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

FUNDACIÓN DE LAS CAJAS DE AHORROS
DOCUMENTO DE TRABAJO
Nº 645/2011
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.
AN ANALYSIS OF THE COST OF DISABILITY ACROSS EUROPE USING THE STANDARD OF LIVING APPROACH

JOSÉ-IGNACIO ANTÓN ¹
FRANCISCO-JAVIER BRAÑA ²
RAFAEL MUÑOZ DE BUSTILLO ³

ABSTRACT

This article presents for the first time a comparative study of the cost of disability for 26 European countries. Using the European Union Statistics on Income and Living Conditions 2008 and two alternative methodologies, one based on how easy or difficult it is for households to make ends meet and the other related to access of households to a set of services and assets, we present estimates of the extra costs of disability for households. Also discussed are the possible explanatory reasons for the pattern of costs found in the analysis.

KEYWORDS: disability, cost, standard of living, income, welfare.

JEL CLASSIFICATION: I10, I30.

¹, ², ³ (janton@usal.es), (fjbrana@usal.es(bustillo@usal.es), (bustillo@usal.es), Departamento de Economía Aplicada Universidad de Salamanca.
1. INTRODUCTION

Disability can be understood as a functional limitation, resulting not only from a medical condition of the body or the whole person, but also from the relation of a person with the environment, which involves dysfunction at one or more of three levels: impairments, activity limitations and participation restrictions. The resulting loss of autonomy, physical or mental, prevents performance of some of the Activities of Daily Living (ADL).

Disability is far from being a marginal phenomenon in developed countries. According to Eurostat, 30.8% of European Union (EU) citizens suffered from a long-standing illness or health problem in 2008, whereas 8.1% reported experiencing severe and Development (OECD) and in the EU there is strong concern about the issue and a mandate to try and attain the full economic and social participation of people with disabilities. As a reflection of this concern, in the OECD and in the EU there is a variety of disability benefit systems, regulations and coverage. Some of these policies address the re-integration of disabled people into the labor market while others aim to compensate individuals with disabilities. Public social spending in this area reached a sizable 2% of GDP in the EU27 in 2008, fluctuating from 0.7% in Cyprus to 4.4% in Denmark.

The aim of this paper is to offer an estimate of the extra costs of severe disability using a large sample of European countries. As far as we know, this is the first attempt to offer such an estimation using homogeneous data and the same methodology for all the EU member countries (with the exceptions of Finland, France and Malta) plus

---

1 We understand disability within the so-called “bio-psycho-social model”, according to which disability is the result of the interaction of the functional status of a person with his/her environment, taking into account the social aspects of disability and not seeing disability only as a ‘medical’ or ‘biological’ dysfunction. This is the approach adopted by the International Classification of Functioning, Disability and Health, endorsed by the 54th World Health Assembly on May 22, 2001 (resolution WHA 54.21). For a discussion of the definition and the measuring of disability see OECD (2010).

2 For a more global picture, with different insights on the situation of disabled people in developing countries, see WHO (2011).

3 The OECD has a research field on disability, starting with a first report in 2003, opening a specific project of which the last outcome is a new report published in 2010, reviewing the policies of thirteen countries. The European Commission has published a European Disability Strategy 2010-2020 (European Commission, 2010). Nevertheless, in both cases the aim is restricted to the labor market outcomes of people with disability, particularly eliminating barriers to their labor market integration and fostering higher participation rates among workers with disability.

4 For a review, see OECD (2003).
Norway and Iceland. In addition, we try to outline several plausible explanations for the differences in estimated costs across countries.

Our approach to the cost of disability draws from the work of Amartya Sen (2004), who makes a distinction between two types of handicaps that tend to be associated with disability (Sen, 2004): on the one hand, a disabled person may find it harder to get a job or to keep it, and may receive a lower wage, and disability can even affect the acquisition or accumulation of human capital; on the other hand, because persons with disabilities have special needs, they face more difficulties than able people in achieving well-being from their resources or may need more income for the same activity. Sen calls the first one an “earning handicap” and the second one, a “conversion handicap”. The latter handicap is recognized in social protection systems in many countries, which provide benefits, be they direct expenditure or tax expenditures, to offset the higher consumer costs associated with disability.

The starting point of our work is Sen’s (1985, 1987) concept of distributive justice, based on equalizing people's basic capabilities. For this author, the ultimate reference in redistributive policy is the standard of living, not the utility or the mere possession of goods. The issue is to establish an objective minimum standard that represents a good approximation to the real income level, considering that the standard of living is primarily an issue concerning lifestyle, rather than the means for its development. For Sen, the standard of living is a matter of functionings and capabilities. As is well known, Sen’s point of departure is the modern theory of the consumer (Lancaster, 1966), according to which goods are not relevant in themselves, but only in that they incorporate features and properties that make them desirable. What matters is the use that each person can get from these characteristics, which depends on his or her capability to perform the functions to take advantage of the characteristics of each good. Therefore, given a set of goods, each individual, according to his/her capabilities, can convert its characteristics into different combinations of functionings, from which he/she obtains a certain level of welfare. The standard of living approach aims to determine the extra cost of disability by comparing households with disabled and non-disabled members with the same level of welfare and allowing the difference in income to determine the extra cost of disability.

---

5 This is illustrated, for example, by the work of She and Livermore (2009) for the United States.
Researchers have not devoted much attention to the study of the costs of disabilities and almost all the literature focuses on Anglo-Saxon countries. This body of research is also based on very different methodologies (discussed in the third section) and it relies exclusively on national studies, so the comparability of the different results found in the literature is far from ideal. Apart from the surveys of Indecon (2004), Tibble (2005) and Stapleton, Protik and Stone (2008), one should highlight the works of Martin and White (1988), Matthews and Truscott (1990), Jones and O’Donnell (1995), Zaidi and Burchardt (2005), Kuklys (2005) and Wood and Grant (2010) for the United Kingdom, Indecon (2004) and Cullinan, Gannon and Lyons (2011) for Ireland, Saunders (2007) for Australia, She and Livermore (2007), Mitra, Findley and Sambamoorthi (2009) and Anderson et al. (2010) for the United States, Wilkinson-Meyers et al. (2010) for New Zealand and Braña and Antón (2011) for Spain. In addition, Braithwaite and Mont (2009) estimate the cost of disability for two non-developed countries, like Bosnia and Herzegovina and Vietnam. Although most of the studies are based on the standard of living approach, the overall results of this literature are extremely difficult to summarize: the authors rely on different definitions of disability and uses different variables and econometric specifications to estimate the extra cost of disability, making their outcomes hardly comparable. The absence of comparative studies might also cast some additional doubts on the methodology followed, as cross-country studies using a common methodology can contribute to test the appropriateness of the standard of living approach by arriving at results that make sense and could be explained according to economic theory. In this respect, the present work also aims to contribute to fill this gap.

The current study estimates the extra cost of disability –understood as suffering a chronic health condition and a severe limitation of daily activities- for 26 European countries using two different strategies, one based on a subjective question on a household’s ability to make ends meet and another related to the ownership of several assets. The main finding of the article is that such a cost varies widely across countries, from around 20% to more than 100% of household income depending on the country. In general, Nordic countries and the Netherlands place at the top of the ranking, with Mediterranean and Eastern European states at the bottom. We suggest that this pattern is related to the model of caring for people with disabilities: in the former case, Welfare
States allow many disabled individuals to live by themselves, while in the latter care for people with disabilities is mainly a family responsibility.

The article unfolds in five additional sections as follows. In section 2, we describe the database used to estimate the cost of disability, pointing out its strengths and shortcomings. The third section presents and discusses the methodology followed in the estimation of the cost of disability. In section 4, the results obtained in terms of the cost of disability in the 26 European countries of the sample are presented, while section 5 discusses them. Finally, section 6 summarizes the main conclusions obtained in the paper and outlines further lines of research.

