BUSINESS TIES IN BOARDS: THE INFLUENCE OF INSTITUTIONAL DIRECTORS ON FINANCIAL POLICY

EMMA GARCÍA-MECA
FELIX LÓPEZ ITURRIAGA
FERNANDO TEJERINA GAITE

FUNDACIÓN DE LAS CAJAS DE AHORROS
DOCUMENTO DE TRABAJO
Nº 704/2013

De conformidad con la base quinta de la convocatoria del Programa de Estímulo a la Investigación, este trabajo ha sido sometido a evaluación externa anónima de especialistas cualificados a fin de contrastar su nivel técnico.

ISSN: 1988-8767

La serie **DOCUMENTOS DE TRABAJO** incluye avances y resultados de investigaciones dentro de los programas de la Fundación de las Cajas de Ahorros.
Las opiniones son responsabilidad de los autores.

Business Ties in Boards: the influence of institutional directors on Financial Policy

Emma García-Meca
Felix López-Iturriaga
Fernando Tejerina-Gaite

Abstract

We propose that the type of business ties between institutional investors and firms is key to understand the corporate financial policy. We find that directors representing pressure sensitive investors (i.e., banks and insurance companies) have a preference for lower financial leverage, while pressure resistant directors (i.e., mutual funds and pension funds) do not seem to have a significant effect. Nevertheless, when analysed separately, bank and insurance firm representative directors show different attitudes: bank representatives in the board increase both the financial leverage and the banking debt, consistent with the resource dependence theory. We also find a sort of risk aversion among directors representing banks, so that the higher the fraction of shares they own, the more the companies refuse both financial leverage and banking debt.

Keywords: boards of directors, civil-law countries, corporate governance, institutional investors.**JEL codes**: G32, G34,

Corresponding author : Emma García-Meca, Dept. Accounting and Finance, Technical University of Cartagena, Faculty of Business (30201), Cartagena, Spain.
* Accounting and Finance Department, Technical University of Cartagena
** Accounting and Finance Department, University of Valladolid
We acknowledge the Research Agency of the Spanish Government for financial support (Project ECO2011-29144-C03-02 and ECO2011-29144-C03-01). The authors are grateful to participants in CGIR Conference on Corporate Governance Bundles held in Cambridge and in the IX Workshop on Empirical Research in Financial Accounting held in Las Palmas for their helpful comments. All the remaining errors are our only responsibility.

.

1. Introduction

Recent research has highlighted the growing importance of institutional investors in corporate governance (Elyasiani and Jia, 2010; Ferreira and Matos, 2008; Gillan and Starks, 2003; Ruiz Mallorquí and Santana Martín, 2009; 2011). Theory suggests, and empirical evidence confirms, that institutional investors can provide active monitoring (Almazán, et al., 2005), and bring board members closer to strategic decision making (Hoskisson et al., 2002). The weaknesses of investor protection laws in European countries has resulted in the institutional investors being important controlling shareholders and taking up an active role in the corporate governance[1]. Whereas in the common-law environment the corporate governance has been improved by enhancing directors independence (Aguilera and Cuervo Cazurra, 2009; Aguilera, et al., 2009; Duchin, et al., 2010; Masulis and Mobbs, 2011), the specific agency problems in civil-law countries has resulted in the high participation of institutional directors in boards. In fact, according to Heidrick and Struggles (2011), directors appointed by institutional investors account for 40 per cent of directorship in Spain, 35 per cent in Belgium, 24 per cent in Poland, and 22 per cent in France. On the contrary, they only account for 2 per cent of British firms directorships.

Despite the involvement of institutional investors in the European corporate governance, the academic research has often focused on their role as shareholders, so that the research about the engagement of such investors as directors is relatively unexplored. Moreover, although agency theory has dominated research about board of directors, other theoretical approaches such as the resource based theory, the stewardship theory, and the resource dependency theory can provide interesting insights regarding the role of institutional directors (Gabrielsson and Huse, 2005; Johnson, et al., 1996). According to the agency theory, institutional directors are useful in mitigating agency problems by improving managerial monitoring (Fama and Jensen, 1983; Jensen and Meckling, 1976). However, according to other theoretical lenses, boards of directors may support empowered managers in strategy implementation and formulation, reducing complexity and facilitating cooperation and coordination among stakeholders (Cuevas-Rodríguez, et al., 2012; Pugliese, et al., 2009). In line with van

[1] On 5 April 2011, the European Commission adopted a Green Paper and launched a wide-ranging public consultation on the EU corporate governance framework. Among other questions, the European Commission asked about the incentive structure of the asset managers managing long-term institutional investors´ portfolios and about a more effective monitoring by institutional investors. The results of this consultation were published on 15 November 2011 and can be accessed at European Commission (2011).

Ees, et al. (2009) and Pugliese, et al. (2009) we propose that institutional directors may be more concerned with solving problems of coordination and managing the complexity and uncertainty associated with strategic and financial decision making rather than dealing with conflicts of interests (McNulty and Pettigrew, 1999; Rindova, 1999; Roberts, et al., 2005).

Consequently, in this paper we analyse the role of institutional directors in corporate finance decisions, integrating agency and other organisational control perspectives. Our analysis proceeds in two steps. First we study the impact directors who represent institutional investors on leverage. But, according to recent literature institutional investors cannot be considered as a homogeneous group due to their different incentives and ability to engage in the corporate governance (Almazán, et al., 2005; Cornett, et al., 2007; Chen, et al., 2007). We propose that the type of business relations between firms and institutional investors is a key issue to describe the role of institutional directors and, thus, the financial decisions taken by the board. Accordingly, we study the relation between capital structure decisions and institutional directors, making a distinction between those ones who keep business relations with the firm in whose board they sit, and institutional investors whose business activity is not related to the company in which they hold a directorship.

In a second step, we focus on the specific role of bank directors and analyse their effects on corporate finance when they act as shareholders and directors. According to Kroszner and Strahan (2001), when bankers are on boards, the fiduciary duty of directors to promote the interests of shareholders can lead to a conflict with the banker-director's role as lender or potential lender due to different payoff structures of debt.

We use a sample of Spanish listed firms between 2004 and 2010. Spain is a good paradigm to study the effectiveness of institutional directors due to two main reasons: First, Spain is the European country with the highest presence of institutional investors in the boards of large firms. Unlike the Anglo-Saxon capital markets, the ownership concentration and the lack of liquid capital markets in Spain have resulted in the board of directors as the prevalent mechanism of control and in the presence as directors of the large block-holders. This high proportion of institutional directors gives an idea of stability, so that these directors have ample opportunities to engage in financial strategic decisions (Elyasiani, et al., 2010).

Second, Spain has a bank based financial system in which financial intermediaries perform a wide range of financial services. Contrary to their Anglo-

Saxon counterparts, Spanish financial institutions have traditionally played a relevant role in the governance of non-financial firms. As a consequence of the deregulation process and the growing pressure from financial markets banks have recently widened their traditional lending-borrowing activities to others like asset management and shares issuance underwriting.

Our results suggest that institutional directors have diverse incentives to engage in the corporate governance. Consistent with the relevant role of business relations with the firm, we find that directors representing pressure sensitive investors (i.e., banks and insurance companies) have a preference for lower financial leverage. Pressure resistant directors (i.e., mutual funds and pension funds) do not seem to have any significant effect. Nevertheless, when analysed separately, bank and insurance firm representative directors show different attitudes. In this case, banks representatives in the board increase both the financial leverage and the banking debt. This result suggests that some types of institutional directors provide financial resources to the firms in whose board they sit, supporting the view of boards managing the uncertainty associated with strategic decision making, and bringing preferential access to resources and financial expertise (van Ees, et al., 2009).

Our results are robust to different metrics of the firm's financial policy, to additional identifications of the role played by institutional directors in the board committees and to different estimation methods.

In our analysis extension we also find that at low levels of director ownership, the benefits of providing financial access appear to dominate, while at higher levels, risk taking issues and lender liability concerns become more important. In these cases bank directors can prefer that the firm undertake actions that increase the probability of debt repayment rather than maximizing the expected return to shareholders. To some extent, it can be understood as a possible substitution effect between monitoring through the board of directors and insider ownership.

This paper contributes to the literature in three different ways. First, we complement the empirical evidence regarding the different types of institutional investors and the different ways they can engage in corporate governance (Almazán, et al., 2005; Ruiz Mallorquí and Santana Martín, 2009). Although considerable research has been conducted on institutional ownership, research has failed so far to reach a consensus on whether institutional investors perform a specific role in boardrooms. Second, we provide new evidence on the link between boards of directors

and firms' financial strategy. Capital structure is a financial mechanism of managerial discipline and, thus, institutional directors can improve managerial monitoring in a complementary/substitute way. Besides, our results support the literature that emphasizes the strategic advisory role of board members, in addition to exercising independent control, in line with the board of directors literature that concludes that resource dependence theory is supported more often than other board perspectives (Barroso, et al., 2009; Hillman, et al., 2008; Johnson, et al., 1996), including agency theory. Third, we extend previous research, mainly focused on the Anglo-Saxon environment, to a bank-oriented system with lower legal investors' protection. Our results go one step further to test the role of financial intermediaries when they do not only act as traditional creditors but also sit at the board of directors and even own significant equity stakes. Spain is then a unique opportunity to analyse the conflicts of interests due to banks being simultaneously shareholders, creditors and directors.

The remainder of the paper is organized as follows. In the next section, we review the main theoretical ideas and state our hypotheses about the influence of institutional directors on capital structure. In Section 3, we describe the sample, data and empirical method. Section 4 contains the empirical results. We summarize and conclude in Section 5.

2. Institutional investors, boards of directors, and corporate finance

2.1. Institutional directors types

Prior research on the effects of institutional investors often addresses shareholders and bondholder wealth, and is commonly based on the framework of the conventional US/UK model of corporate control (Elyasiani et al., 2010). These studies generally focus on institutional investors just as shareholders (Roberts and Yuan, 2006), and, when they address the role of boards of directors, usually focus on independent directors (Anderson, et al., 2004; Bhojraj and Sengupta, 2003; Ertugrul and Hegde, 2008; Fields, et al., 2012; Piot and Missonier-Piera, 2007). However, the analysis of independent directors in Europe has not provided conclusive results, with some authors highlighting that, contrary to the UK and US based research, the monitoring role does not seem to be played by independent directors but by grey

directors representing the controlling shareholders (García Osma and Gill de Albornoz Noguer, 2007)[2].

Given the conflicting relation in Continental Europe and in many other countries between minority shareholders and controlling shareholders (La Porta, et al., 1997; Morck, et al., 2005), institutional directors can have a significant influence in the wealth distribution of shareholders and even of bondholders. Although previous research has addressed the influence of the board of directors on the managerial relation, relatively little is known about the relation between board composition and the shareholders-bondholders conflict. As far as we are aware, Bhojraj and Sengupta (2003), Roberts and Yuan (2006) and Ashbaugh-Skaife, et al. (2006) are among the few authors who analyse how institutional ownership is related to debt cost and find that institutional investors have a significant influence in the risk faced by debtholders.

In spite of their influence, not all the institutional investors are equally willing or able to serve this function (Almazán, et al., 2005). Different authors note that business relationships with the firm can critically affect the incentives and preferences of the institutional investors to control corporate decisions. Agrawal and Mandelker (1990), Almazán, et al. (2005), Borokhovich, et al. (2006), Brickley, et al. (1988), Bushee (1998), Ferreira and Matos (2008), Hartzell and Starks (2003), and Ramalingegowda and Yu (2012) show that institutional investors have different attitude towards antitakeover amendments, R&D investment decisions, CEO compensation, profitability, and earnings conservatism. Taken together, this literature underlines that some institutional investors choose monitoring firms and exerting influence on managers whereas others focus on information gathering and short-term trading profits (Elyasiani, et al., 2010). In other words, the differences across institutional investors are not only legal or regulatory but also in terms of investment strategy and their incentives and resources to gather information and to engage in the governances of companies (Bennett, et al., 2003).

Consistent with this heterogeneity across institutional investors, some authors have classified institutional ownership into two groups: pressure-resistant and pressure-sensitive institutional investors (Bhattacharya and Graham, 2007; Brickley, et al., 1988; Dong and Ozkan, 2008; Kochhar and David, 1996; Pound, 1988). Pressure-

[2] The Unified Code of Corporate Governance in Spain distinguishes three types of directors: executive directors, independent directors and grey directors. Grey directors are non-executive directors representing block-holders, most of the times banking and insurance companies or investment funds.

resistant investors are institutional investors that only keep an investment relation with firms whose shares they own. These institutional investors include pension funds, mutual funds, venture capital firms, endowments, and foundations. They have a more independent position in the firm. On the contrary, pressure-sensitive investors keep both an investment and business relations with firms. These institutional shareholdings include equity holdings by insurance companies, banks, and nonbank trusts. Their ability to control may be weakened by keeping business and financial relations simultaneously with firms (Brickley, et al., 1988).

2.2. Theoretical background and hypotheses development

The corporate governance literature recognizes different roles of boards of directors in decision making (Barroso, et al., 2011; Knapp, et al., 2011; Maassen, 2002). The resource dependence theory argues that board members are in a good position to contribute to strategic decision making by providing access to resources (Pfeffer, 1972; 1973). In this sense, the presence of institutional investors in boards can moderate the loss of independence giving access to debt funds and providing with financial resources, services and business connections. Moreover, pressure sensitive directors (banks and insurance companies) usually have additional information over the investment opportunities of the firm and are likely to have better chances of raising external funds (Hoshi, et al., 1990; Kang, et al., 2000; Morck, et al., 2000).

The involvement of institutional directors in the strategic course of the corporation is mainly understood by the stewardship theory, which underlines the directors' experience in order to complement the experience, knowledge and skills of managers (Castaldi and Wortman, 1984). Consistent with this view, directors appointed by institutional investors provide expertise on financial issues.

However, consistent with the agency theory, pressure sensitive directors pose a problem of conflicting interests since they may be focused mainly on the firm's long-term viability and debt payoffs. Hence, we pay special attention to this kind of directors. From the agency theory perspective, the board of directors can work as an information system for external stakeholders to monitor managerial behavior and firm leverage. Trying to limit managerial opportunism and lowering the risk faced by lenders, financial institution representatives may restrict further borrowing, acting as enabled monitors. Regarding insurance companies, they are also likely to have incentives to minimize the probability of default, so they may encourage small level of leverage. Jia, et al. (2012)

and MacMinn (1987) point out that the insurance coverage allows debtholders' payoffs to become relatively independent of project selection and so limits the ability of borrowing firms to shift business risk onto debtholders. As a result, corporate control by insurance companies can help to mitigate potential agency problems such as borrowers' assets substitution and thereby lowers lenders' risk exposures, reducing leverage capacity.

Given the reasons both for a positive and for a negative relation between capital structure and pressure sensitive directorships, we pose the first hypothesis in a dual way:

H1a: Pressure sensitive investor directors increase the level of leverage.

H1b: Pressure sensitive investor directors decrease the level of leverage.

Nevertheless, even within pressure sensitive investors (insurance companies and banks) there are some differences. Banks have a special financial relation with firms. In the bank oriented systems, as Spain, banks are largely the main financial suppliers of non-financial firms, so they are directly involved in the capital structure decisions of the firm, acting simultaneously both as lenders and as shareholders.

Banks usually have representatives at the boards of non-financial firms in many bank-oriented countries. Previous literature has highlighted four main reasons of to have a bank on the board (Baysinger and Butler, 1985; Booth and Deli, 1999; Diamond, 1991; Dittmann, et al., 2010; Fama and Jensen, 1983; Kroszner and Strahan, 2001; Rosenstein and Wyatt, 1997): 1) Bankers can improve the information flow between the bank and customer firms, helping the firm to raise funds from the bank. The information advantage noted by the resource dependence theory permits a better assessment of a firm's creditworthiness and eases loans from the incumbent banks. In this case, bankers might seek board seats in order to sell debt to the firm. 2) According to the stewardship theory, the board of directors, and especially the bank directors, may be considered as a bundle of strategic resources to be used by and within the firms as a source of timely advice in areas where in-firm knowledge is limited or lacking . As a consequence, financial executives could be appointed to the boards of non-financial firms as financial experts to raise funds. Bankers on the board overcome adverse selection and credit rationing problems so that firms with a banker on their board should be more leveraged and use more bank lending. 3) Bankers can play a certification role on the board since a banker joining the board of a firm can signal to

the market that the firm is unlikely to experience financial distress, and it lowers the costs of external finance. 4) Finally, bankers on boards can take advantage of their monitoring abilities and play a controlling role of managers, aligning their interests with shareholders'.

Regarding this last characteristic, Fama (1985) suggests that banks costs of monitoring can be lower than the other intermediaries costs (for example, insurance and finance companies). The ongoing history of a borrower as a depositor provides information that allows a bank to identify the risks and to monitor at a lower cost. Likewise, signals from bank loans about a firm credit worthiness can lower the information costs of other contracts. Hadlock and James (2002), Johnson (1997) and Lummer and McConnell (1989) further document that banks are special since, unlike other security offerings, bank loan announcements are associated with positive abnormal returns. They conclude that banks provide some special service not available from other lenders. Long-term relations between banks and non-financial firms reduce the asymmetric information and allow banks to control firm's investment decisions. Thus, they diminish the adverse selection and moral hazard problems. But banks can acquire bargaining power over the firm's profits, once projects have begun (Rajan, 1992). This power comes in part because of a variety of control rights they receive when firms default or violate debt covenants and in part because they typically lend short term, so borrowers have to come back at regular, short intervals for more funds.

Despite the advantages of having a bank on board, when banks act simultaneously as directors, investors, and creditors, conflicts of interests arise. Bankers on boards could simply protect their interests as shareholders, or could safeguard their loans and get involved in the governance of the companies in which their loans have a significant probability to be distressed. Thus, the fiduciary duty of directors to promote the interests of shareholders can lead to a conflict with the banker-director's role as lender or potential lender. According to Adams and Ferreira (2007), institutional directors may spend a significant portion of their time advising rather than monitoring. This advisory influence can be problematic when directors are affiliated with financial institutions and pursue the interests of those institutions rather than maximizing all shareholders' value.

These diverse roles have direct consequences in the capital structure of the firm. Ramírez (1995) was the first author to provide evidence that bank directors may help raise capital by showing that the presence of bankers on corporate boards reduced the sensitivity of investment to cash flow. In the same vein, Stearns and Mizruchi (1993)

found that the types of financial institutions represented on firm's boards (commercial banks, insurance companies or investment banks) were associated with different types of funds raised by the firms. Morck, et al. (2000) show that banker directors emphasize policies that favor creditors over shareholders in Japan. Also, Booth and Deli (1999) find that the presence of commercial bankers on the board is positively related to firm debt. Interestingly, according to these author's results, while the presence of unaffiliated bankers (those whose banks have not business relationships with the firm) on the boards is positively related with bank borrowing, the presence of affiliated ones is not. They conclude that these results are consistent with the view that commercial bankers supply bank debt market expertise (resource dependence theory), but do not play a monitoring role (agency theory). Also Byrd and Mizruchi (2005) find that the presence of lending bankers on a firm's board negatively affects the debt ratio, while the impact of non-lending bankers depend on the firm's probability of financial distress. Notwithstanding this finding, Güner, et al. (2008) show that a company including an affiliated banker on its board is able to raise larger loans. More recently, Slomka-Golebiowska (2012) shows that firms with a banker on the board rely more heavily on bank loans than on internal funds. However, Kroszner and Strahan (2001) show no significant relation between debt ratios and affiliated bank presence on the board of non-financial firms.

To summarize, the empirical evidence remains inconclusive about the relation between the presence of banker-directors and the availability of debt finance. On the contrary, there is a wide consensus about the banks potential influence on firms' financial decisions due to the close relation between banks and non-financial firms, especially in bank-oriented countries.

Therefore, we state our second hypothesis in a dual way:

H.2a: Bank directors increase the level of leverage of non-financial firms.

H.2b: Bank directors reduce the level of leverage of non-financial firms.

3. Empirical design

3.1. Sample

The sample is drawn from the population of Spanish non-financial firms listed on the Spanish Stock Exchange during 2004-2010. Financial companies have been

excluded both because they are under a special scrutiny by financial authorities that constrains the role of their board of directors and because of their special accounting practices.

