

An Empirical Evaluation of The Environmental Responsibility in the Spanish Savings Banks

Escobar, B.^{1*}, Miras, M.M.¹ and Guzmán, I.²

¹ University of Seville, C/ San Fernando 4, Post Code: 41004, Seville, Spain

² University Polytechnic of Cartagena, Pza. del Cronista Isidoro Valverde, Edif. La Milagrosa, CP. 30202 Cartagena, Spain

Received 3 May 2012;

Revised 19 June 2012;

Accepted 27 June 2012

ABSTRACT: The growing importance of the environmental and social policies in the Spanish savings banks and the large differences between them, take us to delve into those factors that influence on the amounts spent on environment and welfare fund. In this line, we have analyzed all the Spanish Savings Banks, over the period 2004-2008 and using the methodology of panel data, the effect that the composition of the Board of Directors and the Supervisory Committee has on the percentage of income spent on Environment and Welfare Fund. Specifically, such as variables of Board' composition, we used the presence of women and the existence of a political representative. In view of the results obtained, we can draw as general conclusions that the amount of the Welfare Fund that is spent on Environment depends positively on the presence of women in the Board of Directors, while the variable that have a big positive influence on the Welfare Fund is the existence of a political representative in the Board.

Key words: Environment, Corporate Social Responsibility, Welfare Fund, Boards, Gender, Political Representative

INTRODUCTION

Nowadays Savings Banks (hereafter SBs) have become in an important object of study, mainly due to three aspects. The first of all is the important role they have played within the banking sector. In the supervision memory of the Spanish Bank in 2008, it is clear that the SBs exceeded to the banks in collecting funds, in number of employees and number of branches opened. Secondly, the important role they are taking in the restructuring of the Spanish banking system, being the object of numerous purchases and mergers. And finally, we shouldn't forget the social role (Fig. 1) that they develop through their Welfare Fund (hereafter WF), since they spend 36.07% of their profits to WF on average for the period 2004-2008.

In order to deepen in the composition of the WF, the amount that goes to Environment deserves our special attention. Currently, it is a question of great importance and is being taken into account like a priority concern in different disciplines (Mondéjar-Jiménez *et al.*, 2011; Martínez-Paz and Perni, 2011; Segarra-Ona *et al.*, 2011; García-Pozo *et al.*, 2011; Pérez-Caldern *et al.*, 2011; Bruni *et al.*, 2011; Pirani and Secondi, 2011; Junquera, 2012). Secondly, if we focus on the SBs, we can see that while the growth of WF has been 76% (for

the period of study), the amount spent on Environment in 2008 has grown 205% over year 2004.

SBs are currently private public-utility foundations that are part of the Spanish financial system. They therefore have two main functions, the financial and the social one. If we talk about the financial function, their activity is the receipt of deposits from third-parties to be loaned out or placed in financial investments (Ballarín, 1991). In case of the social function they try to avoid the financial exclusion, to increase the economic development and the social progress (De Miguel and Morales, 2009).

The current Spanish legislation on Financial Institutions (Ley, 1985), sets out the legal basis for the SBs. This law secures the structure of the government of SBs (that is described in the Fig. 2) and determines the maximum percentage of participation of every stakeholders (Azofra and Santamaria, 2004). Under this structure, the Board of Directors and Supervisory Committee are those who have the responsibility of approving the budget and controlling the WF.

Moreover, this regulation (art. 11) states that SBs shall set aside as reserves at least 50% of their profits, which allows them to strengthen their solvency, and

