ILLICIT DRUG USE AND LABOUR FORCE PARTICIPATION: A SIMULTANEOUS EQUATIONS APPROACH

Berta Rivera
Bruno Casal
Luis Currais
Paolo Rungo

FUNDACIÓN DE LAS CAJAS DE AHORROS
DOCUMENTO DE TRABAJO
Nº 589/2011

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.

ILLICIT DRUG USE AND LABOUR FORCE PARTICIPATION: A SIMULTANEOUS EQUATIONS APPROACH

Berta Rivera*
Bruno Casal*
Luis Currais**
Paolo Rungo**

Abstract

Empirical research on the relationship between illicit drug use and labour market success has been found to have mixed results in the literature. Relevant sources of variability are the methods used to account for the potential endogeneity of drug use. Using clinical data of drug users, this paper utilizes a recursive simultaneous-equations approach as an alternative for estimating the effect of consumption on labour participation and control the endogeneity problem. Our results confirm that drug use is endogenously determined, and provides evidence to support that frequent use of dependency drugs greatly decreases the likelihood of be in work. The results derive here show the potentially labour market-related costs of drug use and abuse, mainly in terms of production loss.

Key words: drug use, labour participation, endogeneity, simultaneous equation model.

JEL Classification: C31, I12, J23.

Corresponding author: Bruno Casal, Department of Applied Economics I, Faculty of Economics and Business, University A Coruña, A Coruña (15071), Spain. E-mail: bcasal@udc.es

* Department of Applied Economics I - Faculty of Economics and Business - University A Coruña
** Department of Economic Analysis and Business Administration- Faculty of Economics and Business - University A Coruña

1. Introduction

Substance use and abuse is related to health and social problems which imply economic costs to the individual and the society. In this sense, illicit drug use generates direct costs (health care costs; research, prevention and training programmes; property losses; law enforcement…) and indirect costs represented by losses in productivity. A study carried out by the Office of National Drug Control Policy (2001) revealed that productivity losses accounted for 69% of the total estimated costs of substance use in 2000. Oliva and Rivera (2006) estimated the social cost of illicit drug use in the Autonomous Region of Galicia (Spain) in about €129 million in 2003. The largest single component of these costs is productivity loss, which accounts for 67% of total costs.

The objective of our empirical estimation is to study the relationship between drug use and employment status. Several literature suggest that illicit drug use can affect productivity and labour market position of individuals in a negative way (French *et al*., 2001; Buchmueller and Zuvekas, 1998; MacDonald and Pudney, 2000; DeSimone, 2002; Alexandre and French, 2004; Van Ours, 2006), however, some empirical research reported no significant effects or positive effects of illicit drug use on wages and labour market success (Gill and Michaels, 1992; Register and Williams, 1992; Kaestner, 1991, 1994).

We should be cautious when comparing results between studies. These inconsistent trends in the literature may be attributed, among other factors, to the specification of labour market outcomes, the frequency measures, the sample of substance users considered in the analysis, the type of substances, and the methods used to address for the endogeneity of drug use. The potential endogeneity may come from a direct effect of income on drug consumption and from the ways, not observed by the econometrician, that individuals are related to labour market success (Buchmueller and Zuvekas, 1998).

Our analysis contributes to a broader understanding of the relationship between illicit drug use and labour market participation differing from previous studies in two important aspects: the use of a clinical record data (previous studies have used information from national surveys of individuals or households) and the use of a recursive bivariate probit framework as an alternative approach to control for the endogeneity of drug use.

The paper is organized as follows. In section 2 we developed the econometric framework. The sample and the variables are described in section 3. The main results of the empirical analysis are presented in section 4. Section 5 concludes.

2. Econometric specification

A relevant source of variability, in the results described in the introduction is the methods used in the existing literature to account for the potential endogeneity of drug use (DeSimone, 2002; Norton and Han, 2007).