We have combined two databases. Financial information and firms' market value have been drawn from Amadeus database[3]. The corporate governance information has been collected from the Annual Corporate Governance Reports that all the listed companies must publish since 2003.

We build an unbalanced panel of 627 firm-year observations from 162 firms. Roughly, our sample accounts for more than 95 percent of the capitalization of Spanish non-financial firms. The panel is unbalanced since some firms have become public during this period but some other firms have been delisted as a consequence of mergers and acquisitions. Nevertheless, the estimations based on unbalanced panels are as reliable as those based on balanced panels (Arellano, 2003).

3.2. Variables

We define two dependent variables: LEV is the financial leverage, measured as the ratio of book value of debt to total assets; BKLEV is bank leverage, defined as the proportion of bank debt (both short term and long term) over total debt.

We operationalize the board of directors through a number of variables. First, we define SENSIT as the proportion of the board members who are representative of pressure sensitive institutional investors (i.e., banks and insurance companies). We also define RESIST as the proportion of the board members who are representative of pressure resistant institutional investors (basically mutual funds and pension funds). Given our special attention to the roles played by the different institutional investors we define BANK variable as the proportion of directors who are representative of banks (both commercial banks and saving banks) and INSUR as the proportion of directors appointed by the insurance companies.

As a robustness analysis we check the validity of our results when the audit and compensation and nominating committees are taken into account. Thus, we define analogous variables concerning the presence of such directors in the audit committee:

[3] Amadeus is a product of Bureau van Dijk Electronic Publishing and provides comparable standardized financial information for companies across Europe.

SENSITAC is the proportion of pressure sensitive representatives at the audit committee, RESISTAC is the proportion of the pressure resistant representatives at the audit committee, BANKAC is the proportion of members of the audit committee appointed by banks and INSURAC is the proportion of the audit committee members appointed by insurance companies. We define similar variables for the nomination and compensation committee (SENSITNC, RESISTNC, BANKNC and INSURNC). As it will be explained later on, we interact some boards of director variables with the insiders ownership (INSOWN), i.e. the proportion of shares held by the directors.

We control for a number of factors that potentially could impact on corporate leverage and that make our research comparable to previous studies (Antoniou, et al., 2008; Frank and Goyal, 2009; Kayo and Kimura, 2011; Leary, 2009; Lemmon, et al., 2008). ASMAT is the assets maturity, defined as the ratio of fixed assets to annual depreciation expenses. MTB is the equity market to book value which proxies both growth opportunities and market expectations about the firm. SIZE is the log of total assets and is a measure of firm size. TANGIB is the proportion of tangible assets over total assets; it is supposed to be informative about the debt collateral. We also control for the return on assets (ROA), the age of the firm as the log of the number of years since the firm constitution (AGE), and the tax advantages of debt (TAX) defined as tax payments to costly total debt. See Table 1 for a summary of all the variables.

Table 1: Variable definition

Variables	Description
LEV	Ratio of book debt to total assets.
BKLEV	Bank debt to total debt.
SENSIT	Proportion of the directors who represent pressure sensitive institutional investors.
RESIST	Proportion of the directors who represent pressure resistant institutional investors.
BANK	Proportion of the directors who represent banks.
INSUR	Proportion of the directors who represent insurance companies.
SENSITAC	Proportion of the audit committee members who represent pressure sensitive institutional investors.
RESISTAC	Proportion of the audit committee members who represent pressure resistant institutional investors.
BANKAC	Proportion of the audit committee members who represent banks.
INSURAC	Proportion of the audit committee members who represent insurance companies.
SENSITNC	Proportion of the nomination and compensation committee members who represent pressure sensitive institutional investors.
RESISTNC	Proportion of the nomination and compensation committee members who represent pressure resistant institutional investors.
BANKNC	Proportion of the nomination and compensation committee members who represent banks.
INSURNC	Proportion of the nomination and compensation committee members who represent insurance companies.
INSOWN	Insiders ownership, i.e., proportion of shares held by the directors
ASMAT	Assets maturity, i.e., ratio of fixed assets to annual depreciation expenses
MTB	Equity market to book ratio
SIZE	Total assets (log)
TANGIB	Tangible assets over total assets
ROA	Gross profit to total assets
AGE	Years since the firm constitution (log)
TAX	Tax payments to costly debt

3.3. Empirical method

We first report a descriptive analysis to show the main characteristics of our sample. This step provides preliminary evidence about a possible effect of institutional directors on corporate finance and about possible differences among the type of institutional investors who appointed the directors. Then we perform an explanatory

analysis to test our hypotheses. We run the following baseline model, where CORPGOV stands for the variables of corporate governance above mentioned:

$$LEV_{it} = \alpha + \beta_1 \cdot LEV_{it-1} + \beta_2 \cdot ASMAT_{it} + \beta_3 \cdot MTB_{it} + \beta_4 \cdot SIZE_{it} + \beta_5 \cdot ROA_{it} + +\beta_6 \cdot TANGIB_{it} + \beta_7 \cdot AGE_{it} + \beta_8 \cdot TAX_{it} + \sum \beta_j \cdot CORPGOV_{it} + \eta_i + \eta_t + {}_{it}$$

In this equation η_i represents the individual effect, η_t represents the time effect, and ε_{it} represents the stochastic error. The time effect includes the macroeconomic factors that impact on all the firms in the same period.

Our database combines time series with cross-sectional data, allowing the formation of panel data, estimated with the appropriate panel data methodology (Arellano, 2003). In the estimation of our model, two problems could arise: constant and unobservable heterogeneity and the problem of endogeneity.

Constant and unobservable heterogeneity refers to specific characteristics of each firm that remain constant over time as represented by the fixed-effects term η_i. Because they are unobservable, they become part of the random component in the estimated model. Panel data methodology enhances the control of this constant and unobservable heterogeneity introduced by the fixed-effects term.

The literature and the practitioners have shown the existence of target debt ratios, with firms trying to adjust every year their financial leverage to the target (Bancel and Mittoo, 2004; Flannery and Rangan, 2006; Graham and Harvey, 2001; Hovakimian, et al., 2004). Consequently, we propose an auto-regressive model in which lagged financial leverage is among the right-hand-side variables.

The endogeneity problem might appear because lagged financial leverage can be affected by the structure of the board of directors (Demsetz and Villalonga, 2001; Hermalin and Weisbach, 1998; Villalonga and Amit, 2006). To address this problem, Blundell and Bond (1998) and Bond (2002) suggest the use of the panel data system estimator. This procedure is an improved version of the generalized method of moments given the possibility that weak instruments could induce poor asymptotic precision (Alonso-Borrego and Arellano, 1999). This method provides efficient estimates whose consistency depends critically on the absence of second-order serial autocorrelation in the residuals and on the validity of the instruments (Arellano and Bond, 1991). Accordingly, we report the m_2 test. To test the validity of the instruments, we use the Hansen test of overidentifying restrictions, which allows us to test the

absence of a correlation between the instruments and the error term and, therefore, to check the validity of the selected instruments.

4. Results

4.1. Descriptive statistics

Table 2 presents the mean value, the standard error, and the quartiles of the main variables. As it can be seen, representatives of institutional investors account for around 21 percent of directorships, with pressure resistant directors being twice as important as pressure sensitive ones. Consistent with the international trend to increase the importance of institutional investors (Li, et al., 2006) the proportion of directors appointed by institutional investors in our sample has increased from 19.6 percent in 2004 to 21.7 percent in 2010.

Table 2: Main descriptive statistics

Mean, standard deviation and quartiles of the main variables. LEV is the book value of debt over total assets; BKLEV is the proportion of total debt lent by banks; RESIST, SENSIT, BANK, INSUR is the proportion of the directors who represent pressure resistant, pressure sensitive institutional investors, banks or insurance companies; INSOWN is the proportion of shares held by directors; ASMAT is assets maturity, MTB is equity market to book ratio, SIZE is the log of total assets, TANGIB is tangible assets over total assets, ROA is gross profit over total assets, AGE is the log of the number of years since the constitution of the firm, and TAX is taxes paid over costly debt.

	Mean	Std. Dev	Q25	Q50	Q75
LEV	0.593	0.183	0.483	0.611	0.729
BKLEV	0.478	0.214	0.343	0.511	0.642
RESIST	0.137	0.182	0.000	0.083	0.200
SENSIT	0.072	0.110	0.000	0.000	0.125
BANK	0.063	0.102	0.000	0.000	0.111
INSUR	0.009	0.051	0.000	0.000	0.000
INSOWN	0.275	0.264	0.026	0.195	0.505
ASMAT	17.094	19.672	8.988	13.015	19.440
MTB	2.656	2.529	1.310	1.984	3.117
SIZE	13.592	2.021	12.192	13.471	14.862
TANGIB	0.568	0.193	0.425	0.586	0.706
ROA	0.041	0.076	0.013	0.041	0.077
AGE	3.804	0.630	3.434	3.807	4.263
TAX	0.173	1.189	0.110	0.244	0.309

In Table 3 we report the correlation matrix among the variables. With the exception of the relation between SENSIT and BANK, all of them present low correlation coefficients, so that multicolinearity should not be a concern. In any case, we also provide a vector inflation factor (VIF). Our VIF scores are below 3, and, thus, we confirm that multicollinearity does not skew our results (Belsley, et al., 2004; Kutner, et al., 2005).

Table 3: Correlation matrix

Pearson's correlation matrix. LEV is the book value of debt over total assets; BKLEV is the proportion of total debt lent by banks; RESIST, SENSIT, BANK, INSUR is the proportion of the directors who represent pressure resistant, pressure sensitive institutional investors, banks or insurance companies; INSOWN is the proportion of shares held by directors; ASMAT is assets maturity, MTB is equity market to book ratio, SIZE is the log of total assets, TANGIB is tangible assets over total assets, ROA is gross profit over total assets, AGE is the log of the number of years since the constitution of the firm, and TAX is taxes paid over costly debt

	LEV	BKLEV	SENSIT	RESIST	BANK	INSUR	INSOWN	ASMAT	MTB	SIZE	TANGIB	ROA	AGE
BKLEV	0.213												
SENSIT	0.070	0.134											
RESIST	0.186	0.107	-0.205										
BANK	0.130	0.133	0.967	-0.224									
INSUR	-0.225	0.014	0.189	0.061	-0.068								
INSOWN	-0.083	-0.028	-0.062	0.367	-0.074	0.044							
ASMAT	0.064	0.196	0.026	-0.036	0.025	0.004	0.071						
MTB	0.080	-0.210	-0.084	-0.063	-0.067	-0.073	-0.036	-0.085					
SIZE	0.383	0.152	0.285	-0.066	0.331	-0.157	-0.268	0.182	-0.020				
TANGIB	0.007	0.468	0.229	-0.100	0.221	0.044	-0.077	0.227	-0.242	0.401			
ROA	-0.293	-0.365	-0.014	-0.138	-0.014	-0.003	-0.110	-0.080	0.442	0.122	-0.130		
AGE	0.239	0.010	0.046	0.187	0.008	0.149	-0.099	-0.030	0.053	0.207	-0.079	-0.031	
TAX	-0.090	0.020	0.053	-0.016	0.039	0.057	0.050	0.027	0.005	0.034	0.036	0.099	-0.005
VIF			1.25	1.39	1.50	1.19	1.33	1.15	1.11	1.73	1.66	1.27	1.22

For an exploratory analysis, we divide the sample into two groups depending on the proportion of institutional investors in the boardroom. Thus, we have the group of firms with the proportion of pressure sensitive directors over the SENSIT median value and the group of firms with the proportion of pressure sensitive directors under the median value. The same pattern applies to BANK, INSUR and RESIST variables. Then, we conduct a test of means comparison in order to explore whether capital structure and bank debt are different between both groups. The results reported in Table 4, although not concluding, suggest that grey directors appointed by institutional investors are related to differences in corporate finance. More specifically, directors representing pressure resistant investors and banks increase both the leverage and the proportion of bank debt. Furthermore, the insignificant effect of directors representing pressure sensitive investors seems to be due to the opposing influence of banks and insurance companies in corporate finance.

Table 4: Test of means comparison

Proportion of directors who represent pressure sensitive investors (SENSIT), pressure resistant investors (RESIST), banks (BANK) or insurance companies (INSUR) conditional on the financial leverage (LEV) or bank debt (BKLEV). p-value is the significance level to accept the null hypothesis of equality of means between groups.

	LEV			BKLEV		
	Under median	Over median	p-value	Under median	Over median	p-value
SENSIT	0.591	0.598	0.646	0.455	0.492	0.039
BANK	0.579	0.616	0.016	0.454	0.497	0.017
INSUR	0.604	0.391	0.000	0.468	0.503	0.409
RESIST	0.555	0.608	0.002	0.439	0.493	0.005

4.2. Baseline regression results

Table 5 provides the estimates for the first hypothesis. In column 1 we test the effects of institutional directors (both pressure sensitive and pressure resistant ones) on financial leverage along with the control variables. The results are in line with our hypothesis H1b, since the proportion of pressure sensitive directors has a negative influence on corporate leverage. This result could be understood as a sign that this kind of directors exercises such control that deters the risk taking through debt, supporting the managerial monitoring role by directors representing pressure sensitive investors.

In Column 2 of Table 5 we unravel the different types of pressure sensitive directors (banks and insurance companies) along with pressure resistant directors. We

find a different role for bank representative directors relative to insurance companies' representatives. Whereas bank representatives have a positive impact on firm leverage, directors appointed by insurance companies try to avoid the use of debt. These results are in line with Booth and Deli (1999), Güner et al. (2008) and Kroszner and Strahan (2001). These findings confirm the hypothesis H2a and suggest that directors who represent banks provide financial expertise and access to financial funds, as the stakeholder and resource dependence theories suggest. They are also consistent with the idea of bankers in boards of non-financial firms to promote their own business (debt selling hypothesis). The negative coefficient of insurance companies representatives can be understood as showing their interest in reducing firm's risk taking by minimizing the default probability. Results note that pressure resistant directors (i.e., mutual funds and pension funds) do not seem to have a consistent effect.

The coefficient of the lagged leverage is consistent with previous research about the speed of debt adjustment (Flannery and Rangan, 2006; González and González, 2011; Hovakimian and Li, 2011; Vallelado and Saona, 2011). The estimates of our control variables also show that firms with longer asset maturity, higher market-to-book ratios and larger size have higher leverage. On the contrary, the assets tangibility, firm's profitability and the effective tax rate are negative determinants of corporate leverage.

Antoniou, et al. (2008) and Psillaki and Daskalakis (2009) show that decisions on the firm's leverage are quite country- and institutional setting specific, so that the consistency of our estimates has to be checked against estimates from the same country or institutional environment. The results reported by Acedo-Ramírez, et al. (2012), Sogorb Mira (2005), López Gracia and Sogorb Mira (2008), and González and González (2011) for Spanish firms, and by Psillaki and Daskalakis (2009) for civil law firms in the framework of the trade-off and the pecking-order theories of capital structure are coherent with ours in terms of tax rate, firm size, firm age, profitability, asset tangibility and growth opportunities.

The specification proofs of our model are satisfactory. According to the m_2 test, there is no second order correlation among the residuals, so our estimates are efficient. The Hansen test of over-identifying constraints supports the selection of instruments.

In Table 6 we report the estimates of the baseline model when we replicate the analysis using bank debt. As shown in Column 1, the proportion of pressure sensitive

directors is positively related to bank debt. This is in line with the view that these directors reinforce commercial ties with banks (i.e., access to critical resources). Our results hold when we introduce the distinction between banks and insurance companies as reported in Column 2: the presence of directors representing banks has a positive effect on bank debt. Again, these findings support the resource dependence hypothesis regarding the access to financial resources (i.e., bank debt) when pressure sensitive investors are on the board. Pressure resistant directors do not show a consistent effect on bank debt either.

4.3. Analysis extension

We now analyse if insider ownership moderates the relationship between institutional directors and firms financial leverage. Agrawal and Knoeber (1996), Bozec and Bozec (2007), and Rediker and Seth (1995) suggest that firms form internally efficient sets of controls, so that deficiencies in one mechanism can be counterweighed by the action of the alternative ones. Since ownership structure and the board of directors can be substitute mechanisms, the influence of institutional directors in capital structure can be conditional on the shares held by the members of the board.

Column 3 of Table 5 provides interesting insights about the interaction between insider ownership and directors representing institutional investors. We have interacted the proportion of ownership owned by directors (INSOWN) with SENSIT and RESIST. Contrary to our initial result, the proportion of directors appointed by pressure sensitive investors has a positive effect on firm's leverage. Nevertheless, the coefficient of the interacted variable is negative and significant. According to this result, the effect of institutional directors must be analysed conditional on the stake of the directors in the ownership.

The results suggest a possible substitution effect between institutional directorship and institutional ownership: the higher the proportion of shares owned by directors, the more reluctant the pressure sensitive investors to high leverage levels are. This means that when insiders own a significant fraction of shares, the ownership structure becomes an relevant mechanism of corporate control and the disciplinary effect of debt can become less necessary (Jensen, 1986).

Table 5: GMM estimates of the baseline model (financial leverage)

Estimated coefficients (t-stats) of the estimation of the baseline model through the generalized method of moments. The dependent variable is always LEV, i.e., the book value of debt over total assets; RESIST, SENSIT, BANK, INSUR is the proportion of the directors who represent pressure resistant institutional investors, pressure sensitive institutional investors, banks or insurance companies, respectively; INSOWN is the proportion of shares held by directors; ASMAT is assets maturity, MTB is the equity market to book ratio, SIZE is the log of total assets, TANGIB is tangible assets over total assets, ROA is the return on assets, AGE is the log of the number of years since the constitution of the firm, and TAX is taxes paid over costly debt. m_2 is a test of second order serial autocorrelation, Hansen test is a test of overidentifying restrictions which distributes as χ^2 (degrees of freedom). *** for 99 percent confidence level, ** for 95 percent and * for 90 percent.

	(1)	(2)	(3)	(4)
LEV_{t-1}	0.747***	0.729***	0.737***	0.702***
	(59.35)	(65.09)	(63.63)	(37.51)
SENSIT	-0.031**		0.075***	
	(2.03)		(4.39)	
SENSIT·INSOWN			-0.004***	
			(8.59)	
RESIST	0.085***	0.053*	0.046	0.034
	(3.44)	(1.97)	(1.41)	(0.77)
RESIST·INSOWN			-0.001	-0.001*
			(0.95)	(1.76)
BANK		0.039***		0.096***
		(2.81)		(4.85)
BANK·INSOWN				-0.004***
				(7.65)
INSUR		-0.320**		-1.148*
		(2.47)		(1.95)
INSUR·INSOWN				0.019
				(1.48)
ASMAT	0.001***	0.001***	0.001***	0.001***
	(11.48)	(9.22)	(10.63)	(7.89)
MTB	0.005***	0.005***	0.005***	0.004***
	(15.10)	(11.22)	(14.78)	(10.17)
SIZE	0.015***	0.012***	0.010***	0.011***
	(8.94)	(9.32)	(5.19)	(4.87)
TANGIB	-0.054***	-0.042***	-0.043***	-0.031***
	(5.83)	(4.90)	(4.72)	(2.80)
ROA	-0.279***	-0.265***	-0.315***	-0.300***
	(12.16)	(9.32)	(13.08)	(7.20)
AGE	-0.017***	0.001	-0.015***	0.001
	(2.91)	(0.12)	(2.78)	(0.24)
TAX	-0.011***	-0.012***	-0.010***	-0.008***
	(9.71)	(7.00)	(8.48)	(5.37)
Observations	413	417	411	415
m_2	0.85	-0.18	0.81	-0.20
Hansen test (d.f.)	61.71 (215)	65.49 (207)	60.28 (213)	63.92 (206)

In Column 4 we report the results when we take into account the types of pressure sensitive institutional investors (i.e., banks or insurance companies) and introduce the directors' ownership as interacted variables. We can see a dual impact of directors representing banks. Although bankers in boards exacerbate financial leverage, their influence is conditional on the proportion of shares owned by directors. The negative sign of the interacted variable shows that banks as directors avoid taking too much financial risk. Then, banks are not interested in high levels of leverage that could threat the viability of the firm whose shares they own. This result also could imply that the ownership structure is a mechanism of control alternative to the board of directors. Thus, the higher the fraction of shares held by directors, the less prone the firm to borrow. The substituting relation among internal mechanisms of control has been also noted by Fernández and Arrondo (2005).