*Corresponding author E-mail: bescobar@us.es

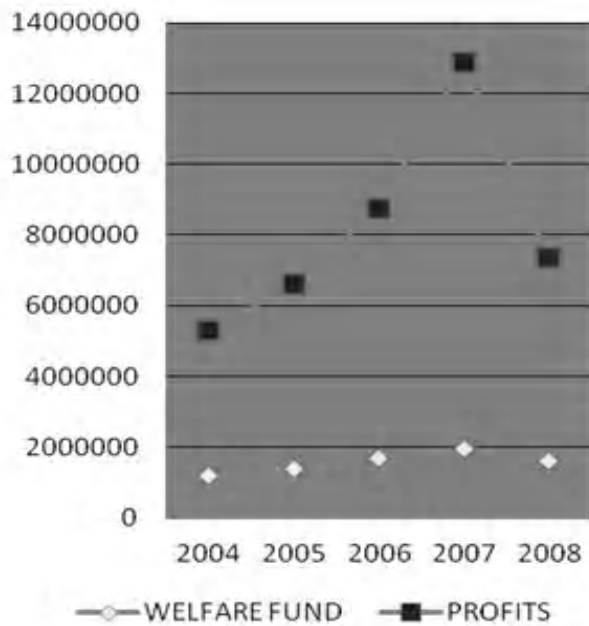


Fig. 1. The evolution of WF and Profits (2004-2008)

Source: Prepared by authors based on annual reports of CECA

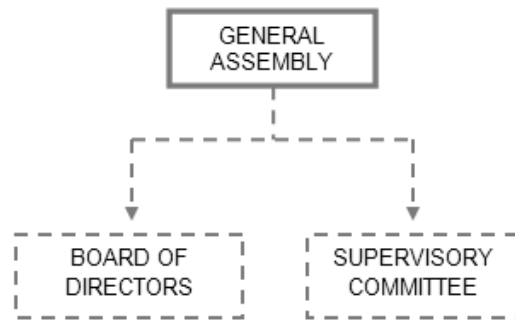


Fig. 2. Government Agency of SBs
Source: Adapted from Quintás (2006)

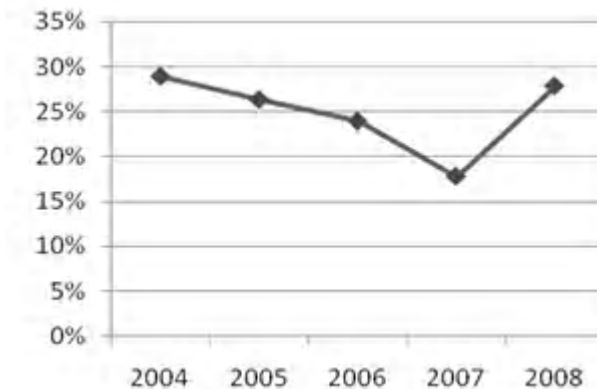


Fig. 3. Evolution of the ratio WF/Profits

Source: Prepared by authors based on annual reports of CECA

the rest of the results can use for satisfying various social demands. In Fig. 3, we can see that the average percentage of the profits that was invested in WF is the same for the years 2004 and 2008, although it decreased a lot in 2007. The amount of WF is distributed in different application, as we can see in the Fig. 4, for the period of study (2004-2008). This composition has been changing over the years (Carbó and López, 2004). Although the most important area (in financial terms) in 2004 was Culture and Leisure, Health and Social Care became in the first one in 2008. This fact is justified by the financial crisis and the changes that it has been produced in the society (De Miguel and Morales, 2009).

Within of the amount of Artistic and Natural Heritage is included the amount that SBs spend on the

Environment. If we compare these three variables, we can see the importance that has taken the amount spend on Environment due to the great growth that has experienced in the period of study (Table 1) with respect to other variables (WF and Artistic and Natural Heritage).

The increasing importance of the Environment and the differences that we could see between the amount that every SB spent on it, make that the aim of the paper is to analyze if there are any relationship between the composition of the Main Boards (Supervisory Committee and Board of Directors) of the Savings Banks and the amount that they spend on WF or, especially on Environment. In particular, the study

