

XARXA  
DE REFERÈNCIA  
EN **ECONOMIA APLICADA**

**Newsletter (1/2010)**

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# Newsletter (1/2010)

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## Editorial

This is the third newsletter of the Reference Network in Applied Economics (XREAP). The aim of the newsletter is to share with you the news related to the research and technology transfer by the groups forming XREAP. For more details, please check regularly our website: [www.pcb.ub.es/xreap](http://www.pcb.ub.es/xreap) from where you can access information on seminars, conferences and congresses we organize as well as the full text of our papers through which we disseminate the main results of our activity.

During the first months of 2010, the activity of the network continues with the renewal of the contract program with the Directorate General for Research of the Generalitat de Catalunya for the period 2010-2011.

In these first months, there have been six seminars, five new working papers have been published and we are closing the program of two workshops to be held during the second half of the year: one related to the economics of education while the other will be related to the labour market for welfare services. We are also beginning to prepare the agenda of the annual symposium of the network which will be related to the analysis of the economic impact of infrastructure. As soon as we have more details, we will keep you informed.



We also want to highlight that during February 2010, XREAP has submitted a research proposal to the FP7 Social Sciences and Humanities call of the European Union that has involved several research groups XREAP and eight research centres in different European countries. Despite the competition in this type of calls, we hope that the efforts by the team working in the proposal be rewarded with a positive assessment of the proposal.



Last, we announce that XREAP together with the Catalan Regional Science Association (ACCR) and the Spanish Association of Regional Science (AECR) will host the annual congress of the European Regional Science Association (ERSA) to be held in Barcelona during the summer of 2011. The latest editions of this congress have been attended by over 1,000 researchers and internationally recognized keynote speakers.

Marti Parellada (Director XREAP)  
Raul Ramos (Technical Secretary XREAP)



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## Activities - Symposium

### **Railway Regulation in Metropolitan Area**

13th of November 2010

Aula Magna, Facultat d'Economia i Empresa, Universitat de Barcelona; Av. Diagonal 690, Barcelona

#### ***PRESENTATION***

On 13th November 2009, the Reference Network in Applied Economics (XREAP) hosted its annual symposium. This year the focus of the symposium was the regulation of metropolitan railway environments. The symposium, which was attended by some 90 people, had the co-operation of the Department of Territorial Policy and Public Works of the Generalitat de Catalunya and the participation of Mr. Manel Nadal, Secretary for Mobility and Mr. Villalante Manuel, Director General of Land Transportation.

#### ***SUMMARY***

The main objective of the symposium was to contribute to the debate on railway reform in the context of changes in the Spanish model, facilitating the connection between academic analysis and the discussion of public policy options in the management, financing and introduction of competitive mechanisms. The first session was by Professor Chris Nash, Institute for Transport Studies at Leeds University, who explained various aspects of the introduction of market competition on railways in the UK and Sweden. The discussion included the presentation by Professor Gustavo Nombela, FEDEA and Abertis Chair of Economics of Infrastructures. In the second session, Prof. Rosário Macario Instituto Superior Técnico of Lisbon, analyzed the institutional framework required for the regulation of transport in the metropolitan area and, next, professor at the Autonomous University of Barcelona, Francesc Trilles brought additional items for discussion. Last, the symposium ended with a round table formed by representatives of governments, private companies (such as Javier Carbajo, CEO ALSA Group - National Express and José Carbajo, associate director of Frontier Economics) , social agents (as Eva Granados, Under-Secretariat General of General Union of Workers of Catalonia) and the Academy (Javier Campos, professor at the University of Las Palmas de Gran Canaria).