In Column 3 of Table 6 we reproduce the analysis concerning bank debt. Once again, pressure sensitive directors seem to reinforce the relations with banks and have a positive effect on bank debt. Nevertheless, the negative sign of the interacted variable suggests that they avoid taking too much financial risk when they are shareholders on top of directors.

Results reported in Column 4 of Table 6 corroborate the dual role of banks: although bankers in boards increase banking debt, the joint effect of bank ownership and bank directorship is negative. There seems to be an interaction among the different roles as they may be simultaneously directors, shareholders (and probably lenders). If this is the case, banks are concerned about the viability of their firm and avoid taking too much financial risk.

As regards the control variables, we find that arm's length funds are positively related to the maturity and tangibility of assets, and to growth opportunities. On the contrary, it is negatively affected by firm's performance. These results are consistent with the asymmetric information approach (Haque, et al., 2009; James and Smith, 2000; Yosha, 1995) and the moral hazard approach (Dennis, et al., 2000; Dewaelheyns and Van Hulle, 2010; Johnson, 1997) of financial intermediation.

Table 6: GMM estimates of the baseline model (bank debt)

Estimated coefficients (t-stats) of the estimation of the baseline model through the generalized method of moments. The dependent variable is always BKLEV, i.e., the proportion of bank debt over total debt; RESIST, SENSIT, BANK, INSUR is the proportion of the directors who represent pressure resistant institutional investors, pressure sensitive institutional investors, banks or insurance companies, respectively; INSOWN is the proportion of shares held by directors; ASMAT is assets maturity, MTB is the equity market to book ratio, SIZE is the log of total assets, TANGIB is tangible assets over total assets, ROA is the return on assets, AGE is the log of the number of years since the constitution of the firm, and TAX is taxes paid over costly debt. m_2 is a test of second order serial autocorrelation, Hansen test is a test of overidentifying restrictions which distributes as χ^2 (degrees of freedom). *** for 99 percent confidence level, ** for 95 percent and * for 90 percent.

	(1)		(2)		(3)		(4)	
$BKLEV_{t-1}$	0.653 (24.61)	***	0.545 (18.33)	***	0.601 (24.08)	***	0.538 (16.88)	***
SENSIT	0.172 (4.68)	***			0.331 (6.54)	***		
SENSIT·INSOWN					-0.008 (10.53)	***		
RESIST	0.093 (3.31)	***	0.035 (1.52)		0.056 (1.40)		-0.021 (0.44)	
RESIST·INSOWN					0.001 (1.70)	*	0.001 (1.35)	
BANK			0.166 (5.11)	***			0.326 (5.89)	***
BANK·INSOWN							-0.010 (13.13)	***
INSUR			0.728 (3.53)	***			0.360 (0.57)	
INSUR·INSOWN							0.004 (0.31)	
ASMAT	0.001 (1.51)		0.000 (2.80)	***	0.000 (3.49)	***	0.001 (3.60)	***
MTB	0.004 (7.18)	***	0.004 (7.60)	***	0.005 (8.94)	***	0.004 (8.20)	***
SIZE	-0.001 (0.52)		0.003 (0.78)		-0.007 (2.47)	**	0.001 (0.15)	
TANGIB	0.178 (8.37)	***	0.183 (8.61)	***	0.203 (8.00)	***	0.179 (7.19)	***
ROA	-0.190 (3.98)	***	-0.160 (3.33)	***	-0.140 (2.55)	**	-0.180 (2.62)	**
AGE	-0.012 (1.98)	**	0.001 (0.14)		-0.014 (1.86)	*	-0.010 (0.93)	
TAX	-0.001 (0.64)		-0.006 (2.48)	**	-0.001 (0.74)		-0.003 (1.10)	
Observations	417		417		411		415	
m_2	0.27		0.18		0.32		0.37	
Hansen test (d.f.)	69.2 (215)		56.71 (207)		61.68 (213)		60.34 (204)	

4.4. Sensitivity analysis

We now present some further analysis to check the sensitivity of our results to different estimation methods and different specifications of our model. First, we run new estimates using the two stages least square method (2SLS). Given the possibility of boards of directors being affected by corporate finance issues, Coles, et al. (2008) and Bhagat and Black (2001) use an instrumental variables model. Likewise, in Table 7 we report the estimates for our model. In Columns 1 and 2 the dependent variable is LEV and in Columns 3 and 4 the dependent variable is BKLEV. For simplicity we only report the most comprehensive models combining both the presence of grey directors and the ownership of the investors they represent.

The estimates of Table 7 corroborate the above reported ones. According to Columns 1 and 3, directors representing pressure sensitive investors have a positive influence on both leverage and bank debt, coherently with H1a. Nevertheless, this influence becomes negative when the ownership held by the institutional investors is taken into account. When we split up the effect of pressure sensitive directors into bank representatives and insurance companies representatives (Columns 2 and 4), the most remarkable result is the positive effect of BANK variable along with the negative effect of the interacted variable BANK·INSOWN. This result corroborates the ones reported in Tables 5 and 6.

Our second robustness check has to do with the role that grey directors play in the board. As it has been noted by a number of authors, the committee structure is an outstanding feature of the board of directors. Furthermore, there are three committees to which policy makers have paid special attention: the executive, the audit, and the compensation and nominating committees (Brick and Chidambaran, 2010; Cook and Wang, 2011; Reeb and Upadhyay, 2010). Since the Spanish Foundation of Financial Studies (2011) has shown that fewer than 46 percent of the Spanish quoted firms have an executive committee, we analyze the role of the institutional directors in the two other committees: audit and compensation and nomination.

The results reported in Table 8 (for the compensation and nomination committee) and in Table 9 (for the audit committee) corroborate our previous findings. As shown in Columns 1 and 3, directors representing pressure sensitive investors increase financial leverage, consistent with H1a. Nevertheless, Column 1 shows that, when the directors own a high proportion of shares, they refuse to reach high levels of financial leverage.

According to Columns 2 and 4, this combined effect is predominant among the directors representing banks and other deposit entities.

Table 7: 2SLS estimates of the baseline models

Estimated coefficients (t-stats) of the estimation of the baseline model through the two stages least squares method. The dependent variable is LEV (total debt to total assets) in Columns 1 and 2, and BKLEV (the proportion of bank debt over total debt) in Columns 3 and 4; RESIST, SENSIT, BANK, INSUR is the proportion of the directors who represent pressure resistant institutional investors, pressure sensitive institutional investors, banks or insurance companies, respectively; INSOWN is the proportion of shares held by directors; ASMAT is assets maturity, MTB is the equity market to book ratio, SIZE is the log of total assets, TANGIB is tangible assets over total assets, ROA is the return on assets, AGE is the log of the number of years since the constitution of the firm, and TAX is taxes paid over costly debt. *** for 99 percent confidence level, ** for 95 percent and * for 90 percent.

	(1)		(2)		(3)		(4)	
LEV_{t-1}	0.781	***	0.747	***				
	(24.06)		(23.70)					
$BKLEV_{t-1}$					0.703	***	0.620	***
					(19.23)		(7.98)	
SENSIT	0.766	***			0.738	**		
	(3.65)				(2.74)			
SENSIT·INSOWN	-0.017	***			-0.016	**		
	(3.66)				(2.73)			
RESIST	0.125	***	0.146	***	0.143	**	0.292	**
	(2.92)		(3.55)		(2.26)		(2.07)	
RESIST·INSOWN	0.001		-0.000		-0.001		0.000	
	(0.18)		(0.61)		(0.26)		(0.12)	
BANK			0.653	***			2.278	*
			(3.52)				(1.86)	
BANK·INSOWN			-0.014	***			-0.050	*
			(3.27)				(1.90)	
INSUR			-0.137				-0.295	
			(0.41)				(0.34)	
INSUR·INSOWN			-0.004				0.016	
			(0.41)				(0.51)	
ASMAT	0.001	***	0.001	***	0.001	*	0.003	
	(4.05)		(4.05)		(1.92)		(1.86)	
MTB	0.009	***	0.009	***	0.005	*	0.008	
	(4.43)		(4.42)		(1.83)		(1.55)	
TANGIB	-0.051	*	-0.039		0.145	***	0.155	**
	(1.73)		(1.37)		(3.38)		(2.17)	
ROA	-0.233	***	-0.222	***	-0.109		-0.034	
	(3.77)		(3.90)		(1.14)		(0.22)	
AGE	-0.021	**	-0.010		-0.017		-0.025	
	(2.34)		(1.27)		(1.42)		(1.14)	
TAX	-0.015	***	-0.014	***	-0.004		-0.010	
	(3.04)		(2.99)		(0.59)		(0.76)	
Observations	415		415		415		394	
Adj-R^2	0.5689		0.5029		0.4870		0.2212	

Table 8: GMM estimates (compensation and nomination committee)

Estimated coefficients (t-stats) through the generalized method of moments. The dependent variable is LEV (total debt to total assets) in Columns 1 and 2, and BKLEV (the proportion of bank debt over total debt) in Columns 3 and 4; RESISTNC, SENSITNC, BANKNC, INSURNC is the proportion of members of the compensation and nomination committee who represent pressure resistant institutional investors, pressure sensitive institutional investors, banks or insurance companies, respectively; INSOWN is the proportion of shares held by directors; ASMAT is assets maturity, MTB is the equity market to book ratio, SIZE is the log of total assets, TANGIB is tangible assets over total assets, ROA is the return on assets, AGE is the log of the number of years since the constitution of the firm, and TAX is taxes paid over costly debt. m_2 is a test of second order serial autocorrelation, Hansen test is a test of overidentifying restrictions which distributes as χ^2 (degrees of freedom). *** for 99 percent confidence level, ** for 95 percent and * for 90 percent.

	(1)		(2)		(3)		(4)	
LEV_{t-1}	0.765	***	0.776	***				
	(66.88)		(65.35)					
$BKLEV_{t-1}$					0.635	***	0.627	***
					(24.49)		(20.92)	
SENSITNC	0.072	***			0.025	**		
	(5.10)				(2.51)			
SENSITNC·INSOWN	-0.001	**			-0.001	***		
	(2.52)				(3.16)			
RESISTNC	0.027	**	-0.002		0.038	***	0.037	**
	(1.99)		(0.53)		(2.88)		(2.60)	
RESISTNC·INSOWN	-0.001	**	0.001		-0.001	**	-0.001	**
	(2.18)		(0.88)		(2.36)		(2.44)	
BANKNC			0.088	***			0.100	**
			(5.86)				(2.06)	
BANKNC·INSOWN			-0.002	***			-0.004	***
			(3.45)				(2.85)	
INSURNC			-0.786				-5.329	**
			(0.45)				(1.79)	
INSURNC·INSOWN			0.373				0.261	*
			(0.47)				(1.75)	
ASMAT	0.001	***	0.001	***	0.001		0.001	*
	(9.40)		(6.61)		(0.76)		(1.81)	
MTB	0.005	***	0.004	***	0.005	***	0.004	***
	(10.14)		(9.93)		(9.53)		(7.15)	
SIZE	0.009	***	0.012	***	-0.002		-0.001	
	(4.73)		(6.11)		(0.89)		(0.10)	
TANGIB	-0.028	***	-0.076	***	0.224	***	0.200	***
	(2.80)		(5.78)		(10.61)		(8.09)	
ROA	-0.199	***	-0.316	***	-0.116	*	-0.014	
	(5.99)		(7.54)		(1.86)		(0.20)	
AGE	-0.007		-0.025	***	-0.014		-0.029	**
	(0.89)		(3.48)		(1.47)		(2.77)	
TAX	-0.009	***	-0.011	***	-0.003	***	-0.005	*
	(5.30)		(6.81)		(2.77)		(1.89)	
Observations	378		378		378		378	
m_2	-0.16		-0.16		0.28		0.68	
Hansen test (d.f.)	45.51 (245)		50.73 (235)		65.24 (241)		56.25 (237)	

Table 9: GMM estimates (audit committee)

Estimated coefficients (t-stats) through the generalized method of moments. The dependent variable is LEV (total debt to total assets) in Columns 1 and 2, and BKLEV (the proportion of bank debt over total debt) in Columns 3 and 4; RESISTAC, SENSITAC, BANKAC, INSURAC is the proportion of members of the compensation and nomination committee who represent pressure resistant institutional investors, pressure sensitive institutional investors, banks or insurance companies, respectively; INSOWN is the proportion of shares held by directors; ASMAT is assets maturity, MTB is the equity market to book ratio, SIZE is the log of total assets, TANGIB is tangible assets over total assets, ROA is the return on assets, AGE is the log of the number of years since the constitution of the firm, and TAX is taxes paid over costly debt. m_2 is a test of second order serial autocorrelation, Hansen test is a test of overidentifying restrictions which distributes as χ^2 (degrees of freedom). *** for 99 percent confidence level, ** for 95 percent and * for 90 percent.

	(1)		(2)		(3)		(4)	
LEV_{t-1}	0.771	***	0.757	***				
	(92.32)		(87.37)					
$BKLEV_{t-1}$					0.634	***	0.572	***
					(25.73)		(21.76)	
SENSITAC	0.017	**			0.088	***		
	(2.22)				(4.00)			
SENSITAC·INSOWN	-0.002	**			-0.001	***		
	(2.32)				(2.81)			
RESISTAC	0.002		0.014		0.066	***	-0.051	
	(0.12)		(0.94)		(4.73)		(0.90)	
RESISTAC·INSOWN	0.105		0.001		0.164		0.000	
	(1.59)		(1.52)		(0.45)		(0.41)	
BANKAC			0.088	***			0.244	***
			(3.86)				(6.51)	
BANKAC·INSOWN			-0.004	***			-0.008	***
			(8.35)				(9.03)	
INSURAC			-0.678				0.365	
			(1.08)				(0.27)	
INSURAC·INSOWN			0.025				0.016	
			(0.69)				(0.23)	
ASMAT	0.001	***	0.001	***	0.000	***	0.001	***
	(8.94)		(6.61)		(3.40)		(5.09)	
MTB	0.004	***	0.004	***	0.005	***	0.004	***
	(12.07)		(9.93)		(9.72)		(7.15)	
SIZE	0.013	***	0.012	***	-0.003		-0.007	**
	(10.67)		(6.11)		(0.95)		(2.10)	
TANGIB	-0.054	***	-0.076	***	0.191	***	0.176	***
	(5.29)		(5.78)		(10.14)		(8.27)	
ROA	-0.308	***	-0.316	***	-0.052		-0.062	
	(12.41)		(7.54)		(0.81)		(0.90)	
AGE	-0.014	***	-0.025	***	-0.004		0.004	
	(3.72)		(3.48)		(0.35)		(0.25)	
TAX	-0.011	***	-0.011	***	-0.007	***	-0.007	***
	(11.69)		(6.81)		(3.03)		(3.03)	
Observations	414		414		414		414	
m_2	-0.21		-0.14		0.39		0.52	
Hansen test (d.f.)	69.15 (250)		59.77 (215)		61.57 (250)		57.47 (215)	

5. Concluding remarks

Whereas recent studies have shown the prevalence of large institutional shareholdings around the world, the research about the influence of institutional investors as directors is still scarce. In this paper we propose that the type of business relations between firms and institutional investors is important to understand the incentives of these directors and, hence, the financial policy of the firm. We study the relation between the capital structure decisions of Spanish listed firms and institutional directors, making a distinction between those ones who keep business relations with the firm in whose board they sit, and institutional investors whose business activity is not related to the company in which they hold a directorship. We analyze the role of these directors under the agency theory along with other behavioral perspectives such as the resource dependence and the stewardship theory.

Our results suggest that institutional directors have diverse incentives to engage in the corporate governance. Consistent with the importance of business relations, the directors representing pressure sensitive investors (i.e., banks and insurance companies) have a preference for lower financial leverage, while the pressure resistant directors (i.e., mutual funds and pension funds) do not seem to have a consistent effect. This result suggests that pressure sensitive directors can provide managerial discipline alternative to the capital structure mechanism or prevent excessive financial risk taking. Nevertheless, when analysed separately, bank and insurance firm representative directors show different attitudes. Bankers in the board increase the financial leverage, which suggests that some types of institutional directors provide financial resources to the firms in whose board they sit. We also find a sort of risk aversion among directors representing banks, so that the higher the fraction of shares they own, the more the companies refuse both financial leverage and banking debt. It also can be understood as a possible substitution effect between the monitoring by the board of directors and the control through insider ownership.

The amplifying effect on the financial leverage of the bank involvement in boards of directors suggests that bank directors seems to provide financial expertise and access to financial funds as the resource dependence theory suggests. Nevertheless, the moderating effect of insider ownership on capital structure indicates that the role played by banks as providing critical resources is conditional on their stake in the ownership.

Our research sheds some light about the role played by financial intermediaries in the governance of non-financial firms. The supervision performed by these directors explains why, unlike US or UK systems in which board independence has been enhanced as a mechanism for managers monitoring, firms in Continental Europe have a significantly higher proportion of directors representing institutional investors. In addition, unlike the Anglo-Saxon countries, the concentrated ownership in Continental Europe firms results in interacted effects between institutional directorship and institutional ownership.

Overall, our research has interesting academic and policy implications for the debate over the proper degree of institutional involvement in corporate governance as witnessed by the public consultation recently launched by the European Commission on some corporate governance issues. First, when analysing the role of institutional investors one has to take into account not only their ownership stake, but their role in other mechanisms of corporate control such as the board of directors. Second, different institutional investors have different agendas and incentives for corporate governance, so both researchers and policy makers should no longer consider institutional investors as a whole. Third, the incentives of banks and, hence, the role that bank representative directors play in corporate governance could vary depending on other corporate variables, such as the ownership held by directors. Fourth, analysing the role of institutional directors under behavioural perspectives is necessary to better understand their involvement in effective corporate governance. Although the recent literature has shed some light on these issues, the research still has to deepen in the causes and implications of institutional investors involvement in the corporate governance of non-financial firms, particularly in bank-based economies.

References

Acedo-Ramírez, M. A., Ayala-Calvo, J. C. and Rodríguez-Osés, J. E., 2012. Capital structure of small companies in the Spanish footwear sector: relevant factors, *SERIEs*, ***Forthcoming***.

Adams, R. B. and Ferreira, D., 2007. A theory of friendly boards, *Journal of Finance*, **62**, 217-250.

Agrawal, A. and Knoeber, C. R., 1996. Firm performance and mechanisms to control agency problems between managers and shareholders, *Journal of Financial and Quantitative Analysis*, **31**.

Agrawal, A. and Mandelker, G. N., 1990. Large shareholders and the monitoring of managers: the case of antitakeover charter amendments, *Journal of Financial and Quantitative Analysis*, **25**, 143–161.

Aguilera, R. V. and Cuervo Cazurra, Á., 2009. Codes of good governance, *Corporate Governance: An International Review*, **17**, 376-387.

Aguilera, R. V., Cuervo Cazurra, Á. and Kim, S. 2009. Taking Stock of Research on Codes of Good Governance. In F. López (ed) *Codes of Corporate Governance Around the World*, 1-30. New York: Nova Publisher.

Almazán, A., Hartzell, J. C. and Starks, L. T., 2005. Active institutional shareholders and costs of monitoring: Evidence from executive compensation, *Financial Management*, **34**, 5-34.

Alonso-Borrego, C. and Arellano, M., 1999. Symmetrically normalized instrumental variable estimation using panel data, *Journal of Business & Economic Statistics*, **17**, 36-49.

Anderson, R. C., Mansi, S. A. and Reeb, D. M., 2004. Board characteristics, accounting report integrity, and the cost of debt, *Journal of Accounting and Economics*, **37**, 315-342.

Antoniou, A., Guney, Y. and Paudyal, K., 2008. The determinants of capital structure: Capital market-oriented versus bank-oriented institutions, *Journal of Financial and Quantitative Analysis*, **43**, 59-92.

Arellano, M., 2003. *Panel data econometrics* Oxford: Oxford University Press.

Arellano, M. and Bond, S., 1991. Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations, *Review of Economic Studies*, **58**, 277-297.

Ashbaugh-Skaife, H., Collins, D. W. and LaFond, R, 2006. The effects of corporate governance on firms' credit ratings, *Journal of Accounting and Economics*, **42**, 203-243.

Bancel, F. and Mittoo, U. R., 2004. Cross-country determinants of capital structure choice: A survey of European firms, *Financial Management*, **33**, 103-132.