2. DATA

The database used in this research is the European Union Statistics on Income and Living Conditions 2008 (EU-SILC 2008). Our original aim was to study the cost of disability in the 27 member states of the EU plus Norway and Iceland, countries of the European Economic Area that are also included in the database. However, it was impossible to include Finland, France and Malta in the analysis. Finland was excluded because only the household head is interviewed about his/her disability condition, whereas the other two countries refused our request and did not authorize micro-data dissemination. Therefore, the study focuses on the cost of disability in 26 European countries. The main advantage of this database is that it provides detailed information on household income and living conditions that is comparable across countries. Sample sizes are considerably large: they range from more than 3,300 households in Cyprus to roughly 20,000 in Italy. Nevertheless, the EU-SILC also has several shortcomings. First, some information is not available for all countries, so the comparative analysis has to necessarily be restricted to those variables that are present in all member states. Second, and importantly, information in the database on disability is not as exhaustive and detailed as desirable. In particular, there are only two questions that address this issue. The first asks the interviewee if he or she has a chronic illness or

---

6 Detailed information on the database, including methodological papers and national questionnaires, can be found at http://circa.europa.eu/Public/irc/dsis/eusilc/library.
7 As is common in this type of survey, information on income refers to the previous year (2007).
8 For instance, those countries that collect detailed information on some types of issues (for instance, the gender pay gap) are not required to ask for the same information in the EU-SILC.
health problem, while the second inquires as to whether the household member has been limited in his or her daily activity during the previous 6 months. Although other studies in the literature, such as Zaidi and Burchardt (2000) –in some of their specifications-and Cullinan, Gannon and Lyons (2011), use similar questions to characterize the disability condition, the limitations of the survey in this sense preclude us from having detailed information on the type of disability suffered by household members. Such information would have greatly contributed to better characterize the disability. In the third place, information on disability is not available for people 16 years old or under, an important limitation of this study that one should bear in mind.

In order to operationalize the concept of disability, we apply a quite demanding definition: a person is considered as disabled if he or she simultaneously reports suffering from a chronic illness or condition and having been intensely limited during the last 6 months. The exigency of the chosen concept of disability can be seen clearly in the data shown in Table 1. Focusing on the average of the 26 countries of the sample, of the 30% of population with a chronic condition and the 16.4% of population with a condition that limits their activity, only 7.4% is considered to have a strong disability. A by-product of the definition of disability used in this study is the remarkably low dispersion of the percentage of population considered to be suffering from a strong disability among the countries of the sample, roughly half of the dispersion of those with a chronic condition or with limitations of activity.

In order to check the verisimilitude of the results obtained in terms of prevalence of disability according to the proposed concept, we compared these results with those obtained using two alternative sources and definitions: the 2002 Labour Force Survey (LFS) ad-hoc module on employment of disabled persons, and the 2004 European Health Interview Survey (EHIS). For the 12 countries for which the three data sources offer information, the EU-SILC shows the lowest variability among countries (the coefficient of variation is 0.237 in the EU-SILC compared to 0.471 in the LFS and 1.46 in the EHIS), which may suggest that the database we use better captures the disability condition.
### Table 1. Population over 16 years old with a chronic condition, limitations of daily activities and disability condition in Europe (2008)

<table>
<thead>
<tr>
<th>Country</th>
<th>Chronic condition (%)</th>
<th>Limitations of daily activities (%)</th>
<th>Disability (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes, limited</td>
<td>Yes, strongly limited</td>
</tr>
<tr>
<td>Austria</td>
<td>32.6</td>
<td>19.0</td>
<td>10.6</td>
</tr>
<tr>
<td>Belgium</td>
<td>24.4</td>
<td>15.9</td>
<td>6.6</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>23.7</td>
<td>11.1</td>
<td>4.5</td>
</tr>
<tr>
<td>Cyprus</td>
<td>26.2</td>
<td>11.8</td>
<td>6.3</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>27.2</td>
<td>16.4</td>
<td>5.4</td>
</tr>
<tr>
<td>Germany</td>
<td>36.2</td>
<td>22.4</td>
<td>10.4</td>
</tr>
<tr>
<td>Denmark</td>
<td>26.6</td>
<td>18.9</td>
<td>8.5</td>
</tr>
<tr>
<td>Estonia</td>
<td>37.8</td>
<td>20.7</td>
<td>9.5</td>
</tr>
<tr>
<td>Spain</td>
<td>30.6</td>
<td>17.6</td>
<td>5.4</td>
</tr>
<tr>
<td>Greece</td>
<td>22.1</td>
<td>11.5</td>
<td>8.1</td>
</tr>
<tr>
<td>Hungary</td>
<td>38.2</td>
<td>18.8</td>
<td>10.1</td>
</tr>
<tr>
<td>Ireland</td>
<td>24.0</td>
<td>14.3</td>
<td>5.4</td>
</tr>
<tr>
<td>Iceland</td>
<td>27.5</td>
<td>5.4</td>
<td>10.2</td>
</tr>
<tr>
<td>Italy</td>
<td>22.3</td>
<td>19.4</td>
<td>8.0</td>
</tr>
<tr>
<td>Lithuania</td>
<td>28.4</td>
<td>17.7</td>
<td>7.1</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>24.2</td>
<td>13.6</td>
<td>7.0</td>
</tr>
<tr>
<td>Latvia</td>
<td>33.5</td>
<td>24.8</td>
<td>7.5</td>
</tr>
<tr>
<td>Netherlands</td>
<td>33.6</td>
<td>22.8</td>
<td>6.7</td>
</tr>
<tr>
<td>Norway</td>
<td>33.5</td>
<td>10.6</td>
<td>7.0</td>
</tr>
<tr>
<td>Poland</td>
<td>31.1</td>
<td>15.3</td>
<td>6.4</td>
</tr>
<tr>
<td>Portugal</td>
<td>33.8</td>
<td>18.4</td>
<td>11.9</td>
</tr>
<tr>
<td>Romania</td>
<td>19.2</td>
<td>12.3</td>
<td>6.7</td>
</tr>
<tr>
<td>Sweden</td>
<td>35.5</td>
<td>10.3</td>
<td>8.1</td>
</tr>
<tr>
<td>Slovenia</td>
<td>42.8</td>
<td>17.4</td>
<td>10.9</td>
</tr>
<tr>
<td>Slovakia</td>
<td>29.1</td>
<td>23.1</td>
<td>10.7</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>32.5</td>
<td>11.0</td>
<td>8.4</td>
</tr>
<tr>
<td>Unweighted mean</td>
<td>29.8</td>
<td>16.4</td>
<td>7.9</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>5.9</td>
<td>4.7</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Source: Authors’ analysis from EU-SILC 2008.

### 3. METHODOLOGY

The extra cost that disability imposes on households has been studied from different perspectives, which are associated with different research strategies.\(^9\) The subjective-

---

direct approach, the most straightforward procedure, consists in asking disabled people (or experts) what the costs of having a disability are. The main limitation of this method is that the respondents can hardly make an accurate estimation of how much they would spend on common goods everyone purchases if they were not disabled (Zaidi and Burchardt, 2000). Some studies using this approach are Martin and White (1988) and Wood and Grant (2010) for the UK and the report of Indecon (2004) for Ireland, which offers a set of estimates for specific types of disability according to several assumptions and another one based on a detailed survey on disabled people (whose response rate was less than 20% and whose size was less than 300).

The second possible strategy relies on the study of the consumption patterns of both the disabled and the non-disabled population, identifying those items disabled people spend more on controlling by income. This approach has usually been applied to evaluate the extra costs associated with certain items, as Matthews and Truscott (1990) and Jones and O’Donnell (1995) do for the British case and Mitra, Findley and Sambamoorthi (2009) and Anderson et al. (2010) for medical expenses in the United States. Although this method overcomes several limitations of the subjective-direct approach, it presents a serious shortcoming: the estimated cost of disability is constrained by the income of disabled people; in other words, they only report how much they actually spend, so it is not possible to measure the potential cost of disability.