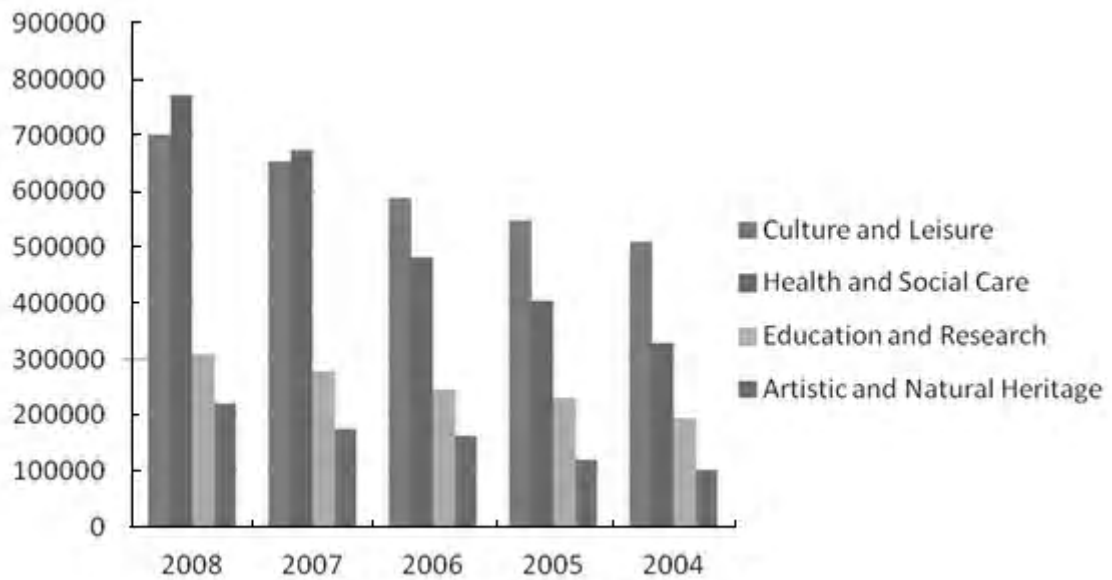


Fig. 4. The distribution of Welfare Fund (2004-2008)
 Source: Prepared by authors based on annual reports of CECA

Table 1. Comparison of the increase of Welfare Fund, Artistic and Natural Heritage, and Environment

	2004-2005	2005-2006	2006-2007	2007-2008	2004-2008
Increase of WF	15%	14%	20%	13%	76%
Increase of A and NH	21%	34%	7%	26%	119%
Increase of Environment	55%	48%	19%	11%	205%

focuses in the presence of women and the existence of politics in the Boards.

Apart from this introduction, the paper is organized as follows. The second section deepens in the background to our hypotheses, in the sample and the methodology. The third section gives the results and an analysis of these. Finally, the fourth section presents the conclusions drawn.

MATERIALS & METHODS

We can find in the specialized literature a lot of studies that analyze the influence that the Boards' composition have in many different areas. For example, Robinson and Dechant (1997) studied if the composition of the Board have any relationship with the entry in new markets, likewise, others papers related the diversity of the Board of Directors with the good management of the companies (Tyson, 2003) and with the value creation (Burke, 1997; Bilimoria, 2000).

Inside that last group, we can highlight the relationship between boards and the profits of the companies that has been analyzed a lot although there isn't an agreement between all of them. This lack of consensus could be due to the different variables that are used to measure the composition of the Boards. We could highlight different measures of the composition like the size of the Boards, the outsider directors and the gender diversity (Carter *et al.*, 2003; Farrell and Hersch, 2005; Carrasco and Laffarga, 2006; Francoeur *et al.*, 2008; Adams and Ferreira, 2009; Catalyst, 2010; De Fuentes *et al.*, 2010; Gallego-Álvarez *et al.*, 2010).

It has also been studied in depth the relationship between Corporate Social Responsibility (therefore CSR) and the composition of the Board of Directors, in particular about the outsider directors (Zahra, 1989; Ibrahim and Angelidis, 1995) and the presence of women (Coffey *et al.*, 1998; William, 2003; Bear *et al.*, 2010). As the result of the latter, it was highlighted the

positive relationship found between the presence of women and the CSR.

In spite of the fact that there are some articles about the bank sector (Andrés and Vallelado, 2008; Pathan *et al.*, 2011), there is little evidence about the Savings Banks, some descriptive articles like Gómez *et al.* (2005); and others that analyze the influence that the WF have on the profits (Cabeza-García *et al.*, 2010).

Therefore we propose that the composition in the Main Boards of SBs affects to the amount to be given to WF, as argued in the section 2, in Savings Banks there is a direct and proportional relationship between the WF and the profits that is due to the current law about it. Because of that reason, we could deepen in the WF studying the effect that the independent variables have on the percentage of the Profits that SBs spend on WF.