Barroso, C., Domínguez, M., Vecino Gravel, J. and Villegas, M. M., 2009. Does the Team Leverage the Boards Decisions?, *Corporate Governance: An International Review*, **17**, 744-761.

Barroso, C., Villegas, M. M. and Pérez-Calero, L., 2011. Board influence on a firm's internationalization, *Corporate Governance: An International Review*, **19**, 351-367.

Baysinger, B. and Butler, H. H., 1985. Corporate governance and the board of directors: performance effects of changes in board composition, *Journal of Law, Economics, and Organization*, **1**, 101-124.

Belsley, D. A., Kuh, E. and Roy, E. 2004. *Regression Diagnostics. Identifying Influential Data and Sources of Collinearity*. New York: Wiley.

Bennett, J. A., Sias, R. W. and Starks, L. T. 2003. Greener pastures and the impact of dynamic institutional preferences, *Review of Financial Studies*, **16**, 1203–1238.

Bhagat, S. and Black, B. S. 2001. The non-correlation between board independence and long-term firm performance, *Journal of Corporation Law*, **27**, 231-274.

Bhattacharya, P. S. and Graham, M. 2007. "Institutional ownership and firm performance: Evidence from Finland?". Working Paper. School of Accounting, Economics and Finance. Faculty of Business and Law. Deaking University. Melbourne. Available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1000092

Bhojraj, S. and Sengupta, P. 2003. Effect of Corporate Governance on Bond Ratings and Yields: The Role of Institutional Investors and Outside Directors, *Journal of Business*, **76**, 455-473.

Blundell, R. and Bond, S. 1998. Initial conditions and moment restrictions in dynamic panel data models, *Journal of Econometrics*, **87**, 115-143.

Bond, S. 2002. Dynamic panel data models: A guide to micro data methods and practice. In Editor ed.) *Book Dynamic panel data models: A guide to micro data methods and practice*. City: The Institute for fiscal Studies.

Booth, J. R. and Deli, D. N. 1999. On executives of financial institutions as outside directors, *Journal of Corporate Finance*, **5**, 227-250.

Borokhovich, K. A., Brunarski, K., Harman, Y. S. and Parrino, R. 2006. Variation in the monitoring incentives of outside stockholders, *Journal of Law and Economics*, **49**, 651–680.

Bozec, Y. and Bozec, R. 2007. Ownership Concentration and Corporate Governance Practices: Substitution or Expropriation Effects?, *Canadian Journal of Administrative Sciences*, **24**, 182-195.

Brick, I. E. and Chidambaran, N. K. 2010. Board meetings, committee structure, and firm value, *Journal of Corporate Finance*, **16**, 533-553.

Brickley, J. A., Lease, R. C. and Smith, C. W. 1988. Ownership structure and voting on antitakeover amendments, *Journal of Financial Economics*, **20**, 267–291.

Bushee, B. J. 1998. The influence of institutional investors on myopic R&D investment behaviour, *The Accounting Review*, **73**, 305-333.

Byrd, D. T. and Mizruchi, M. 2005. Bankers on the board and the debt ratio of firms, *Journal of Corporate Finance*, **11**, 129-173.

Castaldi, R. and Wortman, M. S. J. 1984. Boards of Directors in Small Corporations: An Untapped Resource, *American Journal of Small Business*, **9**, 1-10.

Coles, J. L., Daniel, N. D. and Naveen, L. 2008. Boards: does one size fit all?, *Journal of Financial Economics*, **87**, 329-356.

Cook, D. O. and Wang, H. 2011. The informativeness and ability of independent multi-firm directors, *Journal of Corporate Finance*, **17**, 108-121.

Cornett, M. M., J., M. A., Saunders, A. and Tehranian, H. 2007. The impact of institutional ownership on corporate operating performance, *Journal of Banking & Finance*, **31**, 1771–1794.

Cuevas-Rodríguez, G., Gomez-Mejia, L. and Wiseman, R. 2012. Has agency theory run its course? Making the theory more flexible to inform the management of reward systems, *Corporate Governance: An International Review*, **20**, 526-546.

Chen, K., Elder, R. and Hsieh, Y. 2007. Corporate governance and earnings management: The implications of corporate governance best practice principles for Taiwanese listed companies, *Journal of Contemporary Accounting and Economics*, **3**, 73–105.

Demsetz, H. and Villalonga, B. 2001. Ownership structure and corporate performance, *Journal of Corporate Finance*, **7**, 209-233.

Dennis, S., Nandy, D. and Sharpe, I. G. 2000. The determinants of contract terms in bank revolving credit agreements, *Journal of Financial and Quantitative Analysis*, **?**, 87-¿.

Dewaelheyns, N. and Van Hulle, C. 2010. Internal Capital Markets and Capital Structure: Bank Versus Internal Debt, *European Financial Management*, **16**, 345-373.

Diamond, D. W. 1991. Monitoring and Reputation: The Choice between Bank Loans and Directly Placed Debt, *Journal of Political Economy*, **99**, 689-721.

Dittmann, I., Maug, E. and Schneider, C. 2010. Bankers on the Boards of German Firms: What They Do, What They are Worth, and Why They are (Still) There, *Review of Finance*, **14**, 35-71.

Dong, M. and Ozkan, A. 2008.Institutional investors and director pay: An empirical study of UK companies, *Journal of Multinational Financial Management*, **18**, 16-29.

Duchin, R., Matsusaka, J. G. and Ozbas, O. 2010 When are outside directors effective?, *Journal of Financial Economics*, **96**, 195-214.

Elyasiani, E. and Jia, J. 2010. Distribution of institutional ownership and corporate firm performance, *Journal of Banking & Finance*, **34**, 606-620.

Elyasiani, E., Jingyi Jian, J. and Mao, C. 2010. Institutional ownership stability and the cost of debt, *Journal of Financial Markets*, **13**, 475-500.

Ertugrul, M. and Hegde, S. 2008. Board compensation practices and agency costs of debt, *Journal of Corporate Finance*, **14**, 512-531.

European Commission 2011. *Feedback statement. Summary of responses to the Commission Green Paper on the EU corporate governance*. Brussels: European Commission.

Fama, E. F. 1985. What's different about banks?, *Journal of Monetary Economics*, **15**, 29-39.

Fama, E. F. and Jensen, M. C. 1983. The separation of ownership and control, *Journal of Law & Economics*, **26**, 301-325.

Fernández, C. and Arrondo, R. 2005. Alternative Internal Controls as Substitutes of the Board of Directors, *Corporate Governance: An International Review*, **13**, 856-866.

Ferreira, M. A. and Matos, P. 2008. The colors of investors' money: The role of institutional investors around the world, *Journal of Financial Economics*, **88**, 499-533.

Fields, L. P., Fraser, R. and Subrahmanyam, A. 2012. Board quality and the cost of debt capital: The case of bank loans, *Journal of Banking and Finance*, **36**, 1536-1547.

Flannery, M. J. and Rangan, K. P. 2006. Partial adjustment toward target capital structures, *Journal of Financial Economics*, **79**, 469-506.

Foundation of Financial Studies 2011.: "Observatorio de Gobierno Corporativo 2010". Papeles de la Fundación. Madrid. Available at

Frank, M. Z. and Goyal, V. K. 2009. Capital structure decisions: Which factors are reliably important?, *Financial Management*, **48**, 1-37.

Gabrielsson, J. and Huse, M. 2005. "Outside" directors in SME boards: A call for theoretical reflections, *Corporate Board: Role, Duties & Composition*, **1**, 28-37.

García Osma, B. and Gill de Albornoz Noguer, B. 2007. The Effect of the Board Composition and its Monitoring Committees on Earnings Management: evidence from Spain, *Corporate Governance: An International Review*, **15**, 1413-1428.

Gillan, S. L. and Starks, L. T. 2003. Corporate governance, corporate ownership, and the role of institutional investors, a global perspective, *Journal of Applied Corporate Finance*, **13**, 4-22.

González, V. M. and González, F. 2011. Firm size and capital structure: evidence using dynamic panel data, *Applied Economics*, **44**, 4745-4754.

Graham, J. and Harvey, C. 2001. The theory and practice of corporate finance: Evidence from the field, *Journal of Financial Economics*, **60**, 187-243.

Güner, A. B., Malmendier, U. and Tate, G. 2008. The Impact of Boards with Financial Expertise on Corporate Policies, *Journal of Financial Economics*, **88**, 323-354.

Hadlock, C. J. and James, C. M. 2002. Do banks provide financial slack?, *Journal of Finance*, **57**, 1383-1419.

Haque, F., Arun, T. G. and Kirkpatrick, C. 2009. Corporate governance and capital structure in developing countries: a case study of Bangladesh, *Applied Economics*, **43**, 673-681.

Hartzell, J. and Starks, L. T. 2003. Institutional investors and executive compensation, *Journal of Finance*, **58**, 2351–2374.

Heidrick and Struggles 2011. *Challenging board performance. European Report on corporate governance*: Heidrick & Struggles.

Hermalin, B. E. and Weisbach, M. S. 1998. Endogenously chosen boards of directors and their monitoring of the CEO, *American Economic Review*, **88**, 96-118.

Hillman, A. J., Nicholson, G. J. and Shropshire, C. 2008. Directors' Multiple Identities, Identification, and Board Monitoring and Resource Provision., *Organization Science*, **19**, 441-456.

Hoshi, T., Kashyap, A. and Scharfstein, D. 1990. The role of banks in reducing the costs of financial distress in Japan, *Journal of Financial Economics*, **27**, 67-88.

Hovakimian, A., Hovakimian, G. and Tehranian, H. 2004. Determinants of target capital structure: The case of dual debt and equity issues, *Journal of Financial Economics*, **71**, 517-540.

Hovakimian, A. and Li, G. 2011. In search of conclusive evidence: How to test for adjustment to target capital structure, *Journal of Corporate Finance*, **17**, 33-44.

James, C. and Smith, D. C. 2000. Are banks still special? New evidence on their role in the corporate capital-raising process, *Journal of Applied Corporate Finance*, **13**, 52-63.

Jensen, M. C. 1986. Agency costs of free cash flow, corporate finance and takeovers, *American Economic Review*, **76**, 323-329.

Jensen, M. C. and Meckling, W. H. 1976. Theory of the firm: managerial behavior, agency costs and ownership structure, *Journal of Financial Economics*, **3**, 305-360.

Jia, J., Adams, M. and Buckle, M. 2012. Insurance and ownership structure in India's corporate sector, *Asia Pacific Journal of Management*, **29**, 129-149.

Johnson, J., Daily, C. M. and Ellstrand, A. E. 1996. Board of directors: a review and research agenda, *Journal of Management and Governance*, **22**, 409-438.

Johnson, S. A. 1997. An empirical analysis of the determinants of corporate debt ownership structure, *Journal of Financial and Quantitative Analysis*, **32**, 47-69.

Kang, J.-K., Shivdasani, A. and Yamada, T. 2000. The effect of bank relations on investment decisions: An investigation of Japanese takeover bids, *Journal of Finance*, **55**, 2197-2218.

Kayo, E. K. and Kimura, H. 2011. Hierarchical determinants of capital structure, *Journal of Banking & Finance*, **35**, 358-371.

Knapp, J. R., Dalziel, T. and Lewis, M., W. 2011. Governing top managers: Board control, social categorization, and their unintended influence on discretionary behaviors, *Corporate Governance: An International Review*, **19**, 295-310.

Kochhar, R. and David, P. 1996. Institutional investors and firm innovation: A test of competing hypotheses, *Strategic Management Journal*, **17**, 73-84.

Kroszner, R. S. and Strahan, P. E. 2001. Bankers on boards: Monitoring, conflicts of interest, and lender liability, *Journal of Financial Economics*, **62**, 415-452.

Kutner, M. H., Neter, J., Nachtsheim, C. J. and Li, W. 2005. *Applied Linear Statistical Models*. New York: McGraw Hill.

La Porta, R., Lopez de Silanes, F., Shleifer, A. and Vishny, R. 1997. Legal determinants of external finance, *The Journal of Finance*, **52**, 1131-1150.

Leary, M. T. 2009. Bank loan supply, lender choice, and corporate capital structure, *Journal of Finance*, **64**, 1143-1185.

Lemmon, M. L., Roberts, M. R. and Zender, J. F. 2008. Back to the beginning: Persistence and the cross-section of corporate capital structure, *Journal of Finance*, **63**, 1575-1608.

Li, D., Moshirian, F., Pham, P. K. and Zein, J. 2006. When financial institutions are large shareholders: The role of macro corporate governance environments, *Journal of Finance*, **61**, 2975-3007.

López Gracia, J. and Sogorb Mira, F. 2008. Testing trade-off and pecking order theories financing SMEs, *Small Business Economics*, **31**, 117-136.

Lummer, S. L. and McConnell, J. 1989. Further evidence on the bank lending process and the capital-market response to bank loan agreements, *Journal of Financial Economics*, **25**, 99-122.

Maassen, G. F. 2002. *An International Comparison of Corporate Governance Models. A Study on the Formal Independence and Convergence of One-Tier and Two-Tier Corporate Boards of Directors in the United States of America, the United Kingdom and the Netherlands.* Amsterdam: Spencer Stuart Executive Search.

MacMinn, R. 1987. Insurance and Corporate Risk Management, *Journal of Risk and Insurance*, **54**, 658-677.

Masulis, R. W. and Mobbs, S. 2011. Are all inside directors the same? Evidence from the external directorship market, *Journal of Finance*, **66**, 823-872.

McNulty, T. and Pettigrew, A. 1999. Strategists on the board, *Organization Studies*, **20**, 40-74.

Morck, R., Nakamura, M. and Shivdasani, A. 2000. Banks, ownership structure, and firm value in Japan, *Journal of Business*, **73**, 539-567.

Morck, R., Wolfenzon, D. and Yeung, B. 2005. Corporate governance, economic entrenchment, and growth, *Journal of Economic Literature*, **43**, 655-720.

Pfeffer, J. 1972. Size and composition of corporate boards of directors: the organization and its environment, *Administrative Science Quarterly*, **17**, 218-228.

Pfeffer, J. 1973. Size, composition, and function of hospital boards of directors: A study of organization-environment linkage, *Administrative Science Quarterly*, **18**, 349-364.

Piot, C. and Missonier-Piera, F. 2007.: "Corporate Governance, Audit Quality and the Cost of Debt Financing of French Listed Companies". SSRN Working Paper Series. Available at http://ssrn.com/abstract=960681

Pound, J. 1988. Proxy contest and the efficiency of shareholder oversig, *Journal of Financial Economics*, **20**, 237–265.

Psillaki, M. and Daskalakis, N. 2009. Are the determinants of capital structure country or firm specific, *Small Business Economics*, **33**, 319-333.

Pugliese, A., Bezemer, P. J., Zattoni, A., Huse, M., van den Bosch, F. A. J. and Volberda, H. W. 2009. Boards of directors' contribution to strategy: a literature

review and research agenda, *Corporate Governance: An International Review*, **17**, 292-306.

Rajan, R. G. 1992. Insiders and Outsiders: The Choice between Informed and Arm's-Length Debt, *Journal of Finance*, **47**, 1367-1400.

Ramalingegowda, S. and Yu, Y. 2012. Institutional ownership and conservatism, *Journal of Accounting and Economics*, **53**, 98–114.

Ramírez, C. D. 1995. Did J.P. Morgan's men add liquidity? Corporate investment, cash flow, and financial structure at the turn of the twentieth century, *Journal of Finance*, **50**, 661-678.

Rediker, K. J. and Seth, A. 1995. Boards of directors and substitution effects of alternative governance mechanisms, *Strategic Management Journal*, **16**, 85-99.

Reeb, D. and Upadhyay, A. 2010. Subordinate board structures, *Journal of Corporate Finance*, **16**, 469-486.

Rindova, V. 1999. What corporate boards have to do with strategy: A cognitive perspective, *Journal of Management Studies*, **36**, 953-975.

Roberts, G. S. and Yuan, L. E. 2006. Does institutional ownership affect the cost of bank borrowing? , *Journal of Economics and Business*, **62**, 604-626.

Roberts, J., McNulty, T. and Stiles, P. 2005. Beyond agency conceptions of the work of the non-executive director: Creating accountability in the boardroom, *British Journal of Management*, **16**, 5-26.

Rosenstein, S. and Wyatt, J. G. 1997. Inside directors, board effectiveness, and shareholder wealth, *Journal of Financial Economics*, **44**, 229-250.

Ruiz Mallorquí, M. V. and Santana Martín, D. J. 2009. Ultimate institutional owner and takeover defenses in the controlling versus minority shareholders context, *Corporate Governance: An International Review*, **17**, 238-254.

Ruiz Mallorquí, M. V. and Santana Martín, D. J. 2011. Dominant institutional owners and firm value, *Journal of Banking & Finance*, **35**, 118-129.

Slomka-Golebiowska, A. 2012. Bankers on boards as corporate governance mechanism: Evidence from Poland, *Journal of Management and Governance*, **Forthcoming**.

Sogorb Mira, F. 2005. How SME Uniqueness Affects Capital Structure: Evidence From A 1994–1998 Spanish Data Panel, *Small Business Economics*, **25**, 447-457.

Stearns, L. B. and Mizruchi, M. S. 1993. Board composition and corporate financing: the impact of financial institution representation on borrowing, *Academy of Management Journal*, **36**, 603-618.

Vallelado, E. and Saona, P. 2011. An integrated model of capital structure to study the differences in the speed of adjustment to target corporate debt maturity among developed countries *International Journal of Banking, Accounting and Finance*, **3**, 258-293.

van Ees, H., Gabrielsson, J. and Huse, M. 2009. Toward a behavioral theory of boards and corporate governance, *Corporate Governance: An International Review*, **17**, 307-319.

Villalonga, B. and Amit, R. 2006. How do family ownership, control, and management affect firm value?, *Journal of Financial Economics*, **80**, 385-417.

Yosha, O. 1995. Information disclosure costs and the choice of financing source, *Journal of Financial Intermediation*, **4**, 3-20.

FUNDACIÓN DE LAS CAJAS DE AHORROS

DOCUMENTOS DE TRABAJO

Últimos números publicados

159/2000 Participación privada en la construcción y explotación de carreteras de peaje
Ginés de Rus, Manuel Romero y Lourdes Trujillo

160/2000 Errores y posibles soluciones en la aplicación del *Value at Risk*
Mariano González Sánchez

161/2000 Tax neutrality on saving assets. The spahish case before and after the tax reform
Cristina Ruza y de Paz-Curbera

162/2000 Private rates of return to human capital in Spain: new evidence
F. Barceinas, J. Oliver-Alonso, J.L. Raymond y J.L. Roig-Sabaté

163/2000 El control interno del riesgo. Una propuesta de sistema de límites
riesgo neutral
Mariano González Sánchez

164/2001 La evolución de las políticas de gasto de las Administraciones Públicas en los años 90
Alfonso Utrilla de la Hoz y Carmen Pérez Esparrells

165/2001 Bank cost efficiency and output specification
Emili Tortosa-Ausina

166/2001 Recent trends in Spanish income distribution: A robust picture of falling income inequality
Josep Oliver-Alonso, Xavier Ramos y José Luis Raymond-Bara

167/2001 Efectos redistributivos y sobre el bienestar social del tratamiento de las cargas familiares en el nuevo IRPF
Nuria Badenes Plá, Julio López Laborda, Jorge Onrubia Fernández

168/2001 The Effects of Bank Debt on Financial Structure of Small and Medium Firms in some European Countries
Mónica Melle-Hernández

169/2001 La política de cohesión de la UE ampliada: la perspectiva de España
Ismael Sanz Labrador

170/2002 Riesgo de liquidez de Mercado
Mariano González Sánchez

171/2002 Los costes de administración para el afiliado en los sistemas de pensiones basados en cuentas de capitalización individual: medida y comparación internacional.
José Enrique Devesa Carpio, Rosa Rodríguez Barrera, Carlos Vidal Meliá

172/2002 La encuesta continua de presupuestos familiares (1985-1996): descripción, representatividad y propuestas de metodología para la explotación de la información de los ingresos y el gasto.
Llorenc Pou, Joaquín Alegre

173/2002 Modelos paramétricos y no paramétricos en problemas de concesión de tarjetas de credito.
Rosa Puertas, María Bonilla, Ignacio Olmeda

174/2002 Mercado único, comercio intra-industrial y costes de ajuste en las manufacturas españolas.
José Vicente Blanes Cristóbal

175/2003 La Administración tributaria en España. Un análisis de la gestión a través de los ingresos y de los gastos.
Juan de Dios Jiménez Aguilera, Pedro Enrique Barrilao González

176/2003 The Falling Share of Cash Payments in Spain.
Santiago Carbó Valverde, Rafael López del Paso, David B. Humphrey
Publicado en "Moneda y Crédito" nº 217, pags. 167-189.

