as the primary outputs of the foundation. Clearly, this multidimensional measure makes it possible for researchers to include more concepts so as to more accurately reproduce the performance of any organization.

The average size of the board (SIZE) in our sample rises to 12 trustees, which is somewhat lower than the average size (16-19 trustees) of the typical board of a North American nonprofit (O'Regan and Oster, 2005). Although more than half of our sample has no insiders in their boards of trustees, the average independence of the boards of Spanish foundations (OUTS) is lower than that shown by American studies: 87% of outsiders in the Spanish nonprofits compared with 98% of the American boards (Callen *et al.*, 2003).

When we examine the knowledge, diversity, and proactive character of the members of the board, we find that about 45% of the board members are also directors (30%) or executives (15%) of other nonprofits (KNOW1 and KNOW2 respectively), and a third of the board members are also executives of a for-profit firm (KNOW3). Finally, about 21% are experts in law (15%) or auditing (6%) (KNOW4 and KNOW5 respectively). Additionally, every

board contains at least one director with a specific type of knowledge of all the five kinds (KNOW1 to KNOW5) we differentiate in our study (DIVER), and only 37% adopt a proactive character in the decision-making process (PROAC).

According to our data on the nature and significance of their founders and donors, 16% of the total resources that Spanish foundations handled in 2003 came from a public source (PUBDON), 23% from a private institution (INSDON), and 5% from a private individual source (INDDON). The rest of the foundations' income derived from small donations (less than 5% of the foundation's income), its economic activity, or the monies from their endowments' investment.

In the nonprofit research, size and age are traditionally associated with the legitimacy and reputation of the organization. Both dimensions have been always related to synergies and knowledge accumulation that increase their performance (Marcuello and Salas, 2001; O'Regan and Oster, 2002; Callen et al., 2003). Thus, we expect size and age to influence positively on the organizational efficiency. On average, the foundations we analyze were constituted 12 years ago (AGE) and handled an average of funds close to €3 million (INCOME).

4.2. Empirical model and statistical techniques

The empirical model to test the hypothesis takes the following form:

$$\text{EFFICIENCY}_i = \alpha + \beta_1 \text{SIZE}_i + \beta_2 \text{OUTS}_i + \beta_3 \text{KNOW1}_i + \beta_4 \text{KNOW2}_i + \beta_5 \text{KNOW3}_i + \beta_6 \text{KNOW4}_i + \beta_7 \text{KNOW5}_i + \beta_8 \text{DIVER}_i + \beta_9 \text{PROAC}_i + \beta_{10} \text{PUBDON}_i + \beta_{11} \text{INSDON}_i + \beta_{12} \text{INDDON}_i + \beta_{13} \text{INCOME}_i + \beta_{14} \text{AGE}_i + \mu_i$$

We measure EFFICIENCY_i using three different variables (ADEF, ECEF1, and ECEF2). In this model, as explanatory variables we include the size (SIZE) and independence (OUTS) of the board; the different types of knowledge of the members that comprise the board (KNOW1, KNOW2, KNOW3, KNOW4, KNOW5); its heterogeneity (DIVER); and how proactive it is (PROAC). The model also contains diverse measurements of the importance of the major stakeholders (PUBDON, INSDON, INDDON) and two control variables for the organizational size (INCOME) and mature (AGE).

We propose a single-equation model that we estimate by using *tobit* analysis. The nature of the efficiency variables (ADEF, ECEF1 and ECEF2), with a substantial volume of observations concentrated on their limit values, requires a hybrid analysis. A *tobit* analysis not only considers the values of the intermediate variables, but also the occurrence probability of the limit values (Tobin, 1958)

5. EMPIRICAL RESULTS

Table 2 shows the results of the estimation of the model. We use two different models to avoid multicollinearity problems (see "Correlation matrix" in Appendix A).

[table 2 here]

According to our results, neither size nor independence has a direct effect on the efficiency of the foundation. In fact, although the rest of our results do not change, the model's explanatory ability increases when we exclude both of these variables (see "Model estimation without size and independence" in Appendix B). These results verify Hypothesis 1. Certainly, the traditional disciplinary model of governance alone cannot effectively explain the foundations' efficiency.