Furthermore, the decision about how much to spend on the WF and the Environment is made by the Boards of Directors and the Supervisory Committee.

Based on the arguments that we have exposed and on the evidence found about the positive influence of gender diversity on the CSR, we propose the next two hypotheses:

H1a: The presence of women in the Board of Directors affects to the spending on WF.

H2a: The presence of women in the Supervisory Committee affects to the spending on WF.

If we focus on the Environment variable, we also find evidence in the literature about the influence of the boards' composition in it. Post *et al.* (2011) analyzed the influence of the presence of women, average age of directors, and the country of their origin on the Environmental Performance of the company, being significant the effect of these three variables. Therefore, we propose the following hypotheses:

H1b: The presence of women in the Board of Directors affects to the spending on Environment.

H2b: The presence of women in the Supervisory Committee affects to the spending on Environment.

There are other discussion about the composition of SBs' Boards, and it is about presence the political representatives of public authorities and their right to vote (Azofra and Santamaria, 2004; Casares, 2005). In that sense, the different regulations have been limiting them, having nowadays as much as 50% of the voting rights (Ley, 2002). For that reason, we propose the next hypothesis:

H3a: The presence of political representatives in the Boards affects to the decision about WF.

According to López-Iturriaga *et al.* (2007), the presences of public administration representatives in the Boards doesn't affects to the distribution of the WF, and therefore we propose the following hypothesis.

H3b: The presence of political representatives in the Boards doesn't affect to the decision about Environment.

We have used a data base created from the annual reports published by the CECA (Spanish Confederation of Savings Banks). The sample includes all the Spanish SBs, from 2004 (because is the first year that we can access to the information about Environment) to 2008 (last year before the first SBs had been taken over by the Spanish Central Bank).

The Table 2 summarizes all the variables that have been used in order to make the analysis.

Moreover if we go through in the environmental variable (Fig. 5), we could make a classification of all the SBs based on a cluster analysis that take into account the percentage that each SB spent on the Environment. We exclude the "Caja del Mediterráneo"

Table 2. Description of the variables

VARIABLES	DESCRIPTION
Profits (PRO)	This variable reflects the results obtained by every SBs for each year.
Welfare Fund (WF)	This is the amount that each SBs spend on compliance with their social function.
Environment (ENV)	This is the amount that each SBs spend on environment.
Presence of Women in Board of Directors (WBD)	The percentage of women in the Board of Directors.
Presence of Women in Supervisory Committee (WSC)	The percentage of women in the Supervisory Committee.
Political Representatives in the Boards (PR)	The presence of a political representative in the Supervisory Committee appointed specifically by the Regional Governments, which are specifically reflected in the annual reports of the CECA.

Source: Prepared by the authors

from the cluster analysis, because it is the SB that spent so much in the Environment- about 13 percentage points of difference- and it might misrepresent the results.

We can see that there is no homogeneous behaviour related to the Environmental amount. While the first group is which spent less in that issue, the groups 5 and 6 are those with a large spent in this objective. In addition, the “Caja del Mediterráneo” provides around the 26% of its WF to the Environment.

Our starting point is to estimate two static panel data regression models through the program Stata 11. In the first one the dependent variable is the ratio between WF and Profits (Model A) and, while in the second one, is the percentage of Environment to WF

(Model B). We are going to estimate these two variables as a function of presence of women in the Main Boards and the existence of a political representative.

Model A:

$$WF / PRO_t = \alpha_1 + \alpha_2 WBD + \alpha_3 WSC + \alpha_4 PR_t$$

Model B:

$$ENV / WF_t = \alpha_1 + \alpha_2 WBD + \alpha_3 WSC + \alpha_4 PR_t$$

We are going to estimate both fixed and random effects models. The fixed effects model involves estimating a parameter for each cross-sectional unit, in our case SBs, while the random effects model assume that the variation across entities is random. In order to choose