177/2003 Effects of ATMs and Electronic Payments on Banking Costs: The Spanish Case.
Santiago Carbó Valverde, Rafael López del Paso, David B. Humphrey

178/2003 Factors explaining the interest margin in the banking sectors of the European Union.
Joaquín Maudos y Juan Fernández Guevara

179/2003 Los planes de stock options para directivos y consejeros y su valoración por el mercado de valores en España.
Mónica Melle Hernández

180/2003 Ownership and Performance in Europe and US Banking – A comparison of Commercial, Co-operative & Savings Banks.
Yener Altunbas, Santiago Carbó y Phil Molyneux

181/2003 The Euro effect on the integration of the European stock markets.
Mónica Melle Hernández

182/2004 In search of complementarity in the innovation strategy: international R&D and external knowledge acquisition.
Bruno Cassiman, Reinhilde Veugelers

183/2004 Fijación de precios en el sector público: una aplicación para el servicio municipal de suministro de agua.
Mª Ángeles García Valiñas

184/2004 Estimación de la economía sumergida es España: un modelo estructural de variables latentes.
Ángel Alañón Pardo, Miguel Gómez de Antonio

185/2004 Causas políticas y consecuencias sociales de la corrupción.
Joan Oriol Prats Cabrera

186/2004 Loan bankers' decisions and sensitivity to the audit report using the belief revision model.
Andrés Guiral Contreras and José A. Gonzalo Angulo

187/2004 El modelo de Black, Derman y Toy en la práctica. Aplicación al mercado español.
Marta Tolentino García-Abadillo y Antonio Díaz Pérez

188/2004 Does market competition make banks perform well?.
Mónica Melle

189/2004 Efficiency differences among banks: external, technical, internal, and managerial
Santiago Carbó Valverde, David B. Humphrey y Rafael López del Paso

190/2004 Una aproximación al análisis de los costes de la esquizofrenia en españa: los modelos jerárquicos bayesianos
F. J. Vázquez-Polo, M. A. Negrín, J. M. Cavasés, E. Sánchez y grupo RIRAG

191/2004 Environmental proactivity and business performance: an empirical analysis
Javier González-Benito y Óscar González-Benito

192/2004 Economic risk to beneficiaries in notional defined contribution accounts (NDCs)
Carlos Vidal-Meliá, Inmaculada Domínguez-Fabian y José Enrique Devesa-Carpio

193/2004 Sources of efficiency gains in port reform: non parametric malmquist decomposition tfp index for Mexico
Antonio Estache, Beatriz Tovar de la Fé y Lourdes Trujillo

194/2004 Persistencia de resultados en los fondos de inversión españoles
Alfredo Ciriaco Fernández y Rafael Santamaría Aquilué

195/2005 El modelo de revisión de creencias como aproximación psicológica a la formación del juicio del auditor sobre la gestión continuada
Andrés Guiral Contreras y Francisco Esteso Sánchez

196/2005 La nueva financiación sanitaria en España: descentralización y prospectiva
David Cantarero Prieto

197/2005 A cointegration analysis of the Long-Run supply response of Spanish agriculture to the common agricultural policy
José A. Mendez, Ricardo Mora y Carlos San Juan

198/2005 ¿Refleja la estructura temporal de los tipos de interés del mercado español preferencia por la liquidez?
Magdalena Massot Perelló y Juan M. Nave

199/2005 Análisis de impacto de los Fondos Estructurales Europeos recibidos por una economía regional: Un enfoque a través de Matrices de Contabilidad Social
M. Carmen Lima y M. Alejandro Cardenete

200/2005 Does the development of non-cash payments affect monetary policy transmission?
Santiago Carbó Valverde y Rafael López del Paso

201/2005 Firm and time varying technical and allocative efficiency: an application for port cargo handling firms
Ana Rodríguez-Álvarez, Beatriz Tovar de la Fe y Lourdes Trujillo

202/2005 Contractual complexity in strategic alliances
Jeffrey J. Reuer y Africa Ariño

203/2005 Factores determinantes de la evolución del empleo en las empresas adquiridas por opa
Nuria Alcalde Fradejas y Inés Pérez-Soba Aguilar

204/2005 Nonlinear Forecasting in Economics: a comparison between Comprehension Approach versus Learning Approach. An Application to Spanish Time Series
Elena Olmedo, Juan M. Valderas, Ricardo Gimeno and Lorenzo Escot

205/2005 Precio de la tierra con presión urbana: un modelo para España
Esther Decimavilla, Carlos San Juan y Stefan Sperlich

206/2005 Interregional migration in Spain: a semiparametric analysis
Adolfo Maza y José Villaverde

207/2005 Productivity growth in European banking
Carmen Murillo-Melchor, José Manuel Pastor y Emili Tortosa-Ausina

208/2005 Explaining Bank Cost Efficiency in Europe: Environmental and Productivity Influences.
Santiago Carbó Valverde, David B. Humphrey y Rafael López del Paso

209/2005 La elasticidad de sustitución intertemporal con preferencias no separables intratemporalmente: los casos de Alemania, España y Francia.
Elena Márquez de la Cruz, Ana R. Martínez Cañete y Inés Pérez-Soba Aguilar

210/2005 Contribución de los efectos tamaño, book-to-market y momentum a la valoración de activos: el caso español.
Begoña Font-Belaire y Alfredo Juan Grau-Grau

211/2005 Permanent income, convergence and inequality among countries
José M. Pastor and Lorenzo Serrano

212/2005 The Latin Model of Welfare: Do 'Insertion Contracts' Reduce Long-Term Dependence?
Luis Ayala and Magdalena Rodríguez

213/2005 The effect of geographic expansion on the productivity of Spanish savings banks
Manuel Illueca, José M. Pastor and Emili Tortosa-Ausina

214/2005 Dynamic network interconnection under consumer switching costs
Ángel Luis López Rodríguez

215/2005 La influencia del entorno socioeconómico en la realización de estudios universitarios: una aproximación al caso español en la década de los noventa
Marta Rahona López

216/2005 The valuation of spanish ipos: efficiency analysis
Susana Álvarez Otero

217/2005 On the generation of a regular multi-input multi-output technology using parametric output distance functions
Sergio Perelman and Daniel Santin

218/2005 La gobernanza de los procesos parlamentarios: la organización industrial del congreso de los diputados en España
Gonzalo Caballero Miguez

219/2005 Determinants of bank market structure: Efficiency and political economy variables
Francisco González

220/2005 Agresividad de las órdenes introducidas en el mercado español: estrategias, determinantes y medidas de performance
David Abad Díaz

221/2005 Tendencia post-anuncio de resultados contables: evidencia para el mercado español
Carlos Forner Rodríguez, Joaquín Marhuenda Fructuoso y Sonia Sanabria García

222/2005 Human capital accumulation and geography: empirical evidence in the European Union
Jesús López-Rodríguez, J. Andrés Faíña y Jose Lopez Rodríguez

223/2005 Auditors' Forecasting in Going Concern Decisions: Framing, Confidence and Information Processing
Waymond Rodgers and Andrés Guiral

224/2005 The effect of Structural Fund spending on the Galician region: an assessment of the 1994-1999 and 2000-2006 Galician CSFs
José Ramón Cancelo de la Torre, J. Andrés Faíña and Jesús López-Rodríguez

225/2005 The effects of ownership structure and board composition on the audit committee activity: Spanish evidence
Carlos Fernández Méndez and Rubén Arrondo García

226/2005 Cross-country determinants of bank income smoothing by managing loan loss provisions
Ana Rosa Fonseca and Francisco González

227/2005 Incumplimiento fiscal en el irpf (1993-2000): un análisis de sus factores determinantes
Alejandro Estellér Moré

228/2005 Region versus Industry effects: volatility transmission
Pilar Soriano Felipe and Francisco J. Climent Diranzo

229/2005 Concurrent Engineering: The Moderating Effect Of Uncertainty On New Product Development Success
Daniel Vázquez-Bustelo and Sandra Valle

230/2005 On zero lower bound traps: a framework for the analysis of monetary policy in the 'age' of central banks
Alfonso Palacio-Vera

231/2005 Reconciling Sustainability and Discounting in Cost Benefit Analysis: a methodological proposal
M. Carmen Almansa Sáez and Javier Calatrava Requena

232/2005 Can The Excess Of Liquidity Affect The Effectiveness Of The European Monetary Policy?
Santiago Carbó Valverde and Rafael López del Paso

233/2005 Inheritance Taxes In The Eu Fiscal Systems: The Present Situation And Future Perspectives.
Miguel Angel Barberán Lahuerta

234/2006 Bank Ownership And Informativeness Of Earnings.
Víctor M. González

235/2006 Developing A Predictive Method: A Comparative Study Of The Partial Least Squares Vs Maximum Likelihood Techniques.
Waymond Rodgers, Paul Pavlou and Andres Guiral.

236/2006 Using Compromise Programming for Macroeconomic Policy Making in a General Equilibrium Framework: Theory and Application to the Spanish Economy.
Francisco J. André, M. Alejandro Cardenete y Carlos Romero.

237/2006 Bank Market Power And Sme Financing Constraints.
Santiago Carbó-Valverde, Francisco Rodríguez-Fernández y Gregory F. Udell.

238/2006 Trade Effects Of Monetary Agreements: Evidence For Oecd Countries.
Salvador Gil-Pareja, Rafael Llorca-Vivero y José Antonio Martínez-Serrano.

239/2006 The Quality Of Institutions: A Genetic Programming Approach.
Marcos Álvarez-Díaz y Gonzalo Caballero Miguez.

240/2006 La interacción entre el éxito competitivo y las condiciones del mercado doméstico como determinantes de la decisión de exportación en las Pymes.
Francisco García Pérez.

241/2006 Una estimación de la depreciación del capital humano por sectores, por ocupación y en el tiempo.
Inés P. Murillo.

242/2006 Consumption And Leisure Externalities, Economic Growth And Equilibrium Efficiency.
Manuel A. Gómez.

243/2006 Measuring efficiency in education: an analysis of different approaches for incorporating non-discretionary inputs.
Jose Manuel Cordero-Ferrera, Francisco Pedraja-Chaparro y Javier Salinas-Jiménez

244/2006 Did The European Exchange-Rate Mechanism Contribute To The Integration Of Peripheral Countries?.
Salvador Gil-Pareja, Rafael Llorca-Vivero y José Antonio Martínez-Serrano

245/2006 Intergenerational Health Mobility: An Empirical Approach Based On The Echp.
Marta Pascual and David Cantarero

246/2006 Measurement and analysis of the Spanish Stock Exchange using the Lyapunov exponent with digital technology.
Salvador Rojí Ferrari and Ana Gonzalez Marcos

247/2006 Testing For Structural Breaks In Variance Withadditive Outliers And Measurement Errors.
Paulo M.M. Rodrigues and Antonio Rubia

248/2006 The Cost Of Market Power In Banking: Social Welfare Loss Vs. Cost Inefficiency.
Joaquín Maudos and Juan Fernández de Guevara

249/2006 Elasticidades de largo plazo de la demanda de vivienda: evidencia para España (1885-2000).
Desiderio Romero Jordán, José Félix Sanz Sanz y César Pérez López

250/2006 Regional Income Disparities in Europe: What role for location?.
Jesús López-Rodríguez and J. Andrés Faíña

251/2006 Funciones abreviadas de bienestar social: Una forma sencilla de simultanear la medición de la eficiencia y la equidad de las políticas de gasto público.
Nuria Badenes Plá y Daniel Santín González

252/2006 “The momentum effect in the Spanish stock market: Omitted risk factors or investor behaviour?”.
Luis Muga and Rafael Santamaría

253/2006 Dinámica de precios en el mercado español de gasolina: un equilibrio de colusión tácita.
Jordi Perdiguero García

254/2006 Desigualdad regional en España: renta permanente versus renta corriente.
José M.Pastor, Empar Pons y Lorenzo Serrano

255/2006 Environmental implications of organic food preferences: an application of the impure public goods model.
Ana Maria Aldanondo-Ochoa y Carmen Almansa-Sáez

256/2006 Family tax credits versus family allowances when labour supply matters: Evidence for Spain.
José Felix Sanz-Sanz, Desiderio Romero-Jordán y Santiago Álvarez-García

257/2006 La internacionalización de la empresa manufacturera española: efectos del capital humano genérico y específico.
José López Rodríguez

258/2006 Evaluación de las migraciones interregionales en España, 1996-2004.
María Martínez Torres

259/2006 Efficiency and market power in Spanish banking.
Rolf Färe, Shawna Grosskopf y Emili Tortosa-Ausina.

260/2006 Asimetrías en volatilidad, beta y contagios entre las empresas grandes y pequeñas cotizadas en la bolsa española.
Helena Chuliá y Hipòlit Torró.

261/2006 Birth Replacement Ratios: New Measures of Period Population Replacement.
José Antonio Ortega.

262/2006 Accidentes de tráfico, víctimas mortales y consumo de alcohol.
José Mª Arranz y Ana I. Gil.

263/2006 Análisis de la Presencia de la Mujer en los Consejos de Administración de las Mil Mayores Empresas Españolas.
Ruth Mateos de Cabo, Lorenzo Escot Mangas y Ricardo Gimeno Nogués.

264/2006 Crisis y Reforma del Pacto de Estabilidad y Crecimiento. Las Limitaciones de la Política Económica en Europa.
Ignacio Álvarez Peralta.

265/2006 Have Child Tax Allowances Affected Family Size? A Microdata Study For Spain (1996-2000).
Jaime Vallés-Giménez y Anabel Zárate-Marco.

266/2006 Health Human Capital And The Shift From Foraging To Farming.
Paolo Rungo.

267/2006 Financiación Autonómica y Política de la Competencia: El Mercado de Gasolina en Canarias.
Juan Luis Jiménez y Jordi Perdiguero.

268/2006 El cumplimiento del Protocolo de Kyoto para los hogares españoles: el papel de la imposición sobre la energía.
Desiderio Romero-Jordán y José Félix Sanz-Sanz.

269/2006 Banking competition, financial dependence and economic growth
Joaquín Maudos y Juan Fernández de Guevara

270/2006 Efficiency, subsidies and environmental adaptation of animal farming under CAP
Werner Kleinhanß, Carmen Murillo, Carlos San Juan y Stefan Sperlich

271/2006 Interest Groups, Incentives to Cooperation and Decision-Making Process in the European Union
A. Garcia-Lorenzo y Jesús López-Rodríguez

272/2006 Riesgo asimétrico y estrategias de momentum en el mercado de valores español
Luis Muga y Rafael Santamaría

273/2006 Valoración de capital-riesgo en proyectos de base tecnológica e innovadora a través de la teoría de opciones reales
Gracia Rubio Martín

274/2006 Capital stock and unemployment: searching for the missing link
Ana Rosa Martínez-Cañete, Elena Márquez de la Cruz, Alfonso Palacio-Vera and Inés Pérez-Soba Aguilar

275/2006 Study of the influence of the voters' political culture on vote decision through the simulation of a political competition problem in Spain
Sagrario Lantarón, Isabel Lillo, Mª Dolores López and Javier Rodrigo

276/2006 Investment and growth in Europe during the Golden Age
Antonio Cubel and Mª Teresa Sanchis

277/2006 Efectos de vincular la pensión pública a la inversión en cantidad y calidad de hijos en un modelo de equilibrio general
Robert Meneu Gaya

278/2006 El consumo y la valoración de activos
Elena Márquez y Belén Nieto

279/2006 Economic growth and currency crisis: A real exchange rate entropic approach
David Matesanz Gómez y Guillermo J. Ortega

280/2006 Three measures of returns to education: An illustration for the case of Spain
María Arrazola y José de Hevia

281/2006 Composition of Firms versus Composition of Jobs
Antoni Cunyat

282/2006 La vocación internacional de un holding tranviario belga: la Compagnie Mutuelle de Tram-ways, 1895-1918
Alberte Martínez López

283/2006 Una visión panorámica de las entidades de crédito en España en la última década.
Constantino García Ramos

284/2006 Foreign Capital and Business Strategies: a comparative analysis of urban transport in Madrid and Barcelona, 1871-1925
Alberte Martínez López

285/2006 Los intereses belgas en la red ferroviaria catalana, 1890-1936
Alberte Martínez López

286/2006 The Governance of Quality: The Case of the Agrifood Brand Names
Marta Fernández Barcala, Manuel González-Díaz y Emmanuel Raynaud

287/2006 Modelling the role of health status in the transition out of malthusian equilibrium
Paolo Rungo, Luis Currais and Berta Rivera

288/2006 Industrial Effects of Climate Change Policies through the EU Emissions Trading Scheme
Xavier Labandeira and Miguel Rodríguez

289/2006 Globalisation and the Composition of Government Spending: An analysis for OECD countries
Norman Gemmell, Richard Kneller and Ismael Sanz

290/2006 La producción de energía eléctrica en España: Análisis económico de la actividad tras la liberalización del Sector Eléctrico
Fernando Hernández Martínez

291/2006 Further considerations on the link between adjustment costs and the productivity of R&D investment: evidence for Spain
Desiderio Romero-Jordán, José Félix Sanz-Sanz and Inmaculada Álvarez-Ayuso

292/2006 Una teoría sobre la contribución de la función de compras al rendimiento empresarial
Javier González Benito

293/2006 Agility drivers, enablers and outcomes: empirical test of an integrated agile manufacturing model
Daniel Vázquez-Bustelo, Lucía Avella and Esteban Fernández

294/2006 Testing the parametric vs the semiparametric generalized mixed effects models
María José Lombardía and Stefan Sperlich

295/2006 Nonlinear dynamics in energy futures
Mariano Matilla-García

296/2006 Estimating Spatial Models By Generalized Maximum Entropy Or How To Get Rid Of W
Esteban Fernández Vázquez, Matías Mayor Fernández and Jorge Rodriguez-Valez

297/2006 Optimización fiscal en las transmisiones lucrativas: análisis metodológico
Félix Domínguez Barrero

298/2006 La situación actual de la banca online en España
Francisco José Climent Diranzo y Alexandre Momparler Pechuán

299/2006 Estrategia competitiva y rendimiento del negocio: el papel mediador de la estrategia y las capacidades productivas
Javier González Benito y Isabel Suárez González

300/2006 A Parametric Model to Estimate Risk in a Fixed Income Portfolio
Pilar Abad and Sonia Benito

301/2007 Análisis Empírico de las Preferencias Sociales Respecto del Gasto en Obra Social de las Cajas de Ahorros
Alejandro Esteller-Moré, Jonathan Jorba Jiménez y Albert Solé-Ollé

302/2007 Assessing the enlargement and deepening of regional trading blocs: The European Union case
Salvador Gil-Pareja, Rafael Llorca-Vivero y José Antonio Martínez-Serrano

303/2007 ¿Es la Franquicia un Medio de Financiación?: Evidencia para el Caso Español
Vanesa Solís Rodríguez y Manuel González Díaz

304/2007 On the Finite-Sample Biases in Nonparametric Testing for Variance Constancy
Paulo M.M. Rodrigues and Antonio Rubia

305/2007 Spain is Different: Relative Wages 1989-98
José Antonio Carrasco Gallego

306/2007 Poverty reduction and SAM multipliers: An evaluation of public policies in a regional framework
Francisco Javier De Miguel-Vélez y Jesús Pérez-Mayo

307/2007 La Eficiencia en la Gestión del Riesgo de Crédito en las Cajas de Ahorro
Marcelino Martínez Cabrera

308/2007 Optimal environmental policy in transport: unintended effects on consumers' generalized price
M. Pilar Socorro and Ofelia Betancor

309/2007 Agricultural Productivity in the European Regions: Trends and Explanatory Factors
Roberto Ezcurra, Belen Iráizoz, Pedro Pascual and Manuel Rapún

310/2007 Long-run Regional Population Divergence and Modern Economic Growth in Europe: a Case Study of Spain
María Isabel Ayuda, Fernando Collantes and Vicente Pinilla