Instrumental variables methods (*IV*), usually implemented in a two-step procedure, are quite common in the literature to correct for endogeneity (DeSimone, 2002; French *et al*., 2001; Norton *et al*., 1998; Register and Williams, 1992), however these procedures require the existence of one or more valid instruments that do not directly explain the binary dependent variable but are correlate with the endogenous regressor. In the presence of a weak correlation between the instrument and the endogenous regressor, *IV* estimates can be seriously biased - finding instruments problem- (Alexandre and French, 2004; Norton *et al*., 1998; Davidson and MacKinnon, 1993). Even with a plausible instrument, the dummy endogenous-variables model seems to raise some econometric problems when the endogenous regressor and the outcome of interest are binary variables (Angrist, 1999; Foster, 1997; Terza *et al.*, 2008). Summarizing, implement a *IV* procedure in nonlinear regression models can lead to bias in the estimation of the effect of drug use on employment status.

Since both drug use and being employed are dichotomous, simultaneous bivariate probit model (*BPM*) is suggest an appropriate alternative model specification in order to control potential endogeneity. We propose a specific case of the *BPM* denoted as a recursive model of simultaneous equations, since the second binary dependent variable appears on the right-hand side of the first equation (Maddala, 1983; Hardin, 1996; Greene, 1998, 2003). Interestingly, the endogenous nature of the variable can be ignored in formulating the likelihood function (Greene, 2003). Bivariate probit model is estimated using *Full Information Maximum Likelihood* (FIML) method.

Participation in the labour force is modelled via the latent equation:

$$L^{*}= \beta_{l}\, x' + \beta_{2}F + \varepsilon_{1}, \qquad (1)$$

where the latent variable L^* is mapped to the observable binary indicator variable L:

$$\begin{cases} L=1 & \text{if} \quad L^{*}>0 \quad \text{in labour force.} \\ L=0 & \text{if} \quad L^{*}\leq 0 \quad \text{otherwise.} \end{cases}$$

In eq. (1) x' is a vector of exogenous variables and F is modelled as a binary variable taking the value of unit if the individual is a frequent user.

Drug use is assumed endogenous in eq. (1) and is determined by the following equation:

$$F^{*}= \delta_{1}z'+\varepsilon_{2}, \qquad (2)$$

where F^* is the latent variable for frequent user, and z' is a vector of exogenous influences on frequency pattern. The unobserved latent variable F^* is related to observable F via

$$\begin{cases} F=1 & \text{if} \quad F^{*}>0 \quad \text{frequent drug use.} \\ F=0 & \text{if} \quad F^{*}\leq 0 \quad \text{otherwise.} \end{cases}$$

It is assumed that error terms ε_1 and ε_2 are jointly normally distribute with $E[\varepsilon_1|x', z']= E[\varepsilon_2|x', z']=0$, $var[\varepsilon_1|x', z']= E[\varepsilon_2|x', z']=1$ and $cov[\varepsilon_1, \varepsilon_1|x', z']=\rho$.

The correlation coefficient ρ measures the correlation between the omitted factors in the employment and the frequency equations. If ρ=0, the model collapses to two separate probit models for *L* and *F*. On the other hand, when ε_1 and ε_2 are not independent, a recursive bivariate probit framework will yield consistent estimates (the separate estimates would be biased if $\rho \neq 0$). The Wald test is used to determine whether ρ is significantly different from zero (the null hypothesis is that ρ=0).

Finally, we are also interested in measuring the influence of frequent use on the probability of labour force participation. This effect can be estimated as a difference between the predict conditional probabilities of labour force participation with and without a frequent drug use (Greene, 2003):

$$E(F)=Prob(L=1|F=1; x, z) - Prob(L=1|F=0; x, z).$$

3. Data and variables

The difficulties associated with survey data are widely recognised, particularly when the subject matter is sensitive (MacDonald and Pudney, 2000). We use unit record data carried out in 2008 by Galician Drug Observatory through a multicenter evaluation system that register, in a standardized manner, homogeneous data from the Drug Addiction Assistance Units (*DAUs*) of Galician Regional Health Service (Spain).