Regarding the knowledge composition of the board, not all kinds of knowledge is favorable for value creation in a foundation. Only those trustees who are simultaneously managers of another nonprofit organization have a positive effect on the efficient allocation of the resources. However, this effect is only significant when we use the multidimensional measures (ECEP1 and ECEP2). Therefore, we cannot completely verify our second hypothesis. Not every kind of knowledge has a positive influence on the adequate assignment of the foundation's funds to its ultimate mission.

In fact, when we look at the rest of the types of knowledge, we can see that they have a negative effect not only on the administrative costs, but also on the multidimensional measure of the economic efficiency. Even though none of our variables has a significant influence on the efficiency, according to the results, the breadth of knowledge implicit in having on the board executives of for-profit corporations, directors of other nonprofits, and experts in law or auditing does not mean better monitoring or counseling for the executive team of the foundation.

As we note above, the cumulative knowledge in the board is not as influential as its heterogeneity. Looking at the results of the model estimation, we see that the diversity of knowledge in the members of the board of trustees is the only variable that has a positive effect on every measure of efficiency. When many different types of cognitive schemes join the same board, the impact they have on each other generates more creative decision-making processes. This result verifies our third hypothesis on the value generation derived from the cognitive conflicts. This result also makes it possible for us to support the increase in the explanatory ability of the agency theory when we include the cognitive arguments.

Contrary to this result, when trustees use their knowledge, their proactive character is not as conclusive. This variable seems to have a positive effect on the reduction of the administrative costs, but when we include the human dimension and the facilities in the economic efficiency, it loses its good effect. Therefore, our data do not verify our fourth hypothesis.

For our fifth hypothesis, which deals with the subject of donors, our results illustrate that not every kind of donor who makes major gifts to a foundation plays an effective monitoring role. However, institutional private donors seem to be especially favorable for nonprofits. Although they do not significantly lessen the administrative costs, when we use a multidimensional measurement, we find that institutional private donors seem to be the most qualified to design an efficient allocation of those resources that they have provided. Our research indicates that those foundations that are essentially financed by a company are usually identified with the for-profit corporation itself. The results in table 2 show us that the company carefully monitors how the foundation expends its funds.

The two control variables we introduce in our model show us that, according to previous studies, economies of scale have a good effect on the foundation's performance. I.e., that the size of the entity, measured as the volume of resources that it handles, is positively related to the efficiency of the foundation. But when we examine the nonprofit's age, the effect turns out to be quite confusing. Although experience seems to reduce administrative expenses, when we include more dimensions in the construction of the efficiency measurement, it changes the sign and shows an adverse effect on the foundation's value creation. When entities age, they lose creativity, and with that loss, their use of the resources becomes less efficient. In this respect, the introduction of dynamic trustees with heterogeneous types of knowledge might help to relieve the problem derived from the unavoidable life cycle of the foundation.

5.1. Robustness of the results

Looking at the results in table 2, we see that for the technical efficiency, the model's explanatory ability is limited. However, we reestimate our model, removing the two variables

of size and independence that do not have a direct influence on the foundation's efficiency (see Appendix B). When we reduce the number of variables, the model's explanatory ability significantly increases (according to the $\text{prob} > \chi^2$) and the rest of our results maintain their sign and significance.

To verify the robustness of our results, we also estimate a basic model (see Appendix C) by including only those variables that are related to board characteristics (SIZE, OUTS, KNOW1 to KNOW5, DIVER, PROAC) and donors (PUBDON, INSDON, INDDON). We see that even though the model's explanatory ability is reduced due to the exclusion of the control variables, the main results of our study retain both their sign and significance. Thus, our results appear to be consistent for both our sample and for other foundations.

6. CONCLUSIONS

Our results confirm that the extended model of governance, including both disciplinary and cognitive dimensions, is actually much more revealing than is the traditional view of the agency theory. Therefore, we conclude that those organizations that operate in an uncertain and dynamic world not only need a monitoring board that keeps the managerial team under control, but also need an active group of creative people who comprehend and foresee the world changes, or at least those changes concerning the organization to which they belong.