311/2007 Financial Information effects on the measurement of Commercial Banks' Efficiency
Borja Amor, María T. Tascón and José L. Fanjul

312/2007 Neutralidad e incentivos de las inversiones financieras en el nuevo IRPF
Félix Domínguez Barrero

313/2007 The Effects of Corporate Social Responsibility Perceptions on The Valuation of Common Stock
Waymond Rodgers , Helen Choy and Andres Guiral-Contreras

314/2007 Country Creditor Rights, Information Sharing and Commercial Banks' Profitability Persistence across the world
Borja Amor, María T. Tascón and José L. Fanjul

315/2007 ¿Es Relevante el Déficit Corriente en una Unión Monetaria? El Caso Español
Javier Blanco González y Ignacio del Rosal Fernández

316/2007 The Impact of Credit Rating Announcements on Spanish Corporate Fixed Income Performance: Returns, Yields and Liquidity
Pilar Abad, Antonio Díaz and M. Dolores Robles

317/2007 Indicadores de Lealtad al Establecimiento y Formato Comercial Basados en la Distribución del Presupuesto
Cesar Augusto Bustos Reyes y Óscar González Benito

318/2007 Migrants and Market Potential in Spain over The XXth Century: A Test Of The New Economic Geography
Daniel A. Tirado, Jordi Pons, Elisenda Paluzie and Javier Silvestre

319/2007 El Impacto del Coste de Oportunidad de la Actividad Emprendedora en la Intención de los Ciudadanos Europeos de Crear Empresas
Luis Miguel Zapico Aldeano

320/2007 Los belgas y los ferrocarriles de vía estrecha en España, 1887-1936
Alberte Martínez López

321/2007 Competición política bipartidista. Estudio geométrico del equilibrio en un caso ponderado
Isabel Lillo, Mª Dolores López y Javier Rodrigo

322/2007 Human resource management and environment management systems: an empirical study
Mª Concepción López Fernández, Ana Mª Serrano Bedia and Gema García Piqueres

323/2007 Wood and industrialization. evidence and hypotheses from the case of Spain, 1860-1935.
Iñaki Iriarte-Goñi and María Isabel Ayuda Bosque

324/2007 New evidence on long-run monetary neutrality.
J. Cunado, L.A. Gil-Alana and F. Perez de Gracia

325/2007 Monetary policy and structural changes in the volatility of us interest rates.
Juncal Cuñado, Javier Gomez Biscarri and Fernando Perez de Gracia

326/2007 The productivity effects of intrafirm diffusion.
Lucio Fuentelsaz, Jaime Gómez and Sergio Palomas

327/2007 Unemployment duration, layoffs and competing risks.
J.M. Arranz, C. García-Serrano and L. Toharia

328/2007 El grado de cobertura del gasto público en España respecto a la UE-15
Nuria Rueda, Begoña Barruso, Carmen Calderón y Mª del Mar Herrador

329/2007 The Impact of Direct Subsidies in Spain before and after the CAP'92 Reform
Carmen Murillo, Carlos San Juan and Stefan Sperlich

330/2007 Determinants of post-privatisation performance of Spanish divested firms
Laura Cabeza García and Silvia Gómez Ansón

331/2007 ¿Por qué deciden diversificar las empresas españolas? Razones oportunistas versus razones económicas
Almudena Martínez Campillo

332/2007 Dynamical Hierarchical Tree in Currency Markets
Juan Gabriel Brida, David Matesanz Gómez and Wiston Adrián Risso

333/2007 Los determinantes sociodemográficos del gasto sanitario. Análisis con microdatos individuales
Ana María Angulo, Ramón Barberán, Pilar Egea y Jesús Mur

334/2007 Why do companies go private? The Spanish case
Inés Pérez-Soba Aguilar

335/2007 The use of gis to study transport for disabled people
Verónica Cañal Fernández

336/2007 The long run consequences of M&A: An empirical application
Cristina Bernad, Lucio Fuentelsaz and Jaime Gómez

337/2007 Las clasificaciones de materias en economía: principios para el desarrollo de una nueva clasificación
Valentín Edo Hernández

338/2007 Reforming Taxes and Improving Health: A Revenue-Neutral Tax Reform to Eliminate Medical and Pharmaceutical VAT
Santiago Álvarez-García, Carlos Pestana Barros y Juan Prieto-Rodriguez

339/2007 Impacts of an iron and steel plant on residential property values
Celia Bilbao-Terol

340/2007 Firm size and capital structure: Evidence using dynamic panel data
Víctor M. González and Francisco González

341/2007 ¿Cómo organizar una cadena hotelera? La elección de la forma de gobierno
Marta Fernández Barcala y Manuel González Díaz

342/2007 Análisis de los efectos de la decisión de diversificar: un contraste del marco teórico "Agencia-Stewardship"
Almudena Martínez Campillo y Roberto Fernández Gago

343/2007 Selecting portfolios given multiple eurostoxx-based uncertainty scenarios: a stochastic goal programming approach from fuzzy betas
Enrique Ballestero, Blanca Pérez-Gladish, Mar Arenas-Parra and Amelia Bilbao-Terol

344/2007 "El bienestar de los inmigrantes y los factores implicados en la decisión de emigrar"
Anastasia Hernández Alemán y Carmelo J. León

345/2007 Governance Decisions in the R&D Process: An Integrative Framework Based on TCT and Knowledge View of The Firm.
Andrea Martínez-Noya and Esteban García-Canal

346/2007 Diferencias salariales entre empresas públicas y privadas. El caso español
Begoña Cueto y Nuria Sánchez- Sánchez

347/2007 Effects of Fiscal Treatments of Second Home Ownership on Renting Supply
Celia Bilbao Terol and Juan Prieto Rodríguez

348/2007 Auditors' ethical dilemmas in the going concern evaluation
Andres Guiral, Waymond Rodgers, Emiliano Ruiz and Jose A. Gonzalo

349/2007 Convergencia en capital humano en España. Un análisis regional para el periodo 1970-2004
Susana Morales Sequera y Carmen Pérez Esparrells

350/2007 Socially responsible investment: mutual funds portfolio selection using fuzzy multiobjective programming
Blanca Mª Pérez-Gladish, Mar Arenas-Parra , Amelia Bilbao-Terol and Mª Victoria Rodríguez-Uría

351/2007 Persistencia del resultado contable y sus componentes: implicaciones de la medida de ajustes por devengo
Raúl Iñiguez Sánchez y Francisco Poveda Fuentes

352/2007 Wage Inequality and Globalisation: What can we Learn from the Past? A General Equilibrium Approach
Concha Betrán, Javier Ferri and Maria A. Pons

353/2007 Eficacia de los incentivos fiscales a la inversión en I+D en España en los años noventa
Desiderio Romero Jordán y José Félix Sanz Sanz

354/2007 Convergencia regional en renta y bienestar en España
Robert Meneu Gaya

355/2007 Tributación ambiental: Estado de la Cuestión y Experiencia en España
Ana Carrera Poncela

356/2007 Salient features of dependence in daily us stock market indices
Luis A. Gil-Alana, Juncal Cuñado and Fernando Pérez de Gracia

357/2007 La educación superior: ¿un gasto o una inversión rentable para el sector público?
Inés P. Murillo y Francisco Pedraja

358/2007 Effects of a reduction of working hours on a model with job creation and job destruction
Emilio Domínguez, Miren Ullibarri y Idoya Zabaleta

359/2007 Stock split size, signaling and earnings management: Evidence from the Spanish market
José Yagüe, J. Carlos Gómez-Sala and Francisco Poveda-Fuentes

360/2007 Modelización de las expectativas y estrategias de inversión en mercados de derivados
Begoña Font-Belaire

361/2008 Trade in capital goods during the golden age, 1953-1973
Mª Teresa Sanchis and Antonio Cubel

362/2008 El capital económico por riesgo operacional: una aplicación del modelo de distribución de pérdidas
Enrique José Jiménez Rodríguez y José Manuel Feria Domínguez

363/2008 The drivers of effectiveness in competition policy
Joan-Ramon Borrell and Juan-Luis Jiménez

364/2008 Corporate governance structure and board of directors remuneration policies: evidence from Spain
Carlos Fernández Méndez, Rubén Arrondo García and Enrique Fernández Rodríguez

365/2008 Beyond the disciplinary role of governance: how boards and donors add value to Spanish foundations
Pablo De Andrés Alonso, Valentín Azofra Palenzuela y M. Elena Romero Merino

366/2008 Complejidad y perfeccionamiento contractual para la contención del oportunismo en los acuerdos de franquicia
Vanesa Solís Rodríguez y Manuel González Díaz

367/2008 Inestabilidad y convergencia entre las regiones europeas
Jesús Mur, Fernando López y Ana Angulo

368/2008 Análisis espacial del cierre de explotaciones agrarias
Ana Aldanondo Ochoa, Carmen Almansa Sáez y Valero Casanovas Oliva

369/2008 Cross-Country Efficiency Comparison between Italian and Spanish Public Universities in the period 2000-2005
Tommaso Agasisti and Carmen Pérez Esparrells

370/2008 El desarrollo de la sociedad de la información en España: un análisis por comunidades autónomas
María Concepción García Jiménez y José Luis Gómez Barroso

371/2008 El medioambiente y los objetivos de fabricación: un análisis de los modelos estratégicos para su consecución
Lucía Avella Camarero, Esteban Fernández Sánchez y Daniel Vázquez-Bustelo

372/2008 Influence of bank concentration and institutions on capital structure: New international evidence
Víctor M. González and Francisco González

373/2008 Generalización del concepto de equilibrio en juegos de competición política
Mª Dolores López González y Javier Rodrigo Hitos

374/2008 Smooth Transition from Fixed Effects to Mixed Effects Models in Multi-level regression Models
María José Lombardía and Stefan Sperlich

375/2008 A Revenue-Neutral Tax Reform to Increase Demand for Public Transport Services
Carlos Pestana Barros and Juan Prieto-Rodriguez

376/2008 Measurement of intra-distribution dynamics: An application of different approaches to the European regions
Adolfo Maza, María Hierro and José Villaverde

377/2008 Migración interna de extranjeros y ¿nueva fase en la convergencia?
María Hierro y Adolfo Maza

378/2008 Efectos de la Reforma del Sector Eléctrico: Modelización Teórica y Experiencia Internacional
Ciro Eduardo Bazán Navarro

379/2008 A Non-Parametric Independence Test Using Permutation Entropy
Mariano Matilla-García and Manuel Ruiz Marín

380/2008 Testing for the General Fractional Unit Root Hypothesis in the Time Domain
Uwe Hassler, Paulo M.M. Rodrigues and Antonio Rubia

381/2008 Multivariate gram-charlier densities
Esther B. Del Brio, Trino-Manuel Ñíguez and Javier Perote

382/2008 Analyzing Semiparametrically the Trends in the Gender Pay Gap - The Example of Spain
Ignacio Moral-Arce, Stefan Sperlich, Ana I. Fernández-Saínz and Maria J. Roca

383/2008 A Cost-Benefit Analysis of a Two-Sided Card Market
Santiago Carbó Valverde, David B. Humphrey, José Manuel Liñares Zegarra and Francisco Rodriguez Fernandez

384/2008 A Fuzzy Bicriteria Approach for Journal Deselection in a Hospital Library
M. L. López-Avello, M. V. Rodríguez-Uría, B. Pérez-Gladish, A. Bilbao-Terol, M. Arenas-Parra

385/2008 Valoración de las grandes corporaciones farmaceúticas, a través del análisis de sus principales intangibles, con el método de opciones reales
Gracia Rubio Martín y Prosper Lamothe Fernández

386/2008 El marketing interno como impulsor de las habilidades comerciales de las pyme españolas: efectos en los resultados empresariales
Mª Leticia Santos Vijande, Mª José Sanzo Pérez, Nuria García Rodríguez y Juan A. Trespalacios Gutiérrez

387/2008 Understanding Warrants Pricing: A case study of the financial market in Spain
David Abad y Belén Nieto

388/2008 Aglomeración espacial, Potencial de Mercado y Geografía Económica: Una revisión de la literatura
Jesús López-Rodríguez y J. Andrés Faíña

389/2008 An empirical assessment of the impact of switching costs and first mover advantages on firm performance
Jaime Gómez, Juan Pablo Maícas

390/2008 Tender offers in Spain: testing the wave
Ana R. Martínez-Cañete y Inés Pérez-Soba Aguilar

391/2008 La integración del mercado español a finales del siglo XIX: los precios del trigo entre 1891 y 1905
Mariano Matilla García, Pedro Pérez Pascual y Basilio Sanz Carnero

392/2008 Cuando el tamaño importa: estudio sobre la influencia de los sujetos políticos en la balanza de bienes y servicios
Alfonso Echazarra de Gregorio

393/2008 Una visión cooperativa de las medidas ante el posible daño ambiental de la desalación
Borja Montaño Sanz

394/2008 Efectos externos del endeudamiento sobre la calificación crediticia de las Comunidades Autónomas
Andrés Leal Marcos y Julio López Laborda

395/2008 Technical efficiency and productivity changes in Spanish airports: A parametric distance functions approach
Beatriz Tovar & Roberto Rendeiro Martín-Cejas

396/2008 Network analysis of exchange data: Interdependence drives crisis contagion
David Matesanz Gómez & Guillermo J. Ortega

397/2008 Explaining the performance of Spanish privatised firms: a panel data approach
Laura Cabeza Garcia and Silvia Gomez Anson

398/2008 Technological capabilities and the decision to outsource R&D services
Andrea Martínez-Noya and Esteban García-Canal

399/2008 Hybrid Risk Adjustment for Pharmaceutical Benefits
Manuel García-Goñi, Pere Ibern & José María Inoriza

400/2008 The Team Consensus–Performance Relationship and the Moderating Role of Team Diversity
José Henrique Dieguez, Javier González-Benito and Jesús Galende

401/2008 The institutional determinants of CO_2 emissions: A computational modelling approach using Artificial Neural Networks and Genetic Programming
Marcos Álvarez-Díaz , Gonzalo Caballero Miguez and Mario Soliño

402/2008 Alternative Approaches to Include Exogenous Variables in DEA Measures: A Comparison Using Monte Carlo
José Manuel Cordero-Ferrera, Francisco Pedraja-Chaparro and Daniel Santín-González

403/2008 Efecto diferencial del capital humano en el crecimiento económico andaluz entre 1985 y 2004: comparación con el resto de España
Mª del Pópulo Pablo-Romero Gil-Delgado y Mª de la Palma Gómez-Calero Valdés

404/2008 Análisis de fusiones, variaciones conjeturales y la falacia del estimador en diferencias
Juan Luis Jiménez y Jordi Perdiguero

405/2008 Política fiscal en la uem: ¿basta con los estabilizadores automáticos?
Jorge Uxó González y Mª Jesús Arroyo Fernández

406/2008 Papel de la orientación emprendedora y la orientación al mercado en el éxito de las empresas
Óscar González-Benito, Javier González-Benito y Pablo A. Muñoz-Gallego

407/2008 La presión fiscal por impuesto sobre sociedades en la unión europea
Elena Fernández Rodríguez, Antonio Martínez Arias y Santiago Álvarez García

408/2008	The environment as a determinant factor of the purchasing and supply strategy: an empirical analysis Dr. Javier González-Benito y MS Duilio Reis da Rocha
409/2008	Cooperation for innovation: the impact on innovatory effort Gloria Sánchez González and Liliana Herrera
410/2008	Spanish post-earnings announcement drift and behavioral finance models Carlos Forner and Sonia Sanabria
411/2008	Decision taking with external pressure: evidence on football manager dismissals in argentina and their consequences Ramón Flores, David Forrest and Juan de Dios Tena
412/2008	Comercio agrario latinoamericano, 1963-2000: aplicación de la ecuación gravitacional para flujos desagregados de comercio Raúl Serrano y Vicente Pinilla
413/2008	Voter heuristics in Spain: a descriptive approach elector decision José Luís Sáez Lozano and Antonio M. Jaime Castillo
414/2008	Análisis del efecto área de salud de residencia sobre la utilización y acceso a los servicios sanitarios en la Comunidad Autónoma Canaria Ignacio Abásolo Alessón, Lidia García Pérez, Raquel Aguiar Ibáñez y Asier Amador Robayna
415/2008	Impact on competitive balance from allowing foreign players in a sports league: an analytical model and an empirical test Ramón Flores, David Forrest & Juan de Dios Tena
416/2008	Organizational innovation and productivity growth: Assessing the impact of outsourcing on firm performance Alberto López
417/2008	Value Efficiency Analysis of Health Systems Eduardo González, Ana Cárcaba & Juan Ventura
418/2008	Equidad en la utilización de servicios sanitarios públicos por comunidades autónomas en España: un análisis multinivel Ignacio Abásolo, Jaime Pinilla, Miguel Negrín, Raquel Aguiar y Lidia García
419/2008	Piedras en el camino hacia Bolonia: efectos de la implantación del EEES sobre los resultados académicos Carmen Florido, Juan Luis Jiménez e Isabel Santana
420/2008	The welfare effects of the allocation of airlines to different terminals M. Pilar Socorro and Ofelia Betancor
421/2008	How bank capital buffers vary across countries. The influence of cost of deposits, market power and bank regulation Ana Rosa Fonseca and Francisco González
422/2008	Analysing health limitations in spain: an empirical approach based on the european community household panel Marta Pascual and David Cantarero

423/2008 Regional productivity variation and the impact of public capital stock: an analysis with spatial interaction, with reference to Spain
Miguel Gómez-Antonio and Bernard Fingleton

424/2008 Average effect of training programs on the time needed to find a job. The case of the training schools program in the south of Spain (Seville, 1997-1999).
José Manuel Cansino Muñoz-Repiso and Antonio Sánchez Braza

425/2008 Medición de la eficiencia y cambio en la productividad de las empresas distribuidoras de electricidad en Perú después de las reformas
Raúl Pérez-Reyes y Beatriz Tovar

426/2008 Acercando posturas sobre el descuento ambiental: sondeo Delphi a expertos en el ámbito internacional
Carmen Almansa Sáez y José Miguel Martínez Paz

427/2008 Determinants of abnormal liquidity after rating actions in the Corporate Debt Market
Pilar Abad, Antonio Díaz and M. Dolores Robles

428/2008 Export led-growth and balance of payments constrained. New formalization applied to Cuban commercial regimes since 1960
David Matesanz Gómez, Guadalupe Fugarolas Álvarez-Ude and Isis Mañalich Gálvez

429/2008 La deuda implícita y el desequilibrio financiero-actuarial de un sistema de pensiones. El caso del régimen general de la seguridad social en España
José Enrique Devesa Carpio y Mar Devesa Carpio

430/2008 Efectos de la descentralización fiscal sobre el precio de los carburantes en España
Desiderio Romero Jordán, Marta Jorge García-Inés y Santiago Álvarez García

431/2008 Euro, firm size and export behavior
Silviano Esteve-Pérez, Salvador Gil-Pareja, Rafael Llorca-Vivero and José Antonio Martínez-Serrano

432/2008 Does social spending increase support for free trade in advanced democracies?
Ismael Sanz, Ferran Martínez i Coma and Federico Steinberg

433/2008 Potencial de Mercado y Estructura Espacial de Salarios: El Caso de Colombia
Jesús López-Rodríguez y Maria Cecilia Acevedo

434/2008 Persistence in Some Energy Futures Markets
Juncal Cunado, Luis A. Gil-Alana and Fernando Pérez de Gracia

435/2008 La inserción financiera externa de la economía francesa: inversores institucionales y nueva gestión empresarial
Ignacio Álvarez Peralta

436/2008 ¿Flexibilidad o rigidez salarial en España?: un análisis a escala regional
Ignacio Moral Arce y Adolfo Maza Fernández

437/2009 Intangible relationship-specific investments and the performance of r&d outsourcing agreements
Andrea Martínez-Noya, Esteban García-Canal & Mauro F. Guillén

438/2009 Friendly or Controlling Boards?
Pablo de Andrés Alonso & Juan Antonio Rodríguez Sanz

439/2009 La sociedad Trenor y Cía. (1838-1926): un modelo de negocio industrial en la España del siglo XIX
Amparo Ruiz Llopis

440/2009 Continental bias in trade
Salvador Gil-Pareja, Rafael Llorca-Vivero & José Antonio Martínez Serrano