DAUs are configured as the gateway to the public healthcare services related to drug abuse, and the origin of subsequent referrals to other specialized treatment services. Data capture is performed by *DAUs* health staff by face to face interviews at the time that the individual is admitted to treatment for abuse or dependence on a particular type of psychoactive substance. Database is highly representative and reliable, and recorded variables, defined under a clinical procedure, for more than 11,000 individuals admitted in 2008 to receive treatment for illicit drug use, alcohol and tobacco consumption, compulsive gambling, eating disorders and doping in sport. Admission in a *DAU* is performed on the basis of individual demand, a demand from the individual's closest social environment (family and friends) or by judicial decision.

The main purpose of the information contained in the database is to obtain, by the public health services, care evaluation indicators and planning actions related to drug use rehabilitation, prevention and social reintegration of drug users.

The negative consequences of illicit drugs for worker productivity vary according to physical and psychological effects of each type of substance. We follow drug classification proposed by Ramsay and Spiller (1997) and MacDonald and Pudney (2000), and restricted the study to individuals whose main consumption is illegal substances included in the group of so-called 'dependency drugs' (cocaine, heroin and cocaine+heroin, coded as "primary substance consumed"). This group of drugs can seriously harm the health of the user and presumed negative effect on labour productivity compared to cannabis drugs use, which cause fewer health problems (DeSimone, 2002; Van Ours, 2006). In this analysis, specific models for cannabis users were not estimated because in the sample, consumption of cannabis shows to be secondary to the use of 'dependency drugs' (not mutually exclusive substances) and when we account for intensity of use it is difficult to distinguish among the effects of this type of substance (Buchmueller and Zuvekas, 1998).

The dataset contains detailed information on each individual's labour market activity, substance consumed, consumption patterns (frequency of drug use, route of administration, dynamics of consumption, etc.), prior treatments, criminal record, as standard socioeconomic and demographic characteristics. In the sample approximately 15% of drug users are women admitted to treatment. Following Buchmueller and Zuvekas (1998), DeSimone (2002) and Zuvekas *et al.* (2005) studies, we limited the sample to men because they tend to have greater rates of drug use compared to women (Kessler *et al*., 1994; Regier *et al.*, 1993). The other reason is that men are more likely to participate in the labour market. After deleting observations with missing values on specific variables, the sample selected for the present analysis includes 4,057 patients.

Impact on labour participation depends of drug use intensity and questions concerning timing (the effects of consumption on labour market may not be immediately). Following the classification of frequency pattern adopted by Martin, Beaumont and Kupper (2003), use frequency categories were divide into two mutually exclusive groups (based on consumption during the past month), characterizing 'frequent drug user' those who admitting to use each substance four or more times a week.

The employment variable *L* is a binary indicator of those 'in labour force', include the employed and self-employed, and those 'not in labour force' include the unemployed. We exclude from the definition individuals who were not of working age (in Spain the minimum age for working is 16 and the legal age for retirement is 65), full-time students, those who are disabled, and unemployed not looking for work.

Table I reports definitions for all of the variables, together with justifications for the inclusion in the empirical model.