#### ***PRESENTATIONS:***

*Competitive tendering of rail passenger services - a comparison of Britain and Sweden*

Chris Nash (Institute for Transport Studies, University of Leeds)

*Adjusting Institutions and Governance for the Reform of Metropolitan Railways Systems*

Rosario Macário (Instituto Superior Técnico, Universidade Técnica de Lisboa)

You can consult the detailed program of the symposium and a summary of submissions on the XREAP's website [<http://www.pcb.ub.es/xreap/simposi>]



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## Activities - Next Workshop (2010/1)

### Workshop on Economics of Education (I)

20th of September 2010

#### *PRESENTATION*

Educational attainment and competences' acquisition are the most relevant output in the educational production function. The study of these outputs has spread in recent years, especially since the existence of data from international assessments, such as The Programme for International Student Assessment (PISA) or The Trends in International Mathematics and Science Study (TIMSS). Different studies have shown the relevance of family and school variables on students' educational attainment and competences' acquisition.

Moreover, these data have allowed to consider several types of analyses of the indicated output, such as the organization of the educational system, differences between native and immigrant students, the factors that contribute to a successful performance (or a very low one), differences between and within schools in students' results, similarities and disparities between countries, the relationship between efficiency and equity in education, peer-effects, etc.

The aim of this workshop is to bring together original research papers that cast some light on these issues, especially those which use PISA data. Although the Workshop focuses on empirical papers, theoretical studies are also welcome. The accepted papers (around 8) will be presented in plenary sessions that will complement the two keynote speakers' presentations.

#### *Keynote Speakers*

- Daniel Checchi; (University of Milan)
- Michael Fertig, (ISG Institute, Köln).

#### *Deadlines*

- Deadline for submission of papers: May 31st, 2010
- Deadline for acceptance of papers: June 15th, 2010
  
- Early registration: May 1st to July 26th, 2010
- Late registration: July 27th to September 12th, 2010



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## Activities - Next Workshop (2010/1)

### Workshop on Economics of Education (II)

20th of September 2010

#### *Topics of Interest*

- Educational attainment
- Competences' acquisition
- Educational inequalities
- PISA data
- Immigration
- School dropout
- Educational production function
- Educational Policy

#### *Registration and further information*

The registration fee covers documentation, coffee breaks and working lunches. Participants whose papers have been accepted are exempt from this payment. Free accommodation will also be provided for them, and their travel expenses may be covered, totally or partially, subject to budget restrictions. Papers should be sent to [xreap\\_workshop@pcb.ub.es](mailto:xreap_workshop@pcb.ub.es) before May 31st, 2010. Only papers presented in PDF format will be considered. Further information on the workshop will soon be available at the workshop webpage, which can be accessed through the XREAP website (<http://www.pcb.ub.es/workshop>). Early registration is 100 Euros; late registration 150 Euros.

#### *Scientific Committee*

- Jorge Calero (U. of Barcelona & IEB-XREAP)
- Danielle Checchi (U. of Milan)
- Josep Lluís Raymond (U. of Barcelona & IEB)
- Michael Fertig (ISG Institute, Köln)
- Josep-Oriol Escardíbul (U. of Barcelona & IEB-XREAP)
- María Jesús Mancebón (U. of Zaragoza)

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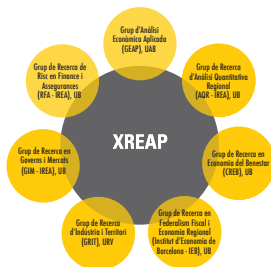
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## Activities - Next Workshop (2010/2)

### Long Term Care and Labor Market prospects (I)

14-15th of October 2010

#### PRESENTATION



In the aging society, products and services for older people become more and more important for the economy of the European Society. Long term care is one of the central aspects in the strategy of the EU and its member states to afford the aging of the European society. It is a challenging field of labour market analysis as long term care combines family, informal and formal occupation.

XREAP organises together with Radboud University Nijmegen a workshop addressed to experts, but overall to students working on long term care and labour market analysis. The workshop is framed in a student visiting programme organised by XREAP for a group of students taking part in the extra-curriculum interdisciplinary honours programme of Radboud University. This group is working momentarily on an advisory report concerning the issue of the long term care labour market in behalf of the Dutch ministry of Health and Welfare.