The third and last approach is the so-called standard of living approach. This method is based on comparing the income levels of households with and without disabled members with the same level of welfare. The extra income required by households with disabled members for achieving such level of welfare represents the extra cost of disability. This method has usually received good reviews because of the robustness of the results obtained (Indecon, 2004, Tibble, 2005).

Furthermore, it is worth mentioning that, some authors (Wilkinson-Meyers et al., 2010) have recently proposed to benefit from the strengths of each method, in a process that would involve looking at the specific needs of disabled population with the advice of a panel of experts, confronting such estimation of the costs with a focus group of disabled individuals and, finally, validating the model using wide surveys.

In this article, we follow the third methodology, the standard of living approach, (from now on subjective-indirect), which has been the most popular one in an otherwise
spare literature (Zaidi and Burchardt, 2000, Indecon, 2004, She and Livermore, 2007, Saunders, 2007, Braithwaite and Mont, 2009, Cullinan, Gannon and Lyons, 2011). This method consists in estimating the effect of income and disability on welfare in order to determine how much income is needed to compensate for the existence of members with disability in the household, given a level of welfare. In practice, the method can be operationalized estimating a model such as:

\[ W_i = \alpha Y_i + \beta D_i + \gamma X_i + \epsilon_i \]  

where \( W_i \) is a variable that denotes the welfare level or standard of living of household \( i \), \( D_i \) is a dummy variable indicating whether or not there are disabled members in the household, and \( X_i \) is a vector that includes an intercept and a set of variables capturing socio-demographic characteristics of households (head sex, head age —using several dummies—, head marital status, head migrant status, head pensioner condition, household size, number of children of 0-4, 5-10 and 10-13 years old and housing tenure status).\(^{10}\) In the equation presented above, the relationship between welfare, income and disability is linear, which implies that the cost of disability in terms of income is given by a fixed monetary amount represented by \(-\beta/\alpha\). Obviously, such a relationship can be modeled in alternative ways, including income in logs, squared or even interactions between both variables. A specification including income logs, for instance, assumes not only decreasing returns to income in terms of welfare but also that the cost of disability is a constant proportion of income. Although in the process of research we tried several alternative specifications, we finally opted for a specification where income was modeled in logs, which proved to be the one that best fitted data according to several statistical criteria described below.

One of the main issues of concern in the standard of living approach is how to determine households’ welfare disregarding income data. Following the spirit of Zaidi and Burchardt (2005), we proceed in two ways. Firstly, we consider as welfare indicator the response given by household heads to the question regarding the ability of the households to make ends meet with their current income. The possibilities for answering this question were: “with great difficulty”, “with difficulty”, “with some difficulty”, “fairly easily”, “easily” and “very easily”. In order to fit the model, we use

\(^{10}\) The set of variables included in the analysis is similar to the ones used by other works in the literature such as Indecon (2004), Zaidi and Burchardt (2005) and Cullinan, Gannon and Lyons (2011).
an ordered logit, which assumes the existence of an underlying and unobservable variable (welfare), which is codified into intervals that determine categories that are fully observed by the researcher. As is well-known, this type of model is estimated using maximum likelihood methods. In order to choose between different specifications of the model, we use the Akaike and Bayesian Information Criteria, which suggest that including income in logs is the most appropriate strategy. The phrasing of the question used to construct the welfare indicator is similar to the questions used in comparable studies for other countries.11

Secondly, we construct an indicator aiming to capture welfare using information on assets of households. One possibility is to simply count the number of assets and fit a negative binomial regression model. However, this method reveals problems of convergence for some countries, hindering the comparability of the analysis. Another option is grouping the assets and considering that a certain number of them determine a given level of welfare. For example, 4 items can be interpreted in terms of a low level of welfare, and 15 items a large level. This strategy, used by Zaidi and Burchardt (2005), Braithwaite and Mont (2009) and Cullinan, Gannon and Lyons (2011), give rise to problems of convergence similar to those found in the negative binomial regression. We therefore used a third and quite pragmatic approach: we carried out a principal component analysis (PCA) of 15 different items/assets or dimensions of the households in the sample. The first principal component obtained by this procedure, which accounts for as much of the variability of the data as possible and can be considered as a good way of estimating household welfare (Filmer and Pritchett, 2001), is taken as the dependent variable of the equation [1], which is thus estimated by OLS with robust standard errors. For comparability purposes with the first approach, we also estimate the model including income in logs. The following items, those on which there is available information in the SILC, were selected for carrying out the analysis:
- Capacity to afford paying for one week annual holiday away from home.
- Capacity to afford a meal with meat, chicken, fish or vegetarian equivalent every second day.

11 The question is quite similar to the question included in the European Community Household Panel used by Cullinan, Gannon, and Lyons (2011). Zaidi and Burchardt (2005) use as well a very similar question taken from the British Household Panel Survey, along with another one asking whether the interviewed household can save. Sea and Livermore (2007) and Saunders (2007) test several questions in the same spirit (food insecurity or ability to pay bills, meet expenses, pay rent or mortgage and get medical care, among others).
- Capacity to meet unexpected financial expenses.
- To have a telephone.
- To have a colour television set.
- To have a computer.
- To have a washing machine.
- To have a car.
- Not to have any natural light problems at home.
- Not to have any noise problems at home.
- Not to have any pollution or environmental problems.
- No crime or violence in the area.
- Not to have a leaking roof, damp walls, floors or foundation or rot in window frames and floor.
- To be able to keep home adequately warm.
- Not to be in a crowded household (defined as that with two or more people per room).

The use of two different methodologies –a choice also made by Zaidi and Burchardt (2005)- aims to assess how robust the findings are to the approach chosen to measure household welfare. In the first case, the question is of a more “subjective nature” (since the household self-reports its ability to meet ends), while the second one can be considered as a more “objective” approach, since it only relies on a household’s assets and services. Nevertheless, even in the latter option, the welfare variable can be contaminated by differences in preferences.

4. RESULTS

Before presenting the results of the empirical analysis, it is advisable to look at the main descriptive statistics of the sample, namely, the proportion of households with people with any chronic condition, the proportion of households with people with intense limitations of their daily activity and, finally, the percentage of households with disabled members (according to the definition presented above) (Table 2).

The estimated cost of disability (with their corresponding 95% confidence intervals) in the 26 countries included in the study is displayed in Figures 1 and 2. The detailed econometric results –comprising 52 econometric analyses (2 models and 26 countries)- are omitted for brevity but they are available from the authors upon request.
In the first place, it should be mentioned that, overall, the magnitude of the costs is quite similar in both models, between 21% and 99% of household income in the first approach and between 20% and 132% according to the second one. Nevertheless, there are very important differences for particular countries, such as the Netherlands, Denmark, Romania or Spain, among others. In the second place, although it is not easy to extrapolate a clear pattern from the results, several facts can be highlighted. For example, in both estimations Scandinavian countries, headed by Norway, lead the ranking of the costs of disability, while at the bottom, in general, are Eastern European countries and Luxembourg. The next section tries to outline several explanations for these patterns.