We observe that some of the so-called "best practices of governance" are not best practices for every organization. According to our results, there is no "one size that fits all," and that it is not always wise to add an independent trustee to the board. The directors' ability to create value for the organization depends not only on their objectivity, but also on their specific knowledge and proactive character. In particular, the efficient allocation of resources seems to be related to the existence of mental schemes that conflict inside the board or with the heterogeneity of directors' knowledge. This evidence confirms that nowadays, foundations, as independent thinking and pioneering spirits, must promote diversity and differentiation in thought if they wish to achieve their mission in the development of the modern societies. Thus, these organizations and their boards can benefit from a high breadth of expertise that will allow them to adapt to the environment and to take advantage of any investment opportunities that might arise.

Our data also prove that the vital finance provided by a private institution favors the foundation's efficiency. Despite the fact that nonprofits are the "voice of the society," and therefore they should handle resources that come from multiple sources, when foundations depend on a unique corporation they appear to be especially efficient. Thus, we observe the emergence of a "new model of charitable corporate donations" in which the benefactors are no longer passive agents of the organizations they finance, but instead are active stakeholders. When a foundation and its role in the society become the public image of a corporation, the corporate board and managerial team monitor the allocation of the foundation's resources. Clearly, when there is a significant corporate donor, the foundation's efficiency benefits highly. The impact of foundations' activities in the world development depends on their adequate resource allocation, which in the end is influenced by the effectiveness of the governance system. The results we present in this paper can serve as a guideline for those foundations that want to accept the challenge of ensuring proper levels of governance; for those trans-European bodies, such as the EFC, that develop best-practice regulations; and for those donors who want to identify those nonprofits that will make the best use of their contributions.

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Table 1. Hypotheses, variables, and descriptive analysis.

	VARIABLE	PREDI CTION	DESCRIPTIVE STATISTICS				
			mean	std. dv.	min.	max.	
Dependent variables	Administrative efficiency (administrative costs/ total costs)	ADEF	---	0.18	0.16	0.00	0.67
	Economic efficiency (using Data Envelopment Analysis) (1) INPUTS: total income, total number of workers, total assets, and OUTPUTS: resources destined to the mission of the foundation, number of activities, geographical dispersion*	ECEF1	---	0.30	0.36	0.00	1.00
	(2) INPUTS: total income, total number of workers and volunteers, total assets, and OUTPUTS: resources destined to the mission of the foundation, number of activities, geographical dispersion*.	ECEF2	---	0.29	0.36	0.00	1.00
Hypothesis 1. About size and independence	Board size (Total number of trustees – normalized)	SIZE	no relationship	12.02	7.54	3.00	41
	Independence (% trustees without executive charge in the foundation)	OUTS	no relationship	0.87	0.23	0.00	1.00
Hypothesis 2 About knowledge	Trustees who are also directors of other nonprofits (%)	KNOW1	positive	0.30	0.28	0.00	1.00
	Trustees who are also executives of other nonprofits (%)	KNOW2	positive	0.15	0.23	0.00	1.00
	Trustees who are also executives of a for-profit firm (%)	KNOW3	positive	0.33	0.32	0.00	1.00
	Trustees who are expert in law (%)	KNOW4	positive	0.15	0.15	0.00	1.00
	Trustees who are expert in auditing (%)	KNOW5	positive	0.06	0.09	0.00	0.55
Hypothesis 3. About diversity of knowledge	Sum of dummy variables that recognize the existence or not of trustees with knowledge of type 1 to 5 (KNOW1, KNOW2, KNOW3, KNOW4, KNOW5) divided by 5 (types of knowledge and experience)	DIVER	positive	0.64	0.29	0.00	1.00
Hypothesis 4. About proactive character	Trustees who are proactive in the decision- making process (propose new ideas and future lines of action for the foundation) (%)	PROAC	positive	0.37	0.34	0.00	1.00
Hypothesis 5. About donors	The total income provided by the principal public donor (%)	PUBDON	positive	0.16	0.25	0.00	1.00
	The total income provided by the principal private institutional donor (%)	INSDON	positive	0.23	0.32	0.00	1.00
	The total income provided by the principal private individual donor (%)	INDDON	positive	0.05	0.15	0.00	1.00
Control variables	Size of the foundation (total expenses in thousands of Euros–normalized)	INCOME	positive	2,907.60	6,672.17	1.31	44,100.00
	Age of the foundation (age of the foundation – normalized)	AGE	positive	14.20	17.20	1.00	112

* We use a categorical variable (1=local; 2=regional; 3=national; 4=international) to measure geographical dispersion.