441/2009 Determining operational capital at risk: an empirical application to the retail banking
Enrique José Jiménez-Rodríguez, José Manuel Feria-Domínguez & José Luis Martín-Marín

442/2009 Costes de mitigación y escenarios post-kyoto en España: un análisis de equilibro general para España
Mikel González Ruiz de Eguino

443/2009 Las revistas españolas de economía en las bibliotecas universitarias: ranking, valoración del indicador y del sistema
Valentín Edo Hernández

444/2009 Convergencia económica en España y coordinación de políticas económicas. un estudio basado en la estructura productiva de las CC.AA.
Ana Cristina Mingorance Arnáiz

445/2009 Instrumentos de mercado para reducir emisiones de co2: un análisis de equilibrio general para España
Mikel González Ruiz de Eguino

446/2009 El comercio intra e inter-regional del sector Turismo en España
Carlos Llano y Tamara de la Mata

447/2009 Efectos del incremento del precio del petróleo en la economía española: Análisis de cointegración y de la política monetaria mediante reglas de Taylor
Fernando Hernández Martínez

448/2009 Bologna Process and Expenditure on Higher Education: A Convergence Analysis of the EU-15
T. Agasisti, C. Pérez Esparrells, G. Catalano & S. Morales

449/2009 Global Economy Dynamics? Panel Data Approach to Spillover Effects
Gregory Daco, Fernando Hernández Martínez & Li-Wu Hsu

450/2009 Pricing levered warrants with dilution using observable variables
Isabel Abínzano & Javier F. Navas

451/2009 Information technologies and financial prformance: The effect of technology diffusion among competitors
Lucio Fuentelsaz, Jaime Gómez & Sergio Palomas

452/2009 A Detailed Comparison of Value at Risk in International Stock Exchanges
Pilar Abad & Sonia Benito

453/2009 Understanding offshoring: has Spain been an offshoring location in the nineties?
Belén González-Díaz & Rosario Gandoy

454/2009 Outsourcing decision, product innovation and the spatial dimension: Evidence from the Spanish footwear industry
José Antonio Belso-Martínez

455/2009 Does playing several competitions influence a team's league performance? Evidence from Spanish professional football
Andrés J. Picazo-Tadeo & Francisco González-Gómez

456/2009 Does accessibility affect retail prices and competition? An empirical application
Juan Luis Jiménez and Jordi Perdiguero

457/2009 Cash conversion cycle in smes
Sonia Baños-Caballero, Pedro J. García-Teruel and Pedro Martínez-Solano

458/2009 Un estudio sobre el perfil de hogares endeudados y sobreendeudados: el caso de los hogares vascos
Alazne Mujika Alberdi, Iñaki García Arrizabalaga y Juan José Gibaja Martíns

459/2009 Imposing monotonicity on outputs in parametric distance function estimations: with an application to the spanish educational production
Sergio Perelman and Daniel Santin

460/2009 Key issues when using tax data for concentration analysis: an application to the Spanish wealth tax
José Mª Durán-Cabré and Alejandro Esteller-Moré

461/2009 ¿Se está rompiendo el mercado español? Una aplicación del enfoque de feldstein –horioka
Saúl De Vicente Queijeiro , José Luis Pérez Rivero y María Rosalía Vicente Cuervo

462/2009 Financial condition, cost efficiency and the quality of local public services
Manuel A. Muñiz & José L. Zafra

463/2009 Including non-cognitive outputs in a multidimensional evaluation of education production: an international comparison
Marián García Valiñas & Manuel Antonio Muñiz Pérez

464/2009 A political look into budget deficits.The role of minority governments and oppositions
Albert Falcó-Gimeno & Ignacio Jurado

465/2009 La simulación del cuadro de mando integral. Una herramienta de aprendizaje en la materia de contabilidad de gestión
Elena Urquía Grande, Clara Isabel Muñoz Colomina y Elisa Isabel Cano Montero

466/2009 Análisis histórico de la importancia de la industria de la desalinización en España
Borja Montaño Sanz

467/2009 The dynamics of trade and innovation: a joint approach
Silviano Esteve-Pérez & Diego Rodríguez

468/2009 Measuring international reference-cycles
Sonia de Lucas Santos, Inmaculada Álvarez Ayuso & Mª Jesús Delgado Rodríguez

469/2009 Measuring quality of life in Spanish municipalities
Eduardo González Fidalgo, Ana Cárcaba García, Juan Ventura Victoria & Jesús García García

470/2009 ¿Cómo se valoran las acciones españolas: en el mercado de capitales doméstico o en el europeo?
Begoña Font Belaire y Alfredo Juan Grau Grau

471/2009 Patterns of e-commerce adoption and intensity. evidence for the european union-27
María Rosalía Vicente & Ana Jesús López

472/2009 On measuring the effect of demand uncertainty on costs: an application to port terminals
Ana Rodríguez-Álvarez, Beatriz Tovar & Alan Wall

473/2009 Order of market entry, market and technological evolution and firm competitive performance
Jaime Gomez, Gianvito Lanzolla & Juan Pablo Maicas

474/2009 La Unión Económica y Monetaria Europea en el proceso exportador de Castilla y León (1993-2007): un análisis de datos de panel
Almudena Martínez Campillo y Mª del Pilar Sierra Fernández

475/2009 Do process innovations boost SMEs productivity growth?
Juan A. Mañez, María E. Rochina Barrachina, Amparo Sanchis Llopis & Juan A. Sanchis Llopis

476/2009 Incertidumbre externa y elección del modo de entrada en el marco de la inversión directa en el exterior
Cristina López Duarte y Marta Mª Vidal Suárez

477/2009 Testing for structural breaks in factor loadings: an application to international business cycle
José Luis Cendejas Bueno, Sonia de Lucas Santos, Inmaculada Álvarez Ayuso & Mª Jesús Delgado Rodríguez

478/2009 ¿Esconde la rigidez de precios la existencia de colusión? El caso del mercado de carburantes en las Islas Canarias
Juan Luis Jiménez y Jordi Perdiguero

479/2009 The poni test with structural breaks
Antonio Aznar & María-Isabel Ayuda

480/2009 Accuracy and reliability of Spanish regional accounts (CRE-95)
Verónica Cañal Fernández

481/2009 Estimating regional variations of R&D effects on productivity growth by entropy econometrics
Esteban Fernández-Vázquez y Fernando Rubiera-Morollón

482/2009 Why do local governments privatize the provision of water services? Empirical evidence from Spain
Francisco González-Gómez, Andrés J. Picazo-Tadeo & Jorge Guardiola

483/2009 Assessing the regional digital divide across the European Union-27
María Rosalía Vicente & Ana Jesús López

484/2009 Measuring educational efficiency and its determinants in Spain with parametric distance functions
José Manuel Cordero Ferrera, Eva Crespo Cebada & Daniel Santín González

485/2009 Spatial analysis of public employment services in the Spanish provinces
Patricia Suárez Cano & Matías Mayor Fernández

486/2009 Trade effects of continental and intercontinental preferential trade agreements
Salvador Gil-Pareja, Rafael Llorca-Vivero & José Antonio Martínez-Serrano

487/2009 Testing the accuracy of DEA for measuring efficiency in education under endogeneity
Salvador Gil-Pareja, Rafael Llorca-Vivero & José Antonio Martínez-Serrano

488/2009 Measuring efficiency in primary health care: the effect of exogenous variables on results
José Manuel Cordero Ferrera, Eva Crespo Cebada & Luis R. Murillo Zamorano

489/2009 Capital structure determinants in growth firms accessing venture funding
Marina Balboa, José Martí & Álvaro Tresierra

490/2009 Determinants of debt maturity structure across firm size
Víctor M. González

491/2009 Análisis del efecto de la aplicación de las NIIF en la valoración de las salidas a bolsa
Susana Álvarez Otero y Eduardo Rodríguez Enríquez

492/2009 An analysis of urban size and territorial location effects on employment probabilities: the spanish case
Ana Viñuela-Jiménez, Fernando Rubiera-Morollón & Begoña Cueto

493/2010 Determinantes de la estructura de los consejos de administración en España
Isabel Acero Fraile y Nuria Alcalde Fradejas

494/2010 Performance and completeness in repeated inter-firm relationships: the case of franchising
Vanesa Solis-Rodriguez & Manuel Gonzalez-Diaz

495/2010 A Revenue-Based Frontier Measure of Banking Competition
Santiago Carbó, David Humphrey & Francisco Rodríguez

496/2010 Categorical segregation in social networks
Antoni Rubí-Barceló

497/2010 Beneficios ambientales no comerciales de la directiva marco del agua en condiciones de escasez: análisis económico para el Guadalquivir
Julia Martin-Ortega, Giacomo Giannoccaro y Julio Berbel Vecino

498/2010 Monetary integration and risk diversification in eu-15 sovereign debt markets
Juncal Cuñado & Marta Gómez-Puig

499/2010 The Marshall Plan and the Spanish autarky: A welfare loss analysis
José Antonio Carrasco Gallego

500/2010 The role of learning in firm R&D persistence
Juan A. Mañez, María E. Rochina-Barrachina, Amparo Sanchis-Llopis & Juan A. Sanchis-Llopis

501/2010 Is venture capital more than just money?
Marina Balboa, José Martí & Nina Zieling

502/2010 On the effects of supply strategy on business performance: do the relationships among generic competitive objectives matter?
Javier González-Benito

503/2010 Corporate cash holding and firm value
Cristina Martínez-Sola, Pedro J. García-Teruel & Pedro Martínez-Solano

504/2010 El impuesto de flujos de caja de sociedades: una propuesta de base imponible y su aproximación contable en España
Lourdes Jerez Barroso y Joaquín Texeira Quirós

505/2010 The effect of technological, commercial and human resources on the use of new technology
Jaime Gómez & Pilar Vargas

506/2010 ¿Cómo ha afectado la fiscalidad a la rentabilidad de la inversión en vivienda en España? Un análisis para el periodo 1996 y 2007
Jorge Onrubia Fernández y María del Carmen Rodado Ruiz

507/2010 Modelización de flujos en el análisis input-output a partir de la teoría de redes
Ana Salomé García Muñiz

508/2010 Export-led-growth hypothesis revisited. a balance of payments approach for Argentina, Brazil, Chile and Mexico
David Matesanz Gómez & Guadalupe Fugarolas Álvarez-Ude

509/2010 Realised hedge ratio properties, performance and implications for risk management: evidence from the spanish ibex 35 spot and futures markets
David G McMillan & Raquel Quiroga García

510/2010 Do we sack the manager... or is it better not to? Evidence from Spanish professional football
Francisco González-Gómez, Andrés J. Picazo-Tadeo & Miguel Á. García-Rubio

511/2010 Have Spanish port sector reforms during the last two decades been successful? A cost frontier approach
Ana Rodríguez-Álvarez & Beatriz Tovar

512/2010 Size & Regional Distribution of Financial Behavior Patterns in Spain
Juan Antonio Maroto Acín, Pablo García Estévez & Salvador Roji Ferrari

513/2010 The impact of public reforms on the productivity of the Spanish ports: a parametric distance function approach
Ramón Núñez-Sánchez & Pablo Coto-Millán

514/2010 Trade policy versus institutional trade barriers: an application using "good old" ols
Laura Márquez-Ramos, Inmaculada Martínez-Zarzoso & Celestino Suárez-Burguet

515/2010 The "Double Market" approach in venture capital and private equity activity: the case of Europe
Marina Balboa & José Martí

516/2010 International accounting differences and earnings smoothing in the banking industry
Marina Balboa, Germán López-Espinosa & Antonio Rubia

517/2010 Convergence in car prices among European countries
Simón Sosvilla-Rivero & Salvador Gil-Pareja

518/2010 Effects of process and product-oriented innovations on employee downsizing
José David Vicente-Lorente & José Ángel Zúñiga-Vicente

519/2010 Inequality, the politics of redistribution and the tax-mix
Jenny De Freitas

520/2010 Efectos del desajuste educativo sobre el rendimiento privado de la educación: un análisis para el caso español (1995-2006)
Inés P. Murillo, Marta Rahona y Mª del Mar Salinas

521/2010 Sructural breaks and real convergence in opec countries
Juncal Cuñado

522/2010 Human Capital, Geographical location and Policy Implications: The case of Romania
Jesús López-Rodríguez , Andres Faiña y Bolea Cosmin-Gabriel

523/2010 Organizational unlearning context fostering learning for customer capital through time: lessons from SMEs in the telecommunications industry
Anthony K. P. Wensley, Antonio Leal-Millán, Gabriel Cepeda-Carrión & Juan Gabriel Cegarra-Navarro

524/2010 The governance threshold in international trade flows
Marta Felis-Rota

525/2010 The intensive and extensive margins of trade decomposing exports growth differences across Spanish regions
Asier Minondo Uribe-Etxeberria & Francisco Requena Silvente

526/2010 Why do firms locate r&d outsourcing agreeements offshore? the role of ownership, location, and externalization advantages
Andrea Martínez-Noya, Esteban Gárcía-Canal & Mauro f. Guillén

527/2010 Corporate Taxation and the Productivity and Investment Performance of Heterogeneous Firms: Evidence from OECD Firm-Level Data
Norman Gemmell, Richard Kneller, Ismael Sanz & José Félix Sanz-Sanz

528/2010 Modelling Personal Income Taxation in Spain: Revenue Elasticities and Regional Comparisons
John Creedy & José Félix Sanz-Sanz

529/2010 Mind the Remoteness!. Income disparities across Japanese Prefectures
Jesús López-Rodríguez , Daisuke Nakamura

530/2010 El nuevo sistema de financiación autonómica: descripción, estimación empírica y evaluación
Antoni Zabalza y Julio López Laborda

531/2010 Markups, bargaining power and offshoring: an empirical assessment
Lourdes Moreno & Diego Rodríguez

532/2010 The snp-dcc model: a new methodology for risk management and forecasting
Esther B. Del Brio, Trino-Manuel Ñíguez & Javier Perote

533/2010 El uso del cuadro de mando integral y del presupuesto en la gestión estratégica de los hospitales públicos
David Naranjo Gil

534/2010 Análisis de la efectividad de las prácticas de trabajo de alta implicación en las fábricas españolas
Daniel Vázquez-Bustelo y Lucía Avella Camarero

535/2010 Energía, innovación y transporte: la electrificación de los tranvías en España, 1896-1935
Alberte Martínez López

536/2010 La ciudad como negocio: gas y empresa en una región española, Galicia 1850-1936
Alberte Martínez López y Jesús Mirás Araujo

537/2010 To anticipate or not to anticipate? A comparative analysis of opportunistic early elections and incumbents' economic performance
Pedro Riera Sagrera

538/2010 The impact of oil shocks on the Spanish economy
Ana Gómez-Loscos, Antonio Montañés & María Dolores Gadea

539/2010 The efficiency of public and publicly-subsidiz ed high schools in Spain. evidence from pisa-2006
María Jesús Mancebón, Jorge Calero, Álvaro Choi & Domingo P. Ximénez-de-Embún

540/2010 Regulation as a way to force innovation: the biodiesel case
Jordi Perdiguero & Juan Luis Jiménez

541/2010 Pricing strategies of Spanish network carrier
Xavier Fageda, Juan Luis Jiménez & Jordi Perdiguero

542/2010 Papel del posicionamiento del distribuidor en la relación entre la marca de distribuidor y lealtad al establecimiento comercial
Oscar González-Benito y Mercedes Martos-Partal

543/2010 How Bank Market Concentration, Regulation, and Institutions Shape the Real Effects of Banking Crises
Ana I. Fernández, Francisco González & Nuria Suárez

544/2010 Una estimación del comercio interregional trimestral de bienes en España mediante técnicas de interpolación temporal
Nuria Gallego López, Carlos Llano Verduras y Julián Pérez García

545/2010 Puerto, empresas y ciudad: una aproximación histórica al caso de Las Palmas de Gran Canaria
Miguel Suárez, Juan Luis Jiménez y Daniel Castillo

546/2010 Multinationals in the motor vehicles industry: a general equilibrium analysis for a transition economy
Concepción Latorre & Antonio G. Gómez-Plana

547/2010 Core/periphery scientific collaboration networks among very similar researchers
Antoni Rubí-Barceló

548/2010 Basic R&D in vertical markets
Miguel González-Maestre & Luis M. Granero

549/2010 Factores condicionantes de la presión fiscal de las entidades de crédito españolas, ¿existen diferencias entre bancos y cajas de ahorros?
Ana Rosa Fonseca Díaz, Elena Fernández Rodríguez y Antonio Martínez Arias

550/2010 Analyzing an absorptive capacity: Unlearning context and Information System Capabilities as catalysts for innovativeness
Gabriel Cepeda-Carrión, Juan Gabriel Cegarra-Navarro & Daniel Jimenez-Jimenez

551/2010 The resolution of banking crises and market discipline: international evidence
Elena Cubillas, Ana Rosa Fonseca & Francisco González

552/2010 A strategic approach to network value in information markets
Lucio Fuentelsaz, Elisabet Garrido & Juan Pablo Maicas

553/2010 Accounting for the time pattern of remittances in the Spanish context
Alfonso Echazarra

554/2010 How to design franchise contracts: the role of contractual hazards and experience
Vanesa Solis-Rodriguez & Manuel Gonzalez-Diaz

555/2010 Una teoría integradora de la función de producción al rendimiento empresarial
Javier González Benito

556/2010 Height and economic development in Spain, 1850-1958
Ramón María-Dolores & José Miguel Martínez-Carrión

557/2010 Why do entrepreneurs use franchising as a financial tool? An agency explanation
Manuel González-Díaz & Vanesa Solís-Rodríguez

558/2010 Explanatory Factors of Urban Water Leakage Rates in Southern Spain
Francisco González-Gómez, Roberto Martínez-Espiñeira, Maria A. García-Valiñas & Miguel Á. García Rubio

559/2010 Los rankings internacionales de las instituciones de educación superior y las clasificaciones universitarias en España: visión panorámica y prospectiva de futuro.
Carmen Pérez-Esparrells y José Mª Gómez-Sancho.