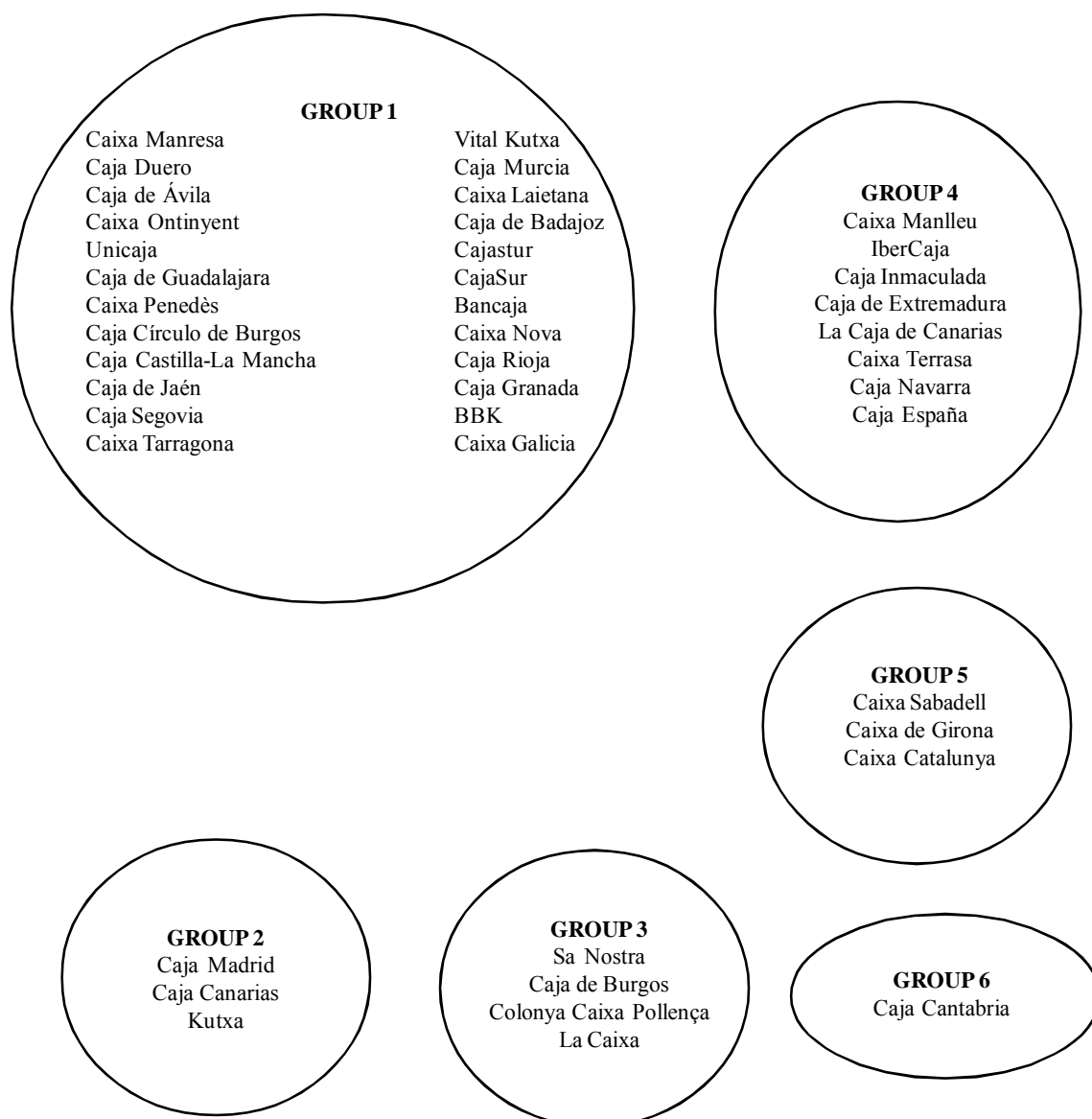


Fig. 5. SBs cluster analysis´ taking into account the percentage that spend in Environment

the best model, we have to test for the consistency of the random effects estimator in our analysis below by the Hausman test. An insignificant value for the Hausman test statistic would imply that the fixed effects estimators are inconsistent and that random effects estimates are more appropriate to our analysis and this prove that there isn't correlation between the fixed effects and one or more independent variables (Baltagi, 1995).