Table 2. Results of the model estimation

Dependent variable:		ADEF				ECEF1				ECEF2			
Method of estimation:		Model 1 with KNOW1,		Model 2 with KNOW2,		Model 1 with KNOW1,		Model 2 with KNOW2,		Model 1 with KNOW1,		Model 2 with KNOW2,	
Tobit analysis		KNOW3 & DIVER		KNOW4 & KNOW5		KNOW3 & DIVER		KNOW4 & KNOW5		KNOW3 & DIVER		KNOW4 & KNOW5	
H1	SIZE	-0.0022	(0.883)	-0.0081	(0.590)	0.0610	(0.200)	0.0705	(0.120)	0.0606	(0.206)	0.0687	(0.133)
	OUTS	0.0205	(0.748)	0.0267	(0.678)	0.0110	(0.956)	0.0032	(0.987)	0.0314	(0.875)	0.0199	(0.919)
H2	KNOW1	0.0372	(0.502)	-----	-----	-0.0626	(0.726)	-----	-----	-0.0786	(0.662)	-----	-----
	KNOW2	-----	-----	0.0043	(0.947)	-----	-----	0.5470	(0.008)***	-----	-----	0.5246	(0.011)**
	KNOW3	0.0401	(0.431)	-----	-----	-0.0403	(0.805)	-----	-----	-0.0376	(0.819)	-----	-----
	KNOW4	-----	-----	0.0261	(0.791)	-----	-----	-0.1117	(0.738)	-----	-----	-0.1622	(0.631)
	KNOW5	-----	-----	0.0935	(0.572)	-----	-----	0.3677	(0.466)	-----	-----	0.3898	(0.443)
H3	DIVER	-0.0930	(0.095)*	-----	-----	0.3125	(0.080)*	-----	-----	0.3056	(0.089)*	-----	-----
H4	PROAC	-0.0778	(0.065)*	-0.0813	(0.059)*	-0.0354	(0.793)	-0.0670	(0.617)	-0.0412	(0.762)	-0.0695	(0.607)
H5	PUBDON	-0.0109	(0.861)	-0.0203	(0.744)	0.1082	(0.592)	0.0697	(0.720)	0.0593	(0.771)	0.0238	(0.903)
	INSDON	-0.0347	(0.477)	-0.0270	(0.586)	0.4375	(0.006)***	0.4390	(0.005)***	0.4516	(0.005)***	0.4503	(0.005)***
	INDDON	0.1260	(0.205)	0.1544	(0.122)	0.4442	(0.152)	0.4418	(0.141)	0.4397	(0.159)	0.4329	(0.152)
C	INCOME	-0.0194	(0.187)	-0.0242	(0.098)*	0.1631	(0.002)***	0,1665	(0,001)***	0,1661	(0,002)***	0,1693	(0,001)***
	AGE	-0.0284	(0.064)*	-0.0285	(0.071)*	-0.1062	(0.059)*	-0,1316	(0,021)**	-0,1058	(0,061)*	-0,1296	(0,023)**
C		0.2215	(0.002)	0.1700	(0.010)	-0.0874	(0.690)	0,0209	(0,915)	-0,0915	(0,678)	0,0204	(0,918)
No. observations		124		124		124		124		124		124	
Prob > chi2		0,1046		0.2154		0.0014		0.0002		0.0012		0.0002	

The estimation coefficients of the variables are shown with the levels of significance in parentheses.