### Table 2. Main descriptive statistics of the database

<table>
<thead>
<tr>
<th>Country</th>
<th>Observations (No. of households)</th>
<th>% of households with people with chronic illnesses or conditions</th>
<th>% of households with people with intense limitations</th>
<th>% of households with disabled people</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>6,078</td>
<td>49.4</td>
<td>17.9</td>
<td>16.6</td>
</tr>
<tr>
<td>Belgium</td>
<td>6,793</td>
<td>38.2</td>
<td>11.7</td>
<td>10.2</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>4,772</td>
<td>46.0</td>
<td>10.8</td>
<td>9.2</td>
</tr>
<tr>
<td>Cyprus</td>
<td>4,045</td>
<td>45.8</td>
<td>13.3</td>
<td>12.3</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>12,361</td>
<td>40.4</td>
<td>9.3</td>
<td>9.1</td>
</tr>
<tr>
<td>Germany</td>
<td>13,672</td>
<td>49.3</td>
<td>14.9</td>
<td>13.8</td>
</tr>
<tr>
<td>Denmark</td>
<td>6,036</td>
<td>26.6</td>
<td>8.4</td>
<td>7.1</td>
</tr>
<tr>
<td>Estonia</td>
<td>5,443</td>
<td>54.4</td>
<td>16.3</td>
<td>16.1</td>
</tr>
<tr>
<td>Spain</td>
<td>14,719</td>
<td>50.6</td>
<td>11.3</td>
<td>10.3</td>
</tr>
<tr>
<td>Greece</td>
<td>7,276</td>
<td>37.4</td>
<td>15.7</td>
<td>15.5</td>
</tr>
<tr>
<td>Hungary</td>
<td>9,798</td>
<td>59.2</td>
<td>19.0</td>
<td>18.9</td>
</tr>
<tr>
<td>Ireland</td>
<td>5,766</td>
<td>43.4</td>
<td>11.3</td>
<td>10.5</td>
</tr>
<tr>
<td>Iceland</td>
<td>3,231</td>
<td>27.1</td>
<td>10.1</td>
<td>10.1</td>
</tr>
<tr>
<td>Italy</td>
<td>23,237</td>
<td>36.4</td>
<td>14.7</td>
<td>12.6</td>
</tr>
<tr>
<td>Lithuania</td>
<td>5,242</td>
<td>44.6</td>
<td>13.4</td>
<td>12.6</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>4,091</td>
<td>38.4</td>
<td>13.2</td>
<td>8.9</td>
</tr>
<tr>
<td>Latvia</td>
<td>5,647</td>
<td>54.8</td>
<td>15.4</td>
<td>14.8</td>
</tr>
<tr>
<td>Netherlands</td>
<td>10,866</td>
<td>33.0</td>
<td>6.5</td>
<td>6.1</td>
</tr>
<tr>
<td>Norway</td>
<td>5,829</td>
<td>33.3</td>
<td>6.9</td>
<td>6.5</td>
</tr>
<tr>
<td>Poland</td>
<td>16,489</td>
<td>52.5</td>
<td>13.7</td>
<td>13.2</td>
</tr>
<tr>
<td>Portugal</td>
<td>4,938</td>
<td>55.4</td>
<td>22.8</td>
<td>21.4</td>
</tr>
<tr>
<td>Romania</td>
<td>8,562</td>
<td>35.2</td>
<td>14.5</td>
<td>13.5</td>
</tr>
<tr>
<td>Sweden</td>
<td>7,942</td>
<td>35.2</td>
<td>8.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Slovenia</td>
<td>11,352</td>
<td>41.0</td>
<td>10.4</td>
<td>9.3</td>
</tr>
</tbody>
</table>
Figure 1. The estimated cost of disability across the European Union (welfare based on reported ability to make ends meet)

Note: Interval confidences calculated at the 95% confidence level.

Source: Authors’ analysis from EU-SILC 2008.
In order to check the robustness of our findings, we repeat the analysis changing the definition of disability, making it less demanding, and performing again the calculations using both sorts of strategies (the question about how people make ends meet and the welfare indicator based on households’ items). The alternative definition of disability includes those individuals who report suffering a chronic illness and being limited to a certain degree or intensively. This broader concept obviously increases the percentage of households with disabled members. The results obtained using this alternative definition are available upon request and are very similar to the ones reported above. In this respect, the correlation (displayed in Table 3) between the results obtained using the method based on the question regarding the ability to make ends
meet and the one that relies on households’ assets is around 0.5 in the case of intense limitations of daily activity (model I versus model II) and more than 0.6 when people with intense or mild limitations or daily activity are considered as disabled (model III versus model IV). In the second place, there is barely any difference when we compare the results by definition of disability, that is, the correlation between the models based on the question on the ability to make ends meet (model I versus model III) and those based on households’ assets (model II versus model IV) is remarkably high, around 0.9. Nevertheless, it is worth mentioning that the differences according to the way welfare is measured are larger than those reported by Zaidi and Burchardt (2005) for the UK, who obtain similar findings both for the subjective question on ability to make ends meet and the approach based on households’ items.

Table 3. Parametric and non-parametric correlation among outcomes of the different models

<table>
<thead>
<tr>
<th></th>
<th>Pearson’s correlation coefficient (parametric)</th>
<th>Spearman’s rank correlation coefficient (non-parametric)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model I</td>
<td>Model II</td>
</tr>
<tr>
<td>Model I</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Model II</td>
<td>0.647</td>
<td>1.000</td>
</tr>
<tr>
<td>Model III</td>
<td>0.876</td>
<td>0.605</td>
</tr>
<tr>
<td>Model IV</td>
<td>0.565</td>
<td>0.913</td>
</tr>
</tbody>
</table>

Notes:
- Model I is based on intense limitations of daily activity and the question about ability to make ends meet; model II is based on intense limitations of daily activity and households’ assets; model III is based on mild or intense limitations of daily activity and the question about ability to make ends meet; definition 4 is based on mild or intense limitations of daily activity and households’ assets.
- All the correlation coefficients are significantly different from zero at the 1% level.

Source: Authors’ analysis from EU-SILC 2008.

5. DISCUSSION
The results presented in the previous section show the existence of important variations in the extra cost of disability across the European countries of the sample. There are alternative explanations behind such differences that we discuss below.

In first place, part of the differences might be related to measurement problems related to the subjective nature of the disability data used in the analysis. As can be inferred from Table 1, some countries, notably Hungary, Estonia, Portugal or Slovakia, Austria and Germany declare much higher strong disability rates, around 10% or higher, than countries such as Denmark, the Netherlands or Slovenia, with strong disability rates around 5%. It could be argued that some of the differences respond to the different concept of disability applied by the respondent when filling in the survey questionnaire. If that were the case, those countries with high “statistical” disability rates would show a lower cost of disability, as part of the population considered disabled is not really so, showing therefore zero or very low extra cost and bringing down the estimated average cost of disability. We have tested whether there is a negative correlation between the strong disability rate and the cost of disability and, although such a relation holds for specific countries such as Germany (high disability rate and low disability cost, or Denmark, the opposite), it does not hold for the full sample.

The second possible explanation considered is related to one of the methodologies used, the so called subjective-indirect. As was explained in section 3, this methodology compares the ease or difficulty that different households have in making ends meet with their current income, interpreting the differences in the ability of otherwise identical households but for the presence of one of more members with disabilities in terms of the cost of the disability. It can be argued that the ability to make ends meet will be affected by the expectations of the households of what they are entitled to do (what they want to do). If that is so, then societies with a strong feeling of equal rights for disabled people and a strong culture of equality might breed higher expectations and demands in households with disabled members and correspondingly higher disability cost. This could explain the high cost of disability in countries with a strong social-democratic tradition of equal opportunities such as Denmark, Sweden or Norway. This argument seems sound, but in order to serve as a reasonable explanation of the observed differences in disability costs, such differences should only be present in the subjective-indirect method, and not in the second objective method. As that is not
the case, we must also reject this second explanation as a prime hypothesis for the results found.