RESULTS & DISCUSSION

First of all, in Table 3 we can see the descriptive statistics and the correlation coefficients for all the variables that we have used in our analysis. In this regard, we can highlight that the presence of women in both Boards is higher than in other Spanish companies (Gomez et al., 2005; De Fuentes et al., 2010).

Moreover, we can observe the Pearson's correlation coefficients of the variables. In that context, we could say that the Profits, the WF and the Environment are highly correlated (p<0.001). Furthermore, this correlation is positive, which indicates that if the SBs obtains more profits, it will be more investment in WF, and it becomes in more money spent on Environment. This result provides further evidence in the current debate about the relationship

between financial performance and corporate social responsibility, taking the same line as the Hypothesis of Availability of Funds (Waddock and Graves, 1997) and Hypothesis of Directors' Opportunism (Williamson, 1967 and 1985), which defends the position that the amount invested in CSR depends on the results obtained by the companies.

Our regression results are presented in Table 4, we can see the fixed effects model as well as the random effects model. For the Model A, the presence of a political representative affects positively (p<0.001) to the ratio WF to Profits in both fixed and random effects. Although the F test is significant for the fixed model, the Hausman test is not significant, which indicates that the random effects model is consistent and we can use it. In contrast to the result found by López-Iturriaga et al. (2007), that indicated that the presence of political representatives in the boards of SBs doesn't affect to the WF.

With regard to Model B, we can observe that the presence of women in the Board of Directors have a direct and significant (p<0.05) influence on the percentage that the SBs invest in Environment. Like in the Model A, the Hausman test indicates that the random effects model is consistent. The model results provide evidence in the same line those Post et al. (2011).

Table 3. Descriptive statistics and correlation coefficients of key variables

	Mean	S.D	PRO	WF	ENV	WBD	WSC	PR
PRO	147032,0636	3,44627E5	1					
WF	34951,8986	59625,44504	,843***	1				
ENV	1767,2591	5097,92337	,737***	,827**	1			
WBD	15,3828	9,24992	,021	,024	,090	1		
WSC	17,4838	12,86567	-,040	-,056	,103	,177**	1	
PR	,3455	,47660	-,073	-,020	-,112	,009	-,051	1

N=220 observation, *** P < 0.001, **, P < 0.01, * P < 0.05

Table 4. Model's Estimations

Independent Variables	Dependent Variable			
	Model A: WF / PRO		Model B: ENV / WF	
	Fixed Effects	Random Effects	Fixed Effects	Random Effects
Constant	23,93554***(2,688352)	24,52767*** (2,418917)	2,259913***(0,708131)	2,562982*** (0,9652933)
WBD	0,2037066(0.1275052)	,1199525 (0,101229)	0,0817433*(0,0335858)	0,0651837* (,0314923)
WSC	-0.1033562(0.0811942)	-0,0342367 (,0684229)	0,0155124(0,213871)	0,0245949 (,0204754)
PR	8,028658***(3,13148)	6,545905*** (2,178817)	0,5615605(0,8248541)	-0,0380321 (0,7374814)
Hausman Test	3,39		4,93	
Prob (Hausman)	0,3355		0,1771	
F (43, 173)	5,57***		22,91***	

N=220 observations,*** P < 0.005, ** P < 0.01, * P < 0.05. In parentheses we can see the SD of each estimator. Hausman is the Hausman test for fixed effects over random effects

CONCLUSION

The objective of this paper was to see if the presence of women and political representatives in the Main Boards of SBs affected to the amount spent on Environment particularly and WF due to the large differences found between them. For this, he have used a sample which includes all the SBs, except only one because of homogeneity problems, that covers the period from 2004 to 2008, we conducted a panel data analysis, estimating both fixed and random effects. After the analysis of results, we highlight some of them as key findings. First of all, we can observe that the presence of women in the Main Boards (Board of Directors and Supervisory Committee) is higher than other Spanish companies. Secondly, we can conclude that the percentage of the Profits that SBs spend on WF depends directly on the existence of political representatives. Finally, the presence of women on the Board of Directors affects positively to the percentage invests on Environment. All the changes that are being produced in the SBs due to the financial crisis which has culminated in the the banking sector restructuration, pose the dilemma of whether it will affect or not to their social and enviromental commitment.