Table I. Variable definition

Variables	Definition	Justification
	Endogenous variables	
emp	1=currently employed	
freq	1=use dependency drugs four or more times a week during the past month	
	Demographic variables	
age	Age at time of be admitted to treatment	Determine individual access to labour market and consumption patterns (experimental, recreational or dependency).
age2	Age squared/100	
ed1	1=no education and primary	The relationship between labour market outcomes and drug use is conditional to education attainment (Mullahy and Sindelar, 1989, 1993; French and Zarkin, 1995)
ed2	1=secondary education	
ed3	1=university	
numbarrest	Criminal record (number of arrests)	Individuals who use illicit drugs are more likely to commit crimes that affect their employability.
married	1=married or cohabiting	Many literature suggest that marriage is related to a reduction or cessation in substance use, cited as a protective factor against drug use (Bachman *et al.*, 1997; *Moos et al.*, 2002; Heinz *et al.*, 2009)
	Treatment, substance use and risk variables	
psytreat	1=prior psychiatric treatment related to drug consumption	Modify their attitudes and behaviours related to drug use and abuse.
ageconsump	Age of first consumption	Previous literature considers future effects of early life behaviour, such us drug consumption on labour productivity (Burguess and Propper, 1998).
ageconsump2	Ageconsump squared/100	
consyears	Years of consumption (lifetime substance use)	Variable that collects cumulative effects of substance use. Continuous drug use can be symptom of pathological use or dependence at some point in the lifetime (Buchmueller and Zuvekas, 1998; MacDonald and Pudney, 2000)
drugpart	1=drug-dependent partner	It is likely that partners were involved actively in the so-called drug life (Laudet *et al.*, 1999; Comfort *et al.*, 2003)

Descriptive statistics were segmented between employment status and the full sample in table II. The prevalence of use dependency drugs four or more times a week was above 57% for the full sample and 56% for respondents not in labour force report a frequent drug use (60% for those in work).

Table II. Descriptive statistics

Variables	**All sample**	**Employed**	**Unemployed**
Endogenous variables			
emp	0.438		
	(0.008)		
freq	0.577	0.601	0.559
	(0.008)	(0.012)	(0.01)
Demographic variables			
age	33.55	33.17	33.84
	(0.115)	(0.167)	(0.157)
age2	11.79	11.50	12.01
	(0.079)	(0.115)	(0.109)
ed1	0.37	0.303	0.423
	(0.008)	(0.011)	(0.01)
ed2	0.609	0.665	0.567
	(0.008)	(0.011)	(0.01)
ed3	0.019	0.032	0.011
	(0.002)	(0.004)	(0.002)
numbarrest	3.91	1.89	5.48
	(0.134)	(0.12)	(0.214)
married	0.141	0.186	0.108
	(0.005)	(0.009)	(0.006)
Treatment, substance use and risk variables			
psytreat	0.259	0.201	0.303
	(0.007)	(0.009)	(0.009)
ageconsump	20.04	20.64	19.57
	(0.092)	(0.141)	(0.121)
ageconsump2	4.36	4.61	4.16
	(0.045)	(0.072)	(0.058)
consyears	13.47	12.49	14.23
	(0.109)	(0.159)	(0.147)
drugpart	0.106	0.098	0.112
	(0.005)	(0.007)	(0.006)
Sample size	**4,057**	**1,775**	**2,282**

Note: Standard errors in parentheses.

4. Main results

The estimated coefficients and total marginal effects for the recursive bivariate probit model are reported in table III. We impose restrictions to improve the identification of the model and decide exclusion by first including the variables in both equations and omitting them from the equation(s) in which they were insignificant (Wilde, 2000). The estimated value of correlation ρ between the disturbances (the omitted factors) in the equations is 0.767 with a standard error of 0.126. For testing exogeneity hypothesis, the Wald statistic is 10.94 (p=0.0009), and for a chi-square with one degree of freedom this value indicates that ρ is significantly different from 0 and exogeneity hypothesis can be rejected. This suggests that drug use is rightly treated as an endogenous variable in employment equation and a recursive bivariate probit framework is justified to investigate the effect of drug use on labour force participation.