The last explanation considered is the different living arrangements of individuals with disabilities and patterns of caring for disabled people across Europe. Particularly, there are very important differences among the characteristics of households with disabled members in the countries of the sample. It can be argued that when people with disabilities live with parents or children who care for them, an important share of the extra cost of disability is covered by them through non-market–and non-publicly financed- care. In contrast, if people with disabilities live on their own in single households, then they will be more dependent on services brought from outside the household and, hence, such costs will be more visible to our estimation method. In order to test this hypothesis, we present several plots using cross-country data that support it. Such figures are based on model II (the approach based on model I yields similar but somewhat weaker correlations). Firstly, as shown by Figure 3, there exists a negative correlation between the percentage of households with disabled members where disabled people share residency with parents or descendants and the estimated cost of disability. Figure 4 complements the information of the previous graph by pointing out a positive correlation between the proportion of households with disabled members where a disabled member lives alone and the cost of disability. Both figures show that, on average, those countries with a higher estimated cost of disability are also countries where disabled people tend to live more on their own. This evidence could be explained by the fact that part of the cost of disability would be higher for people who live alone because they need extra monetary resources to cover for their disabilities in terms of mobility, household duties, etc. that otherwise could be taken care of by other members of the household (outside of the market).
Figure 3. Percentage of households with disabled members where disabled people share residency with their parents or descendants and estimated disability cost

Source: Authors’ analysis from EU-SILC 2008.

Figure 4. Percentage of single-member households where the member has a disability

Source: Authors’ analysis from EU-SILC 2008.
In other words, it becomes clear that in countries where disabled people live alone and do not share a household with their relatives (the potential and actual care givers for the disabled population and children in many European countries) and therefore do not profit from non-market services provided by the family, the cost of disability is higher. Not by chance, those countries where households with disabled members seem to support the heaviest load are also countries that have established more generous disability social protection systems. As depicted in Figure 5, there is a positive correlation between the “generosity” of disability protection programs of the different countries and the cost faced by a household with handicapped people and the median income (the R² rises up to 0.64 if one removes Luxembourg, a clear outlier). One interpretation of such a relation is that social protection systems try to respond to different needs. An alternative interpretation might be that it is precisely the existence of such generous systems what allows people with disabilities to live on their own and not to be forced to be dependent on family care. A more eclectic view simply assumes that both issues (the cost of disability and disability benefits) are likely to be jointly determined, partly because living arrangements and the Welfare State are embedded in institutional and social frameworks. In this respect, it is worth making a reflection on the types of magnitudes we are dealing with. Throughout this article we have been referring to a purely monetary concept of welfare. It is plausible to assume that people with disabilities who are able to live on their own in places such as the Netherlands or the Nordic countries enjoy some non-pecuniary but valuable compensation through a higher autonomy and a greater freedom of choice, as they are not forced to depend exclusively on their relatives’ care. Some of these rewards could also be shared by their families, who would thus enjoy a greater degree of freedom when deciding whether to act as their caregivers or not.

A last remark to be made in this section refers to Luxembourg and its position at the bottom of the rankings. The low cost in the Grand Duchy can be interpreted as a result of an extremely high per capita income, closely related to the well-known particularities of the country, which makes the cost of disability a lighter load for national households.

According to the econometric log specification used in the article, the cost of disability as proportion of disposable income is constant. The cost of disability in Euros in PPS has been calculated for a household with the median income, which can be considered as representative. The correlation obtained when using the mean income is exactly the same.
6. CONCLUSION

The aim of this paper has been to present for the first time a comparative analysis of the cost of disability in Europe using the EU-SILC 2008. Because of its comparative ambition, the work has also served to test the usefulness and appropriateness of the standard of living method itself in that it has provided results reasonably consistent with economic theory. The study was based on the so-called standard of living approach, using two different methodologies (one based on self-reported ability to make ends meet and the other associated with access to several items, assets and services). The first important finding of the study is that there is a significant diversity in the cost of disability as it varies across European countries. The overall pattern show Scandinavian countries at the top of the ranking and Eastern European states at the bottom. The second contribution of the article is related to the discussion of these explanatory patterns. After rejecting other hypotheses that could help to interpret the results found, such as the different expectations of people with disabilities in different countries, or
problems related to mis-measurement of disability rates, our analysis suggests that the cost of disability is related to the living arrangements of handicapped people, that is, those who live with their relatives can enjoy some services and goods for free, while disabled people living on their own have to face higher costs and do not profit to the same extent from free care provided by the family.

Nevertheless, there is a long way to go in the study of the cost of disability in both developed and developing countries. Disability is a quite common phenomenon in Europe and is likely to be a more and more important problem in the coming decades because of the ageing population. In this sense, several further research lines can be suggested. Firstly, the findings could be reinforced by the use of databases that, apart from income, contain more detailed and objective information on the health conditions of individuals (even if self-reported), information which was not available when writing this paper. In the second place, research into the extra costs of disabilities could profit from the joint use of alternative methods of estimation (without being restricted to the use of a single approach), combining quantitative and qualitative methods. Third, the EU-SILC database itself offers the possibility of studying the impact of disability on living conditions from a longitudinal perspective. In this respect, it seems particularly relevant to explore the links between poverty and disability across Europe.
REFERENCES


23


<table>
<thead>
<tr>
<th>Número</th>
<th>Título</th>
<th>Autor(es)</th>
</tr>
</thead>
<tbody>
<tr>
<td>159/2000</td>
<td>Participación privada en la construcción y explotación de carreteras de peaje</td>
<td>Ginés de Rus, Manuel Romero y Lourdes Trujillo</td>
</tr>
<tr>
<td>160/2000</td>
<td>Errores y posibles soluciones en la aplicación del Value at Risk</td>
<td>Mariano González Sánchez</td>
</tr>
<tr>
<td>161/2000</td>
<td>Tax neutrality on saving assets. The spahish case before and after the tax reform</td>
<td>Cristina Ruza y de Paz-Curbera</td>
</tr>
<tr>
<td>163/2000</td>
<td>El control interno del riesgo. Una propuesta de sistema de límites</td>
<td>Mariano González Sánchez</td>
</tr>
<tr>
<td>164/2000</td>
<td>La evolución de las políticas de gasto de las Administraciones Públicas en los años 90</td>
<td>Alfonso Utrilla de la Hoz y Carmen Pérez Esparrells</td>
</tr>
<tr>
<td>165/2001</td>
<td>Bank cost efficiency and output specification</td>
<td>Emili Tortosa-Ausina</td>
</tr>
<tr>
<td>166/2001</td>
<td>Recent trends in Spanish income distribution: A robust picture of falling income inequality</td>
<td>Josep Oliver-Alonso, Xavier Ramos y José Luis Raymond-Bara</td>
</tr>
<tr>
<td>167/2001</td>
<td>Efectos redistributivos y sobre el bienestar social del tratamiento de las cargas familiares en el nuevo IRPF</td>
<td>Nuria Badenes Plá, Julio López Laborda, Jorge Onrubia Fernández</td>
</tr>
<tr>
<td>168/2001</td>
<td>The Effects of Bank Debt on Financial Structure of Small and Medium Firms in some European Countries</td>
<td>Mónica Melle-Hernández</td>
</tr>
<tr>
<td>169/2001</td>
<td>La política de cohesión de la UE ampliada: la perspectiva de España</td>
<td>Ismael Sanz Labrador</td>
</tr>
<tr>
<td>170/2002</td>
<td>Riesgo de liquidez de Mercado</td>
<td>Mariano González Sánchez</td>
</tr>
<tr>
<td>171/2002</td>
<td>Los costes de administración para el afiliado en los sistemas de pensiones basados en cuentas de capitalización individual: medida y comparación internacional.</td>
<td>José Enrique Devesa Carpio, Rosa Rodriguez Barrera, Carlos Vidal Meliá</td>
</tr>
<tr>
<td>172/2002</td>
<td>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.</td>
<td>Llorenç Pou, Joaquín Alegre</td>
</tr>
<tr>
<td>173/2002</td>
<td>Modelos paramétricos y no paramétricos en problemas de concesión de tarjetas de credito.</td>
<td>Rosa Puertas, María Bonilla, Ignacio Olmeda</td>
</tr>
<tr>
<td>Número</td>
<td>Título</td>
<td>Autor(a)</td>
</tr>
<tr>
<td>---------</td>
<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>174/2002</td>
<td>Mercado único, comercio intra-industrial y costes de ajuste en las manufacturas españolas.</td>
<td>José Vicente Blanes Cristóbal</td>
</tr>
<tr>
<td>175/2003</td>
<td>La Administración tributaria en España. Un análisis de la gestión a través de los ingresos y de los gastos.</td>
<td>Juan de Dios Jiménez Aguilera, Pedro Enrique Barrilao González</td>
</tr>
<tr>
<td>176/2003</td>
<td>The Falling Share of Cash Payments in Spain.</td>
<td>Santiago Carbó Valverde, Rafael López del Paso, David B. Humphrey</td>
</tr>
<tr>
<td>177/2003</td>
<td>Effects of ATMs and Electronic Payments on Banking Costs: The Spanish Case.</td>
<td>Santiago Carbó Valverde, Rafael López del Paso, David B. Humphrey</td>
</tr>
<tr>
<td>178/2003</td>
<td>Factors explaining the interest margin in the banking sectors of the European Union.</td>
<td>Joaquín Maudos y Juan Fernández Guevara</td>
</tr>
<tr>
<td>179/2003</td>
<td>Los planes de stock options para directivos y consejeros y su valoración por el mercado de valores en España.</td>
<td>Mónica Melle Hernández</td>
</tr>
<tr>
<td>181/2003</td>
<td>The Euro effect on the integration of the European stock markets.</td>
<td>Mónica Melle Hernández</td>
</tr>
<tr>
<td>182/2004</td>
<td>In search of complementarity in the innovation strategy: international R&amp;D and external knowledge acquisition.</td>
<td>Bruno Cassiman, Reinhilde Veugelers</td>
</tr>
<tr>
<td>183/2004</td>
<td>Fijación de precios en el sector público: una aplicación para el servicio municipal de suministro de agua.</td>
<td>Mª Ángeles García Valiñas</td>
</tr>
<tr>
<td>184/2004</td>
<td>Estimación de la economía sumergida en España: un modelo estructural de variables latentes.</td>
<td>Ángel Alañón Pardo, Miguel Gómez de Antonio</td>
</tr>
<tr>
<td>185/2004</td>
<td>Causas políticas y consecuencias sociales de la corrupción.</td>
<td>Joan Oriol Prats Cabrera</td>
</tr>
<tr>
<td>186/2004</td>
<td>Loan bankers’ decisions and sensitivity to the audit report using the belief revision model.</td>
<td>Andrés Guiral Contreras and José A. Gonzalo Angulo</td>
</tr>
<tr>
<td>187/2004</td>
<td>El modelo de Black, Derman y Toy en la práctica. Aplicación al mercado español.</td>
<td>Marta Tolentino García-Abadillo y Antonio Díaz Pérez</td>
</tr>
<tr>
<td>188/2004</td>
<td>Does market competition make banks perform well?.</td>
<td>Mónica Melle</td>
</tr>
<tr>
<td>189/2004</td>
<td>Efficiency differences among banks: external, technical, internal, and managerial</td>
<td>Santiago Carbó Valverde, David B. Humphrey y Rafael López del Paso</td>
</tr>
</tbody>
</table>
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 national 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 Ciriacono 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. Méndez, 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 Fé 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