REFERENCES

- Adams, R. B. and Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance, *Journal of Financial Economics*, **94** (2), 291-309.
- Andrés, P. and Vallelado, E. (2008). Corporate Governance in banking: The role of board of directors. *Journal of Banking and Finance*, **32** (12), 2570-2580.
- Azofra, V. and Santamaría, M. (2004). El gobierno de las cajas de ahorro españolas. *Universia Business Review*, segundo trimestre, **2**, 48-59.
- Ballarín, E. (1991). El proceso de dirección de las cajas de ahorros. *Papeles de Economía Española*, **47**, 25-36.
- Baltagi, B. H. (1995). *Econometric Analysis of Panel Data*. (John Wiley: New York).
- Bear, S., Rahman, N. and Post, C. (2010). Impact of Board Diversity and Gender Composition on Corporate Social Responsibility on Firm Reputation. *Journal of Business Ethics*, **97**, 207-221.
- Bilimoria, D. (2000). Building the Business Case for Women Corporate Directors. (In R.J. Burke and M. C. Mattis. Dordrecht (Eds.), *Women on Corporate Boards of Directors: International Challenges and Opportunities* (pp. 25-40). The Netherlands: Kluwer Academic Publishers.)
- Burke, R. J. (1997). Women directors: selection, acceptance and benefits of board membership. *Corporate Governance*, **5** (3), 118-125.
- Bruni, M. E., Guerriero, F. and Patitucci, V. (2011). Benchmarking Sustainable Development via Data envelopment Analysis: an Italian case study. *Int. J. Environ. Res.*, **5** (1), 47-56.
- Cabeza-García, L., Martínez Campillo, A. and Marbella-Sánchez, F. (2010) Análisis de la relación entre los resultados sociales y económicos de las cajas de ahorros españolas: un caso de responsabilidad social corporativa. *Innovar*, **20** (37), 33-46.
- Carbó, S. and López, R. (2004) La obra benéfico-social: exponente de eficiencia y responsabilidad social empresarial. *Cuadernos de Información Económica*, **182**, 63-70.
- Carrasco, A. and Laffarga, J. (2006). Códigos de Buen Gobierno y Diversidad. *Revista AECA*, **76**, 48-52.
- Carter, D. A., Simkins, B. J. and Simpson, W. G. (2003). Corporate Governance, board diversity, and firm value. *The Financial Review*, **38** (1), 33-53.
- Casares, A. (2005). Cuestiones actuales del régimen jurídico-administrativo de las cajas de ahorros españolas. *Pecunia*, **1**, 31-66.
- Catalyst, (2010). Catalyst census of women board directors of the Fortune. (Catalyst: New York).
- Coffey, B. S. and Wang, J. (1998). Board Diversity and Managerial Control as Predictors of Corporate Social Performance. *Journal of Business Ethics*, **17**, 1595-1603.
- De Fuentes, M. P., Laffarga, J. and Reguera, N. (2010). Diversidad de Género en los Consejos de Administración. *Cefgestion*, **328**, 147-172.
- De Miguel, M. C. and Morales, A. (2009). Gestión de la obra benéfico-social de las cajas de ahorro. *REVESCO*, **99**, 60-84.
- Farrell, K. A. and Hersch, P. L. (2005). Additions, to corporate boards: the effect of gender. *Journal of Corporate Finance*, **11** (1), 85-106.
- Francoeur, C., Labelle, R. and Sinclair-Desgagné, B. (2008). Gender Diversity in Corporate Governance and Top Management. *Journal of Business Ethics*, **81**, 83-95.
- Gallego-Álvarez, I., García-Sánchez; I. M. and Rodríguez-Domínguez, L. (2010). The influence of gender diversity on corporate performance. *Revista de Contabilidad-Spanish Accounting Review*, **13** (1), 53-88.
- García-Pozo, A., Sánchez-Ollero, J. L. and Marchante-Lara, D. M. (2011). Applying a Hedonic Model to the Analysis of Campsite Pricing in Spain. *Int. J. Environ. Res.*, **5** (1), 11-22.
- Gómez, S., Olcese, A., Bescos, M., Botín-Sanz, A. P., Vega, M., Giménez, I. and Ureta, J. C. (2005). Diversidad de género en los consejos de administración de las sociedades cotizadas y cajas de ahorros españolas. Madrid: Fundación de Estudios Financieros.
- Ibrahim, N. A. and Angelidis, J. P. (1995). The Corporate Social Responsiveness Orientation of Board Members: Are there Differences between Inside and Outside Directors? *Journal of Business Ethics*, **14**, 405-410.