Table III. The effect of frequent drug use on employment: Recursive *BPM*

	Type of variable	**Drug use equation**		**Employment equation**		**Total Marginal effects**[a]	**Std. Error**
		Coefficient	Robust Std. Error	Coefficient	Robust Std. Error		
age	(continuous)	0.033	0.038	0.047*	0.016	+0.016	0.011
age2	(continuous)	-0.047**	0.02	-0.066*	0.025	-0.022	0.011
drugpart	(binary)	0.073	0.066	-0.005	0.063	-0.018	0.025
numbarrest	(continuous)	-0.02*	0.002	-0.038*	0.005	-0.014	0.003
psytreat	(binary)	-0.205*	0.045	-0.358*	0.044	-0.126	0.017
married	(binary)	-0.123**	0.059	0.262*	0.069	+0.159	0.023
ed2	(binary)	-0.107**	0.042	0.146*	0.051	+0.093	0.017
ed3	(binary)	-0.296**	0.145	0.483*	0.171	+0.309	0.054
ageconsump	(continuous)	-0.045	0.041			+0.01	0.008
ageconsump2	(continuous)	0.11**	0.044			-0.024	0.007
consyears	(continuous)	0.021	0.035			-0.004	0.008
freq	(binary)			-1.145*	0.179	-0.473	0.074
constant				-0.167	0.311		
rho		0.767	0.126				
Wald test of *rho*=0	*chi2*(1) = 10.9457		*Prob>chi2* = 0.0009				

Significance levels: *1%, **5%. Observations: 4,057

[a] As suggested by Greene (2003), marginal effects are calculated as the change in the probability of being in work of being a frequent drug user relative to being a non-frequent user holding all other explanatory variables at their sample mean values.

Looking first at the drug use equation, variables such as received psychiatric treatment and married have a significant negative impact on frequent drug use probability (protective factors against drug consumptions). Estimated coefficients on education variables suggest that, with respect to the omitted category (no education and primary), completion of either a university degree or secondary education reduced probability of being a frequent drug user. Finally, years of consumption and drug-dependent partner have the expected sign but are not statistically significant at 5% level.

Examining the employment equation, a significant impact of frequent drug use on employment is estimated. The negative signs indicate that, other things equal, individuals who use dependency drugs four or more times a week during the past month are less likely to participate in the labour force. Numerically, this is the strongest effect, decreasing the likelihood of being in work by a full 0.473. An explanation of this significant effect is that frequent users of dependency drugs are more likely to use simultaneously other types of drugs, addictive substances with negative consequences for their physical and psychological wellbeing (Buchmueller and Zuvekas, 1998). These consumptions contribute to increase the effect of the primary substance consumed but it is difficult to determine the relative contribution of each type of substance.

Looking briefly at the effect of the other variables, we can identify the importance of education and married to increases the probability of being in the labour force (married has a substantial positive effect of 0.159 on the probability of labour force participation). In contrast, we find that individuals who received prior psychiatric treatment and have a long criminal record are less likely to be in work.

5. Conclusions

The purpose of this paper has been to re-examine the relationship between illicit drug use and labour market status using information from a clinical record data. We account for a possible unobserved correlation between drug use and labour participation through the use of a *RBPM* as an alternative approach to the estimation techniques used in previous literature. We confirm that drug use is endogenously determined with labour participation and a *RBPM* is an appropriate method in order to control this problem.

The results do not differ from other empirical research and provides evidence to support a highly significant relationship between drug use and participation in the labour force (after controlling for endogeneity). We have shown that frequent use of dependency drugs greatly decreases the likelihood of being in work.

Several limitations of the study must be considered. First, frequency of drug use is not the best predictor of whether or not an individual has a drug problem. Future research should consider individual physiological and psychological response to drug consumption in the model specification (Buchmueller and Zuvekas, 1998). Second, it would have been interesting to analyze longitudinal data on the same individuals. Assuming that there is a lag before the effect of drug use is reflected in observed outcomes of labour market, the cross-sectional design does not allow us to analyze long-term consumption patterns and how these patterns were related to labour market performance. While the corresponding population is of great interest from a public health perspective, given that the sample consists largely of those who engage in the behaviour under examination and might seek treatment because of a specific value of the outcome being studied, we must be cautious about generalizing these results.

From a policy-maker perspective, the results derive here show the potentially labour market-related costs of drug use and abuse, mainly in terms of production loss, and the need to integrate active employment policies and rehabilitation programs for users of psychoactive substances. From an empirical research perspective, our study has two contributions: the use of clinical data of drug users and a recursive simultaneous-equations model approach as an alternative for estimating the effect of drug use on labour participation.