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

   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 Santín

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

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 Diaz
<table>
<thead>
<tr>
<th>Year</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Tendencia post-anuncio de resultados contables: evidencia para el mercado español</td>
<td>Carlos Forner Rodríguez, Joaquín Marhuenda Fructuoso y Sonia Sanabria García</td>
</tr>
<tr>
<td>2005</td>
<td>Auditors' Forecasting in Going Concern Decisions: Framing, Confidence and Information Processing</td>
<td>Waymond Rodgers and Andrés Guiral</td>
</tr>
<tr>
<td>2005</td>
<td>The effects of ownership structure and board composition on the audit committee activity: Spanish evidence</td>
<td>Carlos Fernández Méndez and Rubén Arrondo García</td>
</tr>
<tr>
<td>2005</td>
<td>Cross-country determinants of bank income smoothing by managing loan loss provisions</td>
<td>Ana Rosa Fonseca and Francisco González</td>
</tr>
<tr>
<td>2005</td>
<td>Incumplimiento fiscal en el impuesto sobre la renta (1993-2000): un análisis de sus factores determinantes</td>
<td>Alejandro Estellé Moré</td>
</tr>
<tr>
<td>2005</td>
<td>Region versus Industry effects: volatility transmission</td>
<td>Pilar Soriano Felipe and Francisco J. Climent Diranzo</td>
</tr>
<tr>
<td>2005</td>
<td>On zero lower bound traps: a framework for the analysis of monetary policy in the ‘age’ of central banks</td>
<td>Alfonso Palacio-Vera</td>
</tr>
<tr>
<td>2005</td>
<td>Reconciling Sustainability and Discounting in Cost Benefit Analysis: a methodological proposal</td>
<td>M. Carmen Almansa Sáez and Javier Calatrava Requena</td>
</tr>
<tr>
<td>2005</td>
<td>Can The Excess Of Liquidity Affect The Effectiveness Of The European Monetary Policy?</td>
<td>Santiago Carbó Valverde and Rafael López del Paso</td>
</tr>
<tr>
<td>2005</td>
<td>Inheritance Taxes In The Eu Fiscal Systems: The Present Situation And Future Perspectives.</td>
<td>Miguel Angel Barberán Lahuerta</td>
</tr>
<tr>
<td>2006</td>
<td>Bank Ownership And Informativeness Of Earnings.</td>
<td>Víctor M. González</td>
</tr>
</tbody>
</table>

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


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

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


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.


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

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 María Aldanondo-Ochoa y Carmen Almansa-Sáez

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

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.

José Antonio Ortega.

262/2006 Accidentes de tráfico, víctimas mortales y consumo de alcohol. 
José María 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.

Ignacio Álvarez Peralta.

Jaime Vallés-Giménez y Anabel Zárate-Marco.

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

Juan Luis Jiménez y Jordi Perdiguero.

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 Kleinhans, Carmen Murillo, Carlos San Juan y Stefan Sperlich
A. García-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 Tramways, 1895-1918
Alberte Martínez López

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

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
<table>
<thead>
<tr>
<th>Volume/Year</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>290/2006</td>
<td>La producción de energía eléctrica en España: Análisis económico de la actividad tras la liberalización del Sector Eléctrico</td>
<td>Fernando Hernández Martínez</td>
</tr>
<tr>
<td>291/2006</td>
<td>Further considerations on the link between adjustment costs and the productivity of R&amp;D investment: evidence for Spain</td>
<td>Desiderio Romero-Jordán, José Félix Sanz-Sanz and Inmaculada Álvarez-Ayuso</td>
</tr>
<tr>
<td>292/2006</td>
<td>Una teoría sobre la contribución de la función de compras al rendimiento empresarial</td>
<td>Javier González Benito</td>
</tr>
<tr>
<td>294/2006</td>
<td>Testing the parametric vs the semiparametric generalized mixed effects models</td>
<td>Maria José Lombardía and Stefan Sperlich</td>
</tr>
<tr>
<td>295/2006</td>
<td>Nonlinear dynamics in energy futures</td>
<td>Mariano Matilla-García</td>
</tr>
<tr>
<td>296/2006</td>
<td>Estimating Spatial Models By Generalized Maximum Entropy Or How To Get Rid Of W</td>
<td>Esteban Fernández Vázquez, Matías Mayor Fernández and Jorge Rodríguez-Valez</td>
</tr>
<tr>
<td>297/2006</td>
<td>Optimización fiscal en las transmisiones lucrativas: análisis metodológico</td>
<td>Félix Domínguez Barrero</td>
</tr>
<tr>
<td>298/2006</td>
<td>La situación actual de la banca online en España</td>
<td>Francisco José Climent Diranzo y Alexandre Momparler Pechuán</td>
</tr>
<tr>
<td>299/2006</td>
<td>Estrategia competitiva y rendimiento del negocio: el papel mediador de la estrategia y las capacidades productivas</td>
<td>Javier González Benito y Isabel Suárez González</td>
</tr>
<tr>
<td>300/2006</td>
<td>A Parametric Model to Estimate Risk in a Fixed Income Portfolio</td>
<td>Pilar Abad and Sonia Benito</td>
</tr>
<tr>
<td>301/2007</td>
<td>Análisis Empírico de las Preferencias Sociales Respecto del Gasto en Obra Social de las Cajas de Ahorros</td>
<td>Alejandro Esteller-Moré, Jonathan Jorba Jiménez y Albert Solé-Ollé</td>
</tr>
<tr>
<td>302/2007</td>
<td>Assessing the enlargement and deepening of regional trading blocs: The European Union case</td>
<td>Salvador Gil-Pareja, Rafael Llorca-Vivero y José Antonio Martínez-Serrano</td>
</tr>
<tr>
<td>303/2007</td>
<td>¿Es la Franquicia un Medio de Financiación?: Evidencia para el Caso Español</td>
<td>Vanesa Solís Rodríguez y Manuel González Díaz</td>
</tr>
<tr>
<td>305/2007</td>
<td>Spain is Different: Relative Wages 1989-98</td>
<td>José Antonio Carrasco Gallego</td>
</tr>
</tbody>
</table>
Wood and industrialization. evidence and hypotheses from the case of Spain, 1860-1935. Iñaki Iriarte-Goñi and María Isabel Ayuda Bosque