- Junquera, B. (2012). Research Effort, Functional Integration, and Environmental Action-Based Competitive Advantage: An Empirical Study. *Int. J. Environ. Res.*, **6** (3), 585-596.
- Ley, (1985). Ley, 13/1985, de 25 de mayo, de coeficientes de inversión, recursos propios y obligaciones de información de los intermediarios financieros. BOE núm. 127/1985, de 28 de mayo de 1985. Retrieved June 15, 2011, from <http://www.boe.es>.
- Ley, (2002). Ley, 44/2002, de 22 de noviembre, de Medidas de Reforma del Sistema Financiero. Retrieved June 15, 2011, from <http://www.boe.es>.
- López-Iturriaga, F., Cepeda, R., Cornejo, P. and Ansola, E. (2007). La obra social de las cajas de ahorros: un análisis exploratorio. *Universia Business Review*, **14**, 84-95.
- Mondéjar-Jiménez, J. A., Cordente-Rodríguez, M., Meseguer-Santamaría, M. L. and Gázquez-Abad, J. C. (2011). Environmental Behavior and Water Saving in Spanish Housing. *International Journal of Environmental Research*, **5**(1), 1-10.
- Martínez-Paz, J. M. and Perni, A. (2011). Environmental Cost of Groundwater: A contingent Valuation Approach. *Int. J. Environ. Res.*, **5** (3), 603-612.
- Pathan, S., Haq, M. and Gray, P. (2011). Does Board Structure in Banks Really Affect Their Performance? Retrieved June 22, 2011, from: <http://dx.doi.org/10.2139/ssrn.1895885>.
- Pérez-Calderón, E., Milanés-Montero, P. and Ortega-Rossell, F. J. (2011). Sensitivity of Listed European Hotels with the Sustainable Tourism. *Int. J. Environ. Res.*, **5** (1), 57-66.
- Pirani, E. and Secondi, L. (2011). Eco-Friendly Attitudes: What European Citizens Say and What They Do. *Int. J. Environ. Res.*, **5** (1), 67-84.
- Post, C., Rahman, N. and Rubow, E. (2011). Green Governance: Boards of Directors' Composition and Environmental Corporate Social Responsibility. *Business and Society*, **50** (1), 189-223.
- Quintás, J. (2006). Las cajas de ahorros en el ámbito de la Responsabilidad Social Corporativa. *Papeles de Economía Española*, **108**, 128-143.
- Robinson, G. and Dechant, K. (1997). Building a business case for diversity. *Academy of Management Executive*, **11** (1), 21-30.
- Segarra-Oña, M. V., Peiró-Signes, A., Albors-Garrigós, J. and Miret-Pastor, P. (2011). Impact of Innovative Practices in Environmentally Focused Firms: Moderating Factors. *Int. J. Environ. Res.*, **5** (2), 425-434.
- Tyson, L. (2003). The Tyson Report on the Recruitment and Development of Non-executive Directors. Retrieved June 29, 2011, from: <http://www.london.edu/tysonreport>.
- Waddock, S.A. and Graves, S. B. (1997). Corporate Social Performance-Financial Performance Link. *Strategic Management Journal*, **18** (4), 303-319.
- William, R. J. (2003). Women on Corporate Boards of Directors and their Influence on Corporate Philanthropy. *Journal of Business Ethics*, **42**, 1-10.
- Williamson, O. E. (1967). *The Economics of Discretionary Behavior: Managerial Objectives in a Theory of the Firm*. Chicago: Markham.
- Williamson, O. E. (1985). *The Economic Institutions of Capitalism*. New York: Free Press.
- Zahra, S. A. (1989). Board of Directors and Corporate Social Responsibility Performance. *European Management Journal*, **7** (2), 240-247.