APPENDIX A. Correlation Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1	ADEF	1.000																	
2	ECEF1	-0.142	1.000																
3	ECEF2	-0.145	0.995	1.000															
4	SIZE	-0.024	0.103	0.104	1.000														
5	OUTS	0.001	0.094	0.104	0.157	1.000													
6	KNOW1	0.003	-0.028	-0.034	0.124	0.071	1.000												
7	KNOW2	-0.09	0.193	0.181	0.066	0.014	0.358	1.000											
8	KNOW3	0.073	0.084	0.097	-0.006	0.049	0.284	-0.016	1.000										
9	KNOW4	-0.004	-0.129	-0.145	-0.132	-0.054	0.114	-0.099	0.171	1.000									
10	KNOW5	0.076	0.102	0.107	0.023	0.032	0.031	0.086	0.178	0.183	1.000								
11	DIVER	-0.187	0.206	0.203	0.288	0.045	0.289	0.365	0.230	0.188	0.398	1.000							
12	PROAC	-0.154	0.022	0.021	-0.079	0.047	0.047	0.098	0.096	0.083	0.033	0.080	1.000						
13	PUBDON	-0.032	-0.016	-0.046	-0.031	-0.018	-0.015	0.124	-0.260	0.031	-0.087	0.027	-0.006	1.000					
14	INSDON	-0.015	0.185	0.193	-0.141	-0.019	-0.025	-0.089	0.175	-0.110	0.007	-0.058	-0.017	-0.293	1.000				
15	INDDON	0.207	0.007	0.010	-0.088	0.056	-0.147	-0.158	0.107	-0.124	0.025	-0.183	-0.017	-0.087	-0.146	1.000			
16	INCOME	-0.178	0.280	0.284	0.074	0.131	-0.006	0.129	0.014	-0.057	0.008	0.233	0.079	0.082	-0.158	-0.074	1.000		
17	AGE	-0.139	-0.193	-0.189	0.017	0.038	0.013	0.158	-0.203	0.112	-0.126	-0.059	-0.091	-0.103	-0.158	-0.095	-0.005	1.000	

APPENDIX B. Model estimation without size and independence

Dependent variable:	ADEF		ECEF1				ECEF2					
Method of estimation:	Model 1 with KNOW1, KNOW3, & DIVER		Model 2 with KNOW2, KNOW4, & KNOW5		Model 1 with KNOW1, KNOW3, & DIVER		Model 2 with KNOW2, KNOW4, & KNOW5		Model 1 with KNOW1, KNOW3, & DIVER		Model 2 with KNOW2, KNOW4, & KNOW5	
Tobit analysis												
KNOW1	0.0379	(0.492)	-----	-----	-0.0413	(0.817)	-----	-----	-0.0565	(0.754)	-----	-----
KNOW2	-----	-----	0.0028	(0.965)	-----	-----	0.5643	(0.007)***	-----	-----	0.5410	(0.010)***
H2 KNOW3	0.0410	(0.419)	-----	-----	-0.0600	(0.713)	-----	-----	-0.0572	(0.728)	-----	-----
KNOW4	-----	-----	0.0319	(0.742)	-----	-----	-0.1786	(0.590)	-----	-----	-0.2295	(0.494)
KNOW5	-----	-----	0.0924	(0.576)	-----	-----	0.3873	(0.443)	-----	-----	0.4121	(0.419)
H3 DIVER	-0.0951	(0.078)*	-----	-----	0.3713	(0.033)**	-----	-----	0.3649	(0.038)**	-----	-----
H4 PROAC	-0.0765	(0.067)*	-0.0784	(0.067)*	-0.0597	(0.657)	-0.0899	(0.503)	-0.0649	(0.632)	-0.0912	(0.501)
PUBDON	-0.0100	(0.872)	-0.0172	(0.780)	0.0768	(0.702)	0.0348	(0.857)	0.0284	(0.888)	-0.0099	(0.960)
H5 INSDON	-0.0333	(0.490)	-0.0217	(0.656)	0.4058	(0.010)***	0.3884	(0.011)**	0.4211	(0.008)***	0.4018	(0.010)***
INDDON	0.1293	(0.191)	0.1643	(0.096)*	0.4227	(0.172)	0.3741	(0.208)	0.4216	(0.176)	0.3688	(0.218)
INCOME	-0.0188	(0.198)	-0.0237	(0.102)	0.1639	(0.002)***	0.1698	(0.001)***	0.1677	(0.001)***	0.1730	(0.001)***
AGE	-0.0280	(0.067)*	-0.0276	(0.078)*	-0.1091	(0.053)*	-0.1364	(0.017)**	-0.1082	(0.056)*	-0.1336	(0.020)**
C	0.2392	(0.000)	0.1895	(0.000)	-0.0924	(0.533)	0.0605	(0.573)	-0.0800	(0.592)	0.0732	(0.498)
No. observations	124		124		124		124		124		124	
Prob > chi2	0.0487		0.1250		0.0007		0.0001		0.0007		0.0001	

The estimation coefficients of the variables are shown with the levels of significance in parentheses.