References

Alexandre, P. K.; French, M. T., 2004. Further evidence on the labor market effects of addiction: Chronic drug use and employment in metropolitan Miami. *Contemporary Economic Policy*, 22 (3), 382-393.

Angrist, J. D., 1991. Instrumental variables estimation of average treatment effects in econometrics and epidemiology. *Technical Working Paper*, 115. National Bureau of Economic Research. Cambridge, MA.

Atkinson, J. S.; Montoya, I. D.; Trevino, R. A.; Richard, A. J., 2000. Labor force participation in a sample of substance users. *American Journal of Drug and Alcohol Abuse*, 26 (3), 335-367.

Bachman, J. G.; Wadsworth, K. N.; O'Malley, P. M.; Johnston, L. D.; Schulenberg, J., 1997. *Smoking, drinking, and drug use in young adulthood: The impacts of new freedoms and new responsibilities*. L. Erlbaum Associates. Mahwah, NJ.

Buchmeller, T. C.; Zuvekas, S. H., 1998. Drug use, drug abuse, and labour market outcomes. *Health Economics*, 7, 229-245.

Burgess, S. M.; Propper, C., 1998. Early health-related behaviours and their impact on later life chances: evidence from the US. *Health Economics*, 7, 381-399.

Comfort, M.; Sockloff, A.; Loverro, J.; Kaltenbach, K., 2003. Multiple predictors of substance-abusing women’s treatment and life outcomes: A prospective longitudinal study. *Addictive Behaviors*, 28 (2), 199-224.

Davidson, R.; Mackinnon, J. G., 1993. *Estimation and inference in econometrics*. Oxford Univ. Press. New York.

DeSimone, J., 2002. Illegal drug use and employment. *Journal of Labor Economics*, 20 (4), 952-977.

Foster, E. M., 1997. IV for logistic regression: an illustration. *Social Science Research*, 26, 487-504.

French, M. T.; Zarkin, G. A., 1995. Is moderate alcohol use related to wages? Evidence from four worksites. *Journal of Health Economics*, 14, 319-344.

French, M. T.; Zarkin, G. A.; Dunlap, L. J., 1998. Illicit drug use. Absenteeism and earnings at six U.S. Worksites. *Contemporary Economic Policy*, 16, 334-346.

French, M. T.; Roebuck, M. C.; Alexandre, P. K., 2001. Illicit drug use, employment, and labor force participation. *Southern Economic Journal*, 68 (2), 349-368.

Gill, A.; Michaels, R., 1992. Dos drug use lower wages?. *Industrial and Labor Relations Review*, 45, 419-439.

Greene, W. H., 1998. Gender economics courses in liberal arts colleges: Further results. *Journal of Economic Education*, 29 (4), 291-300.

Greene, W. H., 2003. *Econometric analysis (5th Edition).* Prentice-Hall. New Jersey.

Hardin, J. W., 1996. Bivariate probite models. *Stata Technical Bulletin*, **33,** 15-20.

Heinz, A. J.; Wu, J.; Witkiewitz, K.; Epstein, D. H.; Preston, K. L., 2009. Marriage and relationship closeness as predictors of cocaine and heroin use. *Addictive Behaviors*, 34, 258–263.

Kaestener, R., 1991. The effects of illicit drug use on the wages of young adults. *Journal of Labor Economics*, 9, 381-412.

Kaestener, R., 1994. New estimates of the effects of marijuana and cocaine use on wages. *Industrial and Labor Relations Review*, 47, 454-470.

Kandel, D. B.; Davies, M., 1990. Labor force experiences of a National Simple of Young Adult Men. *Youth and Society*, 21, 411-445.

Kandel, D.; Chen, K.; Gill, A., 1995. The impact of drug use on earnings: a life span perspective. *Social Forces*, 74, 243-270.