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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, Waymon Rodgers, Emiliano Ruiz and Jose A. Gonzalo

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 Rodriguez-Uria

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
Vanessa 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
Maria 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-Sainz 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 Rodríguez Fernandez

384/2008 A Fuzzy Bicriteria Approach for Journal Deselection in a Hospital Library
M. L. López-Avello, M. V. Rodriguez-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 pymes 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 Faiña

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

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 García 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 CO₂ 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 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

Raúl Serrano y Vicente Pinilla

413/2008 Voter heuristics in Spain: a descriptive approach elector decision
José Luis 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 sanitar-rios 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
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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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-Marin

442/2009 Costes de mitigación y escenarios post-kyoto en España: un análisis de equilibrio 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

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

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

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

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 Martins

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

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

¿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

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

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

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

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

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

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

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

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

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

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 Gómez, 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, Maria 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 Rosalia 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
<table>
<thead>
<tr>
<th>Volume</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>489/2009</td>
<td>Capital structure determinants in growth firms accessing venture funding</td>
<td>Marina Balboa, José Martí &amp; Álvaro Tresierra</td>
</tr>
<tr>
<td>490/2009</td>
<td>Determinants of debt maturity structure across firm size</td>
<td>Victor M. González</td>
</tr>
<tr>
<td>491/2009</td>
<td>Análisis del efecto de la aplicación de las NIIF en la valoración de las salidas a bolsa</td>
<td>Susana Álvarez Otero y Eduardo Rodríguez Enríquez</td>
</tr>
<tr>
<td>492/2009</td>
<td>An analysis of urban size and territorial location effects on employment probabilities: the spanish case</td>
<td>Ana Viñuela-Jiménez, Fernando Rubiera-Morollón &amp; Begoña Cueto</td>
</tr>
<tr>
<td>493/2010</td>
<td>Determinantes de la estructura de los consejos de administración en España</td>
<td>Isabel Acero Fraile y Nuria Alcalde Fradejas</td>
</tr>
<tr>
<td>494/2010</td>
<td>Performance and completeness in repeated inter-firm relationships: the case of franchising</td>
<td>Vanesa Solis-Rodriguez &amp; Manuel Gonzalez-Diaz</td>
</tr>
<tr>
<td>495/2010</td>
<td>A Revenue-Based Frontier Measure of Banking Competition</td>
<td>Santiago Carbó, David Humphrey &amp; Francisco Rodríguez</td>
</tr>
<tr>
<td>496/2010</td>
<td>Categorical segregation in social networks</td>
<td>Antoni Rubí-Barceló</td>
</tr>
<tr>
<td>497/2010</td>
<td>Beneficios ambientales no comerciales de la directiva marco del agua en condiciones de escasez: análisis económico para el Guadalquivir</td>
<td>Julia Martín-Ortega, Giacomo Giannoccaro y Julio Berbel Vecino</td>
</tr>
<tr>
<td>498/2010</td>
<td>Monetary integration and risk diversification in eu-15 sovereign debt markets</td>
<td>Juncal Cuñado &amp; Marta Gómez-Puig</td>
</tr>
<tr>
<td>500/2010</td>
<td>The role of learning in firm R&amp;D persistence</td>
<td>Juan A. Mañez, María E. Rochina-Barrachina, Amparo Sanchis-Llopis &amp; Juan A. Sanchis-Llopis</td>
</tr>
<tr>
<td>501/2010</td>
<td>Is venture capital more than just money?</td>
<td>Marina Balboa, José Martí &amp; Nina Zieling</td>
</tr>
<tr>
<td>503/2010</td>
<td>Corporate cash holding and firm value</td>
<td>Cristina Martínez-Sola, Pedro J. García-Teruel &amp; Pedro Martínez-Solano</td>
</tr>
<tr>
<td>504/2010</td>
<td>El impuesto de flujos de caja de sociedades: una propuesta de base imponible y su aproximación contable en España</td>
<td>Lourdes Jerez Barroso y Joaquín Texeira Quirós</td>
</tr>
<tr>
<td>505/2010</td>
<td>The effect of technological, commercial and human resources on the use of new technology</td>
<td>Jaime Gómez &amp; Pilar Vargas</td>
</tr>
<tr>
<td>Número</td>
<td>Título</td>
<td>Autor(a)(es)</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>506/2010</td>
<td>¿Cómo ha afectado la fiscalidad a la rentabilidad de la inversión en vivienda en España? Un análisis para el periodo 1996 y 2007</td>
<td>Jorge Onrubia Fernández y María del Carmen Rodado Ruiz</td>
</tr>
<tr>
<td>507/2010</td>
<td>Modelización de flujos en el análisis input-output a partir de la teoría de redes</td>
<td>Ana Salomé García Muñiz</td>
</tr>
<tr>
<td>508/2010</td>
<td>Export-led-growth hypothesis revisited. a balance of payments approach for Argentina, Brazil, Chile and Mexico</td>
<td>David Matesanz Gómez &amp; Guadalupe Fugarolas Álvarez-Ude</td>
</tr>
<tr>
<td>509/2010</td>
<td>Realised hedge ratio properties, performance and implications for risk management: evidence from the spanish ibex 35 spot and futures markets</td>
<td>David G McMillan &amp; Raquel Quiroga García</td>
</tr>
<tr>
<td>510/2010</td>
<td>Do we sack the manager... or is it better not to? Evidence from Spanish professional football</td>
<td>Francisco González-Gómez, Andrés J. Picazo-Tadeo &amp; Miguel Á. García-Rubio</td>
</tr>
<tr>
<td>511/2010</td>
<td>Have Spanish port sector reforms during the last two decades been successful? A cost frontier approach</td>
<td>Ana Rodríguez-Álvarez &amp; Beatriz Tovar</td>
</tr>
<tr>
<td>512/2010</td>
<td>Size &amp; Regional Distribution of Financial Behavior Patterns in Spain</td>
<td>Juan Antonio Maroto Acín, Pablo García Estévez &amp; Salvador Roji Ferrari</td>
</tr>
<tr>
<td>513/2010</td>
<td>The impact of public reforms on the productivity of the Spanish ports: a parametric distance function approach</td>
<td>Ramón Núñez-Sánchez &amp; Pablo Coto-Millán</td>
</tr>
<tr>
<td>514/2010</td>
<td>Trade policy versus institutional trade barriers: an application using “good old” ols</td>
<td>Laura Márquez-Ramos, Inmaculada Martínez-Zarzoso &amp; Celestino Suárez-Burguet</td>
</tr>
<tr>
<td>515/2010</td>
<td>The “Double Market” approach in venture capital and private equity activity: the case of Europe</td>
<td>Marina Balboa &amp; José Martí</td>
</tr>
<tr>
<td>516/2010</td>
<td>International accounting differences and earnings smoothing in the banking industry</td>
<td>Marina Balboa, Germán López-Espinosa &amp; Antonio Rubia</td>
</tr>
<tr>
<td>517/2010</td>
<td>Convergence in car prices among European countries</td>
<td>Simón Sosvilla-Rivero &amp; Salvador Gil-Pareja</td>
</tr>
<tr>
<td>518/2010</td>
<td>Effects of process and product-oriented innovations on employee downsizing</td>
<td>José David Vicente-Lorente &amp; José Ángel Zúñiga-Vicente</td>
</tr>
<tr>
<td>519/2010</td>
<td>Inequality, the politics of redistribution and the tax-mix</td>
<td>Jenny De Freitas</td>
</tr>
<tr>
<td>521/2010</td>
<td>Structural breaks and real convergence in opec countries</td>
<td>Juncal Cuñado</td>
</tr>
<tr>
<td>522/2010</td>
<td>Human Capital, Geographical location and Policy Implications: The case of Romania</td>
<td>Jesús López-Rodríguez, Andres Faiña y Bolea Cosmin-Gabriel</td>
</tr>
</tbody>
</table>
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