560/2010 Análisis de los determinantes de la transparencia fiscal: Evidencia empírica para los municipios catalanes
Alejandro Esteller Moré y José Polo Otero

561/2010 Diversidad lingüística e inversión exterior: el papel de las barreras lingüísticas en los procesos de adquisición internacional
Cristina López Duarte y Marta Mª Vidal Suárez

562/2010 Costes y beneficios de la competencia fiscal en la Unión Europea y en la España de las autonomías
José Mª Cantos, Agustín García Rico, Mª Gabriela Lagos Rodríguez y Raquel Álamo Cerrillo

563/2010 Customer base management and profitability in information technology industries
Juan Pablo Maicas y Francisco Javier Sese

564/2010 Expansión internacional y distancia cultural: distintas aproximaciones —hofstede, schwartz, globe
Cristina López Duarte y Marta Mª Vidal Suárez

565/2010 Economies of scale and scope in service firms with demand uncertainty: An application to a Spanish port
Beatriz Tovar & Alan Wall

566/2010 Fiscalidad y elección entre renta vitalicia y capital único por los inversores en planes de pensiones: el caso de España
Félix Domínguez Barrero y Julio López Laborda

567/2010 Did the cooperative start life as a joint-stock company? Business law and cooperatives in Spain, 1869–1931
Timothy W. Guinnan & Susana Martínez-Rodríguez

568/2010 Predicting bankruptcy using neural networks in the current financial crisis: a study for US commercial banks
Félix J. López-Iturriaga, Óscar López-de-Foronda & Iván Pastor Sanz

569/2010 Financiación de los cuidados de larga duración en España
Raúl del Pozo Rubio y Francisco Escribano Sotos

570/2010 Is the Border Effect an Artefact of Geographic Aggregation?
Carlos Llano-Verduras, Asier Minondo-Uribe & Francisco Requena-Silvente

571/2010 Notes on using the hidden asset or the contribution asset to compile the actuarial balance for pay-as-you-go pension systems
Carlos Vidal-Meliá & María del Carmen Boado-Penas

572/2010 The Real Effects of Banking Crises: Finance or Asset Allocation Effects? Some International Evidence
Ana I. Fernández, Francisco González & Nuria Suárez Carlos

573/2010 Endogenous mergers of complements with mixed bundling
Ricardo Flores-Fillol & Rafael Moner-Colonques

574/2010 Redistributive Conflicts and Preferences for Tax Schemes in Europe
Antonio M. Jaime-Castillo & Jose L. Saez-Lozano

575/2010 Spanish emigration and the setting-up of a great company in Mexico: bimbo, 1903-2008
Javier Moreno Lázaro

576/2010 Mantenimiento temporal de la equidad horizontal en el sistema de financiación autonómica
Julio López Laborda y Antoni Zabalza

577/2010 Sobreeducación, Educación no formal y Salarios: Evidencia para España
Sandra Nieto y Raúl Ramos

578/2010 Dependencia y empleo: un análisis empírico con la encuesta de discapacidades y atención a la dependencia (edad) 2008.
David Cantarero-Prieto y Patricia Moreno-Mencía

579/2011 Environment and happiness: new evidence for Spain
Juncal Cuñado & Fernando Pérez de Gracia

580/2011 Aanalysis of emerging barriers for e-learning models. a case of study
Nuria Calvo & Paolo Rungo

581/2011 Unemployment, cycle and gender
Amado Peiró, Jorge Belaire-Franch, & Maria Teresa Gonzalo

582/2011 An Analytical Regions Proposal for the Study of Labour Markets: An Evaluation for the Spanish Territory
Ana Viñuela Jiménez & Fernando Rubiera Morollón

583/2011 The Efficiency of Performance-based-fee Funds
Ana C. Díaz-Mendoza, Germán López-Espinosa & Miguel A. Martínez-Sedano

584/2011 Green and good?. The investment performance of US environmental mutual funds
Francisco J. Climent-Diranzo & Pilar Soriano-Felipe

585/2011 El fracaso de Copenhague desde la teoría de juegos.
Yolanda Fernández Fernández, Mª Ángeles Fernández López y Blanca Olmedillas Blanco

586/2011 Tie me up, tie me down! the interplay of the unemployment compensation system, fixed-term contracts and rehirings
José M. Arranz & Carlos García-Serrano

587/2011 Corporate social performance, innovation intensity and their impacts on financial performance: evidence from lending decisions
Andrés Guiral

588/2011 Assessment of the programme of measures for coastal lagoon environmental restoration using cost-benefit analysis.
José Miguel Martínez Paz & Ángel Perni Llorente

589/2011 Illicit drug use and labour force participation: a simultaneous equations approach
Berta Rivera, Bruno Casal, Luis Currais & Paolo Rungo

590/2011 Influencia de la propiedad y el control en la puesta en práctica de la rsc en las grandes empresas españolas
José-Luis Godos-Díez, Roberto Fernández-Gago y Laura Cabeza-García

591/2011 Ownership, incentives and hospitals
Xavier Fageda & Eva Fiz

592/2011 La liberalización del ferrocarril de mercancías en europa: ¿éxito o fracaso?
Daniel Albalate del Sol, Maria Lluïsa Sort García y Universitat de Barcelona

593/2011 Do nonreciprocal preference regimes increase exports?
Salvador Gil-Pareja, Rafael Llorca-Vivero & José Antonio Martínez-Serrano

594/2011 Towards a dynamic analysis of multiple-store shopping: evidence from Spanish panel data
Noemí Martínez-Caraballo, Manuel Salvador, Carmen Berné & Pilar Gargallo

595/2011 Base imponible y neutralidad del impuesto de sociedades: alternativas y experiencias
Lourdes Jerez Barroso

596/2011 Cambio técnico y modelo de negocio: las compañías de transporte urbano en España, 1871-1989
Alberte Martínez López

597/2011 A modified dickey-fuller procedure to test for stationarity
Antonio Aznar, María-Isabel Ayuda

598/2011 Entorno institucional, estructura de propiedad e inversión en I+D: Un análisis internacional
Félix J. López Iturriaga y Emilio J. López Millán

599/2011 Factores competitivos y oferta potencial del sector lechero en Navarra
Valero L. Casasnovas Oliva y Ana M. Aldanondo Ochoa

600/2011 Política aeroportuaria y su impacto sobre la calidad percibida de los aeropuertos
Juan Luis Jiménez y Ancor Suárez

601/2011 Regímenes de tipo de cambio y crecimiento económico en países en desarrollo
Elena Lasarte Navamuel y José Luis Pérez Rivero

602/2011 La supervivencia en las empresas de alta tecnología españolas: análisis del sector investigación y desarrollo
Evangelina Baltar Salgado, Sara Fernández López, Isabel Neira Gómez y Milagros Vivel Búa

603/2011 Análisis económico y de rentabilidad del sistema financiero español, por tipo de entidades y tamaño, después de cuatro años de crisis y ante los retos de la reestructuración financiera
Salvador Climent Serrano

604/2011 Does competition affect the price of water services? Evidence from Spain
Germà Bel, Francisco González-Gómez & Andrés J Picazo-Tadeo

605/2011 The Effects of Remoteness in Japanese Educational Levels
Jesús López-Rodríguez & Daisuke Nakamura

606/2011 The money market under information asymmetries and imperfectly competitive loan and deposit markets
Aday Hernández

607/2011 The effects of airline and high speed train integration
M. Pilar Socorro & M. Fernanda Viecens

608/2011 Consecuencias de la imbricación de los clientes en la dirección medioambiental: un análisis empírico
Jesús Ángel del Brío González, Esteban Fernández Sánchez y Beatriz Junquera Cimadevilla

609/2011 Revenue autonomy and regional growth: an analysis for the 25 year-process of fiscal decentralisation in Spain
Ramiro Gil-Serrate, Julio López-Laborda & Jesús Mur

610/2011 The accessibility to employment offices in the Spanish labor market: Implications in terms of registered unemployment
Patricia Suárez, Matías Mayor & Begoña Cueto

611/2011 Time-varying integration in European government bond markets
Pilar Abad, Helena Chuliá & Marta Gómez-Puig

612/2011 Production networks and EU enlargement: is there room for everyone in the automotive industry?
Leticia Blázquez, Carmen Díaz-Mora & Rosario Gandoy

613/2011 Los factores pronóstico económico, estructura productiva y capacidad de innovar en la valoración de activos españoles
Mª Begoña Font Belaire y Alfredo Juan Grau Grau

614/2011 Capital structure adjustment process in firms accessing venture funding
Marina Balboa, José Martí & Álvaro Tresierra

615/2011 Flexibilidad Contable en la Valoración de Instrumentos Financieros Híbridos
Jacinto Marabel-Romo, Andrés Guiral-Contreras & José Luis Crespo-Espert

616/2011 Why are (or were) Spanish banks so profitable?
Antonio Trujillo-Ponce

617/2011 Extreme value theory versus traditional garch approaches applied to financial data: a comparative evaluation
Dolores Furió & Francisco J. Climent

618/2011 La restricción de balanza de pagos en la España del euro. Un enfoque comparativo.
David Matesanz Gómez, Guadalupe Fugarolas Álvarez-Ude y Roberto Bande Ramudo

619/2011 Is inefficiency under control in the justice administration?
Marta Espasa & Alejandro Esteller-Moré

620/2011 The evolving patterns of competition after deregulation
Jaime Gómez Villascuerna, Raquel Orcos Sánchez & Sergio Palomas Doña

621/2011 Análisis pre y post-fusiones del sector compuesto por las cajas de ahorros españolas: el tamaño importa
Antonio A. Golpe, Jesús Iglesias y Juan Manuel Martín

622/2011 Evaluating three proposals for testing independence in non linear spatial processes
Fernando A. López-Hernández, M. Luz Maté-Sánchez-Val & Andrés Artal-Tur

623/2011 Valoración del Mercado de los Activos Éticos en España: una Aplicación del Método de los Precios Hedónicos
Celia Bilbao-Terol y Verónica Cañal-Fernández

624/2011 Happiness beyond Material Needs: The Case of the Mayan People
Jorge Guardiola, Francisco González-Gómez & Miguel A. García-Rubio

625/2011 Stock characteristics, investor type and market myopia
Cristina Del Rio-Solano & Rafael Santamaria-Aquilué

626/2011 Is mistrust under control in the justice administration?
Alejandro Esteller-Moré

627/2011 Working capital management, corporate performance, and financial constraints
Sonia Baños-Caballero, Pedro J. García-Teruel & Pedro Martínez-Solano

628/2011 On the optimal distribution of traffic of network ailines
Xavier Fageda & Ricardo Flores-Fillol

629/2011 Environmental tax and productivity in a subcentral context: new findings on the porter hypothesis
Jaime Vallés- Giménez & Anabel Zárate-Marco

630/2011 The impact of scale effects on the prevailing internet-based banking model in the US
Alexandre Momparlera, Francisco J. Climentb & José M. Ballesterb

631/2011 Student achievement in a cross-country perspective: a multilevel analysis of pisa2006 data for Italy and Spain
Tommaso Agasisti & Jose Manuel Cordero-Ferrera

632/2011 Banking liberalization and firms' debt structure: International evidence
Víctor M. González & Francisco González

633/2011 Public sector contingent liabilities in Spanish toll roads
Carlos Contreras

634/2011 Fiscal Sustainability and Immigration in the Madrid Region
Luis Miguel Doncel, Pedro Durá, Pilar Grau-Carles & Jorge Sainz

635/2011 Las desviaciones presupuestarias del gasto del estado en el periodo 1990-2009: un análisis desde las perspectivas agregada y de programas.
Valentín Edo Hernández

636/2011 A network approach to services internationalization
Stefano Visintin

637/2011 Factors behind the presence of agricultural credit cooperatives in Spain, 1900-1935: an econometric model
Ángel Pascual Martínez-Soto, Ildefonso Méndez- Martínez & Susana Martínez-Rodríguez.

638/2011 La eficiencia técnica en la industria de agua latinoamericana medida a través de la función de distancia
Angel Higuerey Gómez , Lourdes Trujillo Castellano y María Manuela González Serrano

639/2011 Urban Patterns, Population Density and the Cost of Providing Basic Infrastructure: A Frontier Approach
Inmaculada C. Álvarez, Ángel M. Prieto & José L. Zofío

640/2011 A comparison of national vs. multinational firms' performance using a general equilibrium perspective
María C. Latorre

641/2011 A computable general equilibrium evaluation of market performance after the entry of multinationals
María C. Latorre

642/2011 Competition for procurement shares
José Alcalde & Matthias Dahm

643/2011 Air services on thin routes: regional versus low-cost airlines
Xavier Fageda & Ricardo Flores-Fillol

644/2011 Efficiency and Stability in a Strategic Model of Hedonic Coalitions
Antoni Rubí-Barceló

645/2011 An analysis of the cost of disability across Europe using the standard of living approach
José-Ignacio Antón, Francisco-Javier Braña & Rafael Muñoz de Bustillo

646/2011 Estimating the gravity equation with the actual number of exporting firms
Asier Minondo & Francisco Requena

647/2011 New public management-delivery forms, quality levels and political factors on solid management waste costs in Spanish local governments
José Luis Zafra-Gómez, Diego Prior Jiménez, Ana María Plata Díaz & Antonio M López Hernández

648/2011 El sector financiero como factor desestabilizador para la economía a partir del análisis de Hyman Minsky
Isabel Gimenez Zuriaga

649/2011 Determinantes de la prima de riesgo en las emisiones de bonos de titulización hipotecaria en España (1993-2011)
Miguel Ángel Peña Cerezo, Arturo Rodríguez Castellanos y Francisco Jaime Ibáñez Hernández

650/2011 Does complexity explain the structure of trade?
Asier Minondo & Francisco Requenaz

651/2011 Supplementary pensions and saving: evidence from Spain
José-Ignacio Antón, Rafael Muñoz de Bustillo & Enrique Fernández-Macías

652/2011 The role of destination spatial spillovers and technological intensity in the location of manufa cturing and services firms
Andrés Artal-Tur, José Miguel Navarro-Azorín & María Luisa Alamá-Sabater

653/2011 El papel de los márgenes extensivo e intensivo en el crecimiento de las exportaciones manufactureras españolas por sectores tecnológico
Juan A. Máñez, Francisco Requena-Silvente, María E. Rochina-Barrachina y Juan A. Sanchis-Llopis

654/2011 Incumbents and institutions: how the value of resources varies across markets
Lucio Fuentelsaz, Elisabet Garrido & Juan Pablo Maícas

655/2011 Price differences between domestic and international air markets: an empirical application to routes from Gran Canaria
Xavier Fageda, Juan Luis Jiménez & Carlos Díaz Santamaría

656/2012 The role of accruals quality in the access to bank debt
Pedro J. García-Teruel, Pedro Martínez-Solano and Juan P. Sánchez-Ballesta

657/2012 Trade Under Uncertainty: Legal Institutions Matter
Lisa Kolovich & Isabel Rodriguez-Tejedo

658/2012 La relación bidireccional entre la rsc y el resultado empresarial: conclusiones de un estudio empírico el sector de las cajas de ahorros
Almudena Martínez Campillo, Laura Cabeza García y Federico Marbella Sánchez

659/2012 Consejos de administración y performance de la empresa: efecto de la pertenencia a múltiples consejos
Félix J. López Iturriaga y Ignacio Morrós Rodríguez

660/2012 Análisis comparado de los sistemas eléctricos en España y Argentina, 1890-1950. Estrategias globales y experiencias divergentes de la electrificación en dos países de industrialización tardía
Isabel Bartolomé y Norma Silvana Lanciotti

661/2012 Leverage and corporate performance: International evidence
Víctor M. González

662/2012 Procesos de prociclicidad crediticia e impacto de la provisión estadística en España
Francisco Jaime Ibáñez Hernández, Miguel Ángel Peña Cerezo y Andrés Araujo de la Mata

663/2012 Policy success or economic slowdown?. Effects of the 80 km•h-1 speed limit on air pollution in the Barcelona metropolitan area
Germà Bel i Queralt & Jordi Rosell i Segura

664/2012 Modelos regulatorios en las telecomunicaciones fijas de banda ancha: competencia en redes frente a competencia en servicios. la evidencia empírica en la OCDE y España
Juan Rubio Martín y César Sánchez Pérez

665/2012 Regional export promotion offices and trade margins
Salvador Gil-Pareja, Rafael Llorca-Vivero, José Antonio Martínez-Serrano & Francisco Requena-Silvente

666/2012 An Experimental Study of Gender Differences in Distributive Justice
Ismael Rodriguez-Lara

667/2012 Spanish savings banks in the credit crunch: could distress have been predicted before the crisis? A multivariate statistical analysis
Martí Sagarra, Cecilio Mar-Molinero & Miguel García-Cestona

668/2012 Cities to live or to work in: an input-output model of migration and commuting
Ana Viñuela & Esteban Fernández-Vázquez

669/2012 Non-linear Dynamics in Discretionary Accruals: An Analysis of Bank Loan-Loss Provisions
Marina Balboa, Germán López-Espinosa & Antonio Rubia

670/2012 Iniciación, persistencia e intensificación en la realización de actividades de I+D en España
Dolores Añón Higón, Juan A. Máñez and y Juan A. Sanchis-Llopis

671/2012 La neutralidad financiera en el impuesto sobre sociedades: microsimulación de las opciones de reforma para España
Lourdes Jerez Barroso y Fidel Picos Sánchez

672/2012 When trains go faster than planes: The strategic reaction of airlines in Spain
Juan Luis Jiménez and Ofelia Betancor

673/2012 Distribución del gasto sanitario público por edad y sexo en España: Análisis de la década 1998-2008
Ángela Blanco Moreno, Rosa Urbanos Garrido y Israel John Thuissard Vasallo

674/2012 Does school ownership matter? An unbiased efficiency comparison for Spain regions
Eva Crespo-Cebada, Francisco Pedraja-Chaparro and Daniel Santín

675/2012 Factores condicionantes de la desigualdad educativa: un análisis para el caso español
Crespo Cebada, Eva, Díaz Caro, Carlos y Jesús Pérez Mayo

676/2012 Integrating network analysis and interregional trade to study the spatial impact of transport infrastructure using production functions
Inmaculada C. Álvarez-Ayuso, Ana M. Condeço-Melhorado, Javier Gutiérrez y Jose L. Zofío

677/2012 An actuarial balance model for DB PAYG pension systems with disability and retirement contingencies
Manuel Ventura-Marco & Carlos Vidal-Meliá

678/2012 Will it last? An assessment of the 2011 Spanish pension reform using the Swedish system as benchmark
Carlos Vidal-Meliá

679/2012 Iniciativas educativas en las universidades mexicanas: un análisis estadístico multivariante
Martí Sagarra, Cecilio Mar-Molinero & Herberto Rodríguez-Regordosa

680/2012 Tributación y política de dividendos de las sociedades no financieras, 2000-2010
Félix Domínguez Barrero y Julio López Laborda

681/2012 Lending relationships and credit rationing: the impact of securitization
Santiago Carbó-Valverde, Hans Degryse & Francisco Rodriguez-Fernandez

682/2012 Percepciones de los ciudadanos sobre las haciendas regionales: quién es y quién debería ser responsable de los servicios e impuestos autonómicos
Julio López Laborda y Fernando Rodrigo

683/2012 Trade credit, the financial crisis, and firm access to finance
Santiago Carbó-Valverde, Francisco Rodríguez-Fernández & Gregory F. Udell

684/2012 Changing market potentials and regional growth in Poland
Jesús López-Rodríguez & Malgorzata Runiewizc-Wardyn

685/2012 Firm boundaries and investments in information technologies in Spanish manufacturing firms
Jaime Gómez, Idana Salazar & Pilar Vargas

686/2012 Movimientos de capital, inserción en el mercado mundial y fluctuaciones financieras de la economía cubana: la bolsa de la habana, 1910-1959
Javier Moreno Lázaro

687/2012 El impacto de la inmigración sobre el crecimiento económico español. un enfoque contable
Rodrigo Madrazo García de Lomana

688/2012 Structural equivalence in the input-output field
Ana Salomé García Muñiz

689/2012 Testing the expectations hypothesis in euro overnight interest swap rates
Lucía Hernandis & Hipòlit Torró

690/2012 Bank asset securitization before the crisis: Liquidity, bank type and risk transfer as determinants
Martí Sagarra, Miguel García-Cestona & Josep Rialp

691/2012 Análisis del riesgo soberano utilizando mapas auto-organizativos. el caso de europa, España y Alemania
Félix J. López Iturriaga e Iván Pastor Sanz

692/2012 Economic forecasting with multivariate models along the business cycle
Carlos Cuerpo & Pilar Poncela

693/2012 Testing opvar accuracy: an empirical back-testing on the loss distribution approach
José Manuel Feria-Domínguez, Enrique J. Jiménez-Rodríguez & Mª Paz Rivera-Pérez

694/2012 Is the boost in oil prices affecting the appreciation of real exchange rate?: Empirical evidence of "Dutch disease" in Colombia
Pilar Poncela, Eva Senra & Lya Paola Sierra

695/2012 Market efficiency and lead-lag relationships between spot, futures and forward prices: The case of the Iberian Electricity Market (MIBEL)
Jose María Ballester, Francisco Climent & Dolores Furió

696/2012 Complementarities in the innovation strategy: do intangibles play a role in enhancing the impact of r&d on firm performance?
Dolores Añón, Jaime Gómez & Pilar Vargas

697/2012 The real effects of bank branch deregulation at various stages of economic development: The European experience
José Manuel Pastor, Lorenzo Serrano & Emili Tortosa-Ausina

698/2012 Effects of the financial crisis on the european integration process: relevance of exchange rate, inflation and domestic risks
Alfredo J. Grau-Grau

699/2012 Las Preferencias por la Redistribución: Teoría y Evidencia para España
Julio López Laborda y Eduardo Sanz Arcega

700/2012 Firm boundaries and investments in information technologies in spanish manufacturing firms
Jaime Gómez, Idana Salazar and Pilar Vargas

701/2012	Oil Prices and Inflation in the Euro Area and its Main Countries: Germany, France, Italy and Spain César Castro, Pilar Poncela and Eva Senra
702/2012	Oportunismo y sistemas de gestión medioambiental: las certificaciones como cortina de humo ante los grupos de interés Gustavo Lannelongue Nieto y Javier González Benito
703/2012	Variance Swaps and Gamma Swaps. The Theory and Reality of Model-Free Replication Jacinto Marabel-Romo
704/2013	Business Ties in Boards: the influence of institutional directors on Financial Policy Emma García-Meca, Felix López Iturriaga and Fernando Tejerina Gaite