Kessler, R. C.; McGonagle, K. A.; Zhao, S.; Nelson, C. B.; Hughes, M.; Eshleman, S.; Wittchen, H. U.; Kendler, K. S., 1994. Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States:

Results from the National Comorbidity Survey. *Archives of General Psychiatry*, 51, 8-19.

Laudet, A.; Magura, S.; Furst, R. T.; Kumar, N.; Whitney, S., 1999. Male partners of substance-abusing women in treatment: an exploratory study. *American Journal of Drug and Alcohol Abuse*, 25 (4), 607-627.

MacDonald, Z.; Pudney, S., 2000. Illicit drug use, unemployment, and occupational attainment. *Journal of Health Economics*, 19, 1089-1115.

Maddala, G. S., 1983. *Limited dependent and qualitative variables in econometrics.* Harvard University Press. Cambridge, MA.

Martin, S. L.; Beaumont, J. L.; Kupper, L. L., 2003. Substance use before and during pregnancy: Links to intimate partner violence. *American Journal of Drug and Alcohol Abuse*, 29, 599-617.

Moos, R. H.; Nichol, A. C.; Moos, B. S., 2002. Risk factors for symptom exacerbation among treated patients with substance use disorders. *Addiction*, 97, 75−85.

Mullahy, J.; Sindelar, J. L., 1989. Life-cycle effects of alcoholism on education, earnings, and occupation. *Inquiry*, 26 (2), 272-282.

Mullahy, J., 1993. Alcoholism, work and income. *Journal Labor Economics*, 11 (3), 494-520.

Norton, E. C.; Han, E., 2007. Genetic information, obesity and labor market outcomes. *Sixteenth European Workshop on Econometrics and Health Economics*. Bergen, 5-8 September.

Norton, E. C.; Lindrooth, R. C.; Ennett, S. T., 1998. Controlling for the endogeneity of peer substance use adolescent alcohol and tobacco use. *Health Economics*, 7, 439-453.

Office of National Drug Control Policy., 2001. *The economic costs of drug abuse in the United States: 1992-1998*. Office of National Drug Control Policy. Washington DC.

Oliva, J.; Rivera, B., 2006. Los costes socials del consumo de drogas ilegales en la Comunidad de Galicia. *Presupuesto y Gasto Público*, 44, 105-131.

Ramsey, M.; Spiller, J., 1997. Drug misuse declared in 1996: Latest results from the British Crime Survey. Home Office. London.

Regier, D. A.; Narrow, W. E.; Rae, D. S.; Manderscheid, R. W.; Locked, B. Z.; Goodwin, F. K., 1993. The de Facto US Mental and Addictive Disorders Service System: Epidemiologic catchment area prospective 1-year prevalence rates of disorders and services. *Archives of General Psychiatry*, 50 (2), 85-94.

Register, C.; Williams, D., 1992. Labor market effects of marijuana and cocaine use among young men. *Industrial and Labor Relations Review*, 45, 435-448.

Terza, J.; Bradford, W. D.; Dismuke, C. E., 2008. The use of linear instrumental variables methods in health services research and health economics: A cautionary note. *Health Services Research*, 43, 1102-1120.

Umberson, D., 1987. Family status and health behaviors: Social control as a dimension of social integration*. Journal of Health and Social Behavior*, 28 (3), 306-319.

Van Ours, J. C., 2006. Cannabis, cocaine and jobs. *Journal of Applied Econometrics*, 21 (7), 897-917.

Wilde, J., 2000. Identification of multiple equation probit models with endogenous dummy regressors. *Economics Letters*, 69, 309–312.

Zarkin, G.; French, M.; Mroz, T.; Bray, J., 1998. The relationship between drug use and labour supply for young men. *Labour Economics*, 5, 385-409.

Zuvekas, S.; Cooper, P. F.; Buchmueller, T. C., 2005. Health behaviours and labor market status: The impact of substance abuse. Agency for Healthcare Research and Quality. Rockville, MD.

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

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