The governance threshold in international trade flows
Marta Felis-Rota

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

Why do firms locate R&D outsourcing agreements offshore? The role of ownership, location, and externalization advantages
Andrea Martínez-Noya, Esteban Gárcia-Canal & Mauro f. Guillén

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

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

Mind the Remoteness!: Income disparities across Japanese Prefectures
Jesús López-Rodríguez, Daisuke Nakamura

El nuevo sistema de financiación autonómica: descripción, estimación empirica y evaluación
Antoni Zabalza y Julio López Laborda

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

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

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

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

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

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

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

The impact of oil shocks on the Spanish economy
Ana Gómez-Loscos, Antonio Montañés & María Dolores Gadea
The efficiency of public and publicly-subsidized high schools in Spain: evidence from PISA-2006
Maria Jesús Mancebón, Jorge Calero, Álvaro Choi & Domingo P. Ximénez-de-Embún

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

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

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

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

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

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

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

Core/periphery scientific collaboration networks among very similar researchers
Antoni Rubi-Barceló

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

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

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

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

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

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

How to design franchise contracts: the role of contractual hazards and experience
Vanessa 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 & Vanessa Solís-Rodríguez

558/2010 Explanatory Factors of Urban Water Leakage Rates in Southern Spain
Francisco González-Gómez, Roberto Martinez-Espiñeira, María 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 Dominguez 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

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
<table>
<thead>
<tr>
<th>Paper Number</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>570/2010</td>
<td>Is the Border Effect an Artefact of Geographic Aggregation?</td>
<td>Carlos Llano-Verduras, Asier Minondo Uribe &amp; Francisco Requena Silvente</td>
</tr>
<tr>
<td>571/2010</td>
<td>Notes on using the hidden asset or the contribution asset to compile</td>
<td>Carlos Vidal Melia &amp; Maria del Carmen Boado Penas</td>
</tr>
<tr>
<td></td>
<td>the actuarial balance for pay-as-you-go pension systems</td>
<td></td>
</tr>
<tr>
<td>572/2010</td>
<td>The Real Effects of Banking Crises: Finance or Asset Allocation</td>
<td>Ana I. Fernandez, Francisco Gonzalez &amp; Nuria Suarez Carlos</td>
</tr>
<tr>
<td></td>
<td>Effects? Some International Evidence</td>
<td></td>
</tr>
<tr>
<td>573/2010</td>
<td>Endogenous mergers of complements with mixed bundling</td>
<td>Ricardo Flores Fillol &amp; Rafael Moner Colonques</td>
</tr>
<tr>
<td>574/2010</td>
<td>Redistributive Conflicts and Preferences for Tax Schemes in Europe</td>
<td>Antonio M. Jaime Castillo &amp; Jose L. Saez Lozano</td>
</tr>
<tr>
<td>575/2010</td>
<td>Spanish emigration and the setting-up of a great company in Mexico:</td>
<td>Javier Moreno Lazaro</td>
</tr>
<tr>
<td></td>
<td>bimbo, 1903-2008</td>
<td></td>
</tr>
<tr>
<td>576/2010</td>
<td>Mantenimiento temporal de la equidad horizontal en el sistema de</td>
<td>Julio Lopez Laborda &amp; Antoni Zabalza</td>
</tr>
<tr>
<td></td>
<td>financiación autonómica</td>
<td></td>
</tr>
<tr>
<td>577/2010</td>
<td>Sobreeducación, Educación no formal y Salarios: Evidencia para</td>
<td>Sandra Nieto &amp; Raúl Ramos</td>
</tr>
<tr>
<td></td>
<td>España</td>
<td></td>
</tr>
<tr>
<td>578/2010</td>
<td>Dependencia y empleo: un análisis empírico con la encuesta de</td>
<td>David Cantarero Prieto &amp; Patricia Moreno Mencia</td>
</tr>
<tr>
<td></td>
<td>discapacidades y atención a la dependencia (edad) 2008.</td>
<td></td>
</tr>
<tr>
<td>579/2011</td>
<td>Environment and happiness: new evidence for Spain</td>
<td>Juncal Cuñado &amp; Fernando Pérez de Gracia</td>
</tr>
<tr>
<td>580/2011</td>
<td>An analysis of emerging barriers for e-learning models. a case of</td>
<td>Nuria Calvo &amp; Paolo Rungo</td>
</tr>
<tr>
<td></td>
<td>study</td>
<td></td>
</tr>
<tr>
<td>581/2011</td>
<td>Unemployment, cycle and gender</td>
<td>Amado Peiró, Jorge Belaire Franch, &amp; Maria Teresa Gonzalo</td>
</tr>
<tr>
<td></td>
<td>An Evaluation for the Spanish Territory</td>
<td></td>
</tr>
<tr>
<td>583/2011</td>
<td>The Efficiency of Performance-based-fee Funds</td>
<td>Ana C. Diaz-Mendoza, Germán López Espinosa &amp; Miguel A. Martínez-Sedano</td>
</tr>
<tr>
<td>584/2011</td>
<td>Green and good?. The investment performance of US environmental</td>
<td>Francisco J. Climent Diranze &amp; Pilar Soriano Felipe</td>
</tr>
<tr>
<td></td>
<td>mutual funds</td>
<td></td>
</tr>
<tr>
<td>585/2011</td>
<td>El fracaso de Copenhague desde la teoría de juegos.</td>
<td>Yolanda Fernández Fernandez, Ma Angeles Fernandez Lopez y Blanca Olmedillas Blanco</td>
</tr>
<tr>
<td>586/2011</td>
<td>Tie me up, tie me down! the interplay of the unemployment</td>
<td>José M. Arranz &amp; Carlos Garcia Serrano</td>
</tr>
<tr>
<td></td>
<td>compensation system, fixed-term contracts and rehirings</td>
<td></td>
</tr>
</tbody>
</table>
Corporate social performance, innovation intensity and their impacts on financial performance: evidence from lending decisions
Andrés Guiral

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

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

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

Ownership, incentives and hospitals
Xavier Fageda & Eva Fiz

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

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

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

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

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

A modified Dickey-Fuller procedure to test for stationarity
Antonio Aznar, María-Isabel Ayuda

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

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

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

Regímenes de tipo de cambio y crecimiento económico en países en desarrollo
Elena Lasarte Navamu y José Luis Pérez Rivero

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Is inefficiency under control in the justice administration?
Marta Espasa & Alejandro Esteller-Morè

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

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 airlines
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

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-Rodriguez.
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

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 Rubi-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