APPENDIX C. Model estimation without control variables

Dependent variable:		ADEF		ECEF1				ECEF2					
		Without SIZE & OUTS				Without SIZE & OUTS				Without SIZE & OUTS			
Method of estimation:	Tobit	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
H1	SIZE	0.000 (0.987)	-0.007 (0.636)	----	----	0.065 (0.198)	0.082 (0.092)*	----	----	0.064 (0.205)	0.080 (0.102)	----	----
	OUTS	0.001 (0.988)	0.005 (0.941)	----	----	0.054 (0.796)	0.033 (0.874)	----	----	0.076 (0.717)	0.053 (0.801)	----	----
	KNOW1	0.037 (0.509)	----	0.037 (0.508)	----	-0.140 (0.459)	----	-0.118 (0.534)	----	-0.157 (0.411)	----	-0.134 (0.484)	----
	KNOW2	----	-0.029 (0.658)	----	-0.029 (0.651)	----	0.511 (0.017)*	----	0.525 (0.016)*	----	0.491 (0.023)**	----	0.505 (0.021)**
H2	KNOW3	0.058 (0.257)	----	0.058 (0.255)	----	0.039 (0.816)	----	0.020 (0.905)	----	0.041 (0.808)	----	0.022 (0.896)	----
	KNOW4	----	0.012 (0.900)	----	0.020 (0.839)	----	-0.273 (0.431)	----	-0.365 (0.290)	----	-0.322 (0.360)	----	-0.413 (0.237)
	KNOW5	----	0.146 (0.381)	----	0.142 (0.393)	----	0.594 (0.270)	----	0.633 (0.242)	----	0.611 (0.261)	----	0.652 (0.233)
H3	DIVER	-0.105 (0.059)*	----	-0.105 (0.050)**	----	0.458 (0.015)**	----	0.524 (0.004)***	----	0.453 (0.016)**	----	0.520 (0.005)***	----
H4	PROAC	-0.073 (0.086)*	-0.075 (0.084)*	-0.073 (0.084)*	-0.073 (0.089)*	0.013 (0.929)	0.012 (0.930)	-0.009 (0.948)	-0.008 (0.957)	0.008 (0.957)	0.010 (0.946)	-0.014 (0.924)	-0.010 (0.947)
	PUBDON	0.013 (0.837)	0.002 (0.973)	0.013 (0.835)	0.005 (0.940)	0.204 (0.329)	0.164 (0.423)	0.173 (0.408)	0.126 (0.537)	0.156 (0.458)	0.118 (0.569)	0.125 (0.552)	0.081 (0.695)
H5	INSDON	-0.007 (0.887)	0.003 (0.947)	-0.007 (0.888)	0.008 (0.873)	0.421 (0.010)***	0.430 (0.009)***	0.389 (0.017)**	0.371 (0.020)**	0.435 (0.009)***	0.440 (0.008)***	0.403 (0.015)**	0.383 (0.018)**
	INDDON	0.158 (0.116)	0.187 (0.065)*	0.158 (0.114)	0.194 (0.053)*	0.457 (0.162)	0.435 (0.177)	0.441 (0.178)	0.357 (0.265)	0.452 (0.171)	0.424 (0.192)	0.439 (0.184)	0.350 (0.279)
	C	0.227 (0.007)	0.179 (0.008)	0.228 (0.000)	0.180 (0.000)	-0.254 (0.268)	-0.032 (0.880)	-0.228 (0.142)	0.039 (0.736)	-0.262 (0.259)	-0.035 (0.869)	-0.218 (0.166)	0.051 (0.658)
No. observations		124	124	124	124	124	124	124	124	124	124	124	124
Prob > chi2		0.2146	0.4793	0.1013	0.3044	0.0731	0.0407	0.0663	0.0441	0.0694	0.0397	0.0528	0.0414

The estimation coefficients of the variables are shown with the levels of significance in parentheses.
 Model 1 includes KNOW1, KNOW3 and DIVER and Model 2 includes KNOW2, KNOW4 and KNOW5.