The group altogether consists of 20 students with varying disciplinary backgrounds, for example law, managerial science, economics, psychology, medicine and physics. Apart from the workshop itself on 14 and 15 October, the group will visit also some places of interest in the city of Barcelona.



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## Activities - Next Workshop (2010/2)

### Long Term Care and Labor Market prospects (II)

14-15th of October 2010

#### **CONFIRMED PRESENTATIONS**

##### *Long Term care in Spain*

Montserrat Guillén (RFA-IREA & XREAP, Universitat de Barcelona)

##### *Long Term care in the Netherlands*

Aloys Kersten, Dutch Ministry of Health, Welfare and Sports (VWS)

##### *Labour Market Implication of the long term care sector development*

Erik de Gier (Radboud University Nijmegen)

##### *Social-Cultural conditions of long term care development*

Anna Escobedo Caparrós (Universitat de Barcelona)

##### *Between Family, informal and formal labour market of long term care*

Karsten Krüger (XREAP & ICPP)

##### *Policy Roundtable*

Moderator: Mercedes Ayuso (RFA-IREA & XREAP, Universitat de Barcelona)

The more detailed program will be available at the website of XREAP

<http://www.pcb.ub.es/xreap/workshop>

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## Activities - Seminars (2009/4)

[seminars available at <http://www.pcb.ub.es/xreap/web/plantilla1.php?Id=41&valores=,any,2009>]

*Participating insurance contracts and the Rothschild-Stiglitz equilibrium puzzle*  
Pierre Picard (École Polytechnique Paris)  
06/11/2009

*Why do profit seeking firms do more for the environment than government laws require?.*  
Mathew Potoski (Iowa State University)  
[<http://www.pcb.ub.es/xreap/aplicacio/fixers/Potoski&PrakashAJPS05.pdf>]  
10/11/2009

*Public services privatization and contracting out*  
Mathew Potoski (Iowa State University)  
11/11/2009

*Medición de la productividad. La experiencia del proyecto EUKLEMS*  
Matilde Mas (Universitat de València i IVIE)  
01/12/2009

*Model Selection and Claim Frequency for Workers' Compensation Insurance*  
David Pitt (University of Melbourne)  
11/12/2009

*Riesgo: Un enfoque no paramétrico para la medición del riesgo operacional en entidades financieras*  
Filippo di Pietro (Universidad de Bologna & Universidad de Sevilla)  
17/12/2009

*Market power in electricity markets*  
John Garcia Rendón (Universitat Autònoma de Barcelona)  
18/12/2009

*Las decisiones de financiación de las empresas en el marco de las teorías de la estructura de capital*  
Silverio Alarcón (Universidad Politécnica de Madrid)  
18/12/2009

*Transformation kernel estimation for LDA in operational risk*  
Jens Perch Nielsen (City University London)  
22/12/2009

*The Role of Economic Ideology on Public Spending*  
David López Rodríguez (Columbia University)  
24/12/2009





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## Activities - Seminars (2010/1)

[seminars available at <http://www.pcb.ub.es/xreap/web/plantilla1.php?Id=41&valores=,any,2010>]

### *Entrepreneurship and the crisis*

*Roy Thurik (Centre for Advanced Small Business Economics, Erasmus University Rotterdam)*

22/01/2010

### *Multivariate count data models*

*Dimistris Karlis (Dept of Statistics, Athens University of Economics)*

04/02/2010

### *Valuing Target Redemption Notes by a Stratified Longstaff Schwartz algorithm*

*Paal N. Henriksen (University of Oslo)*

08/02/2010

### *Causal inference by independent component analysis: applications to time-series economic data*

*Alexander Coad (Max Planck Institute of Economics)*

16/03/2010

### *Seminar on Spatial Econometrics*

*Giuseppe Arbia (University G. d'Annunzio) i Gianfranco Piras (Department of City and Regional Planning Cornell University)*

30/04/2010

### *Foreign vs. domestic outsourcing, FDI and productivity: a production function approach*

*José Carlos Fariñas (Universidad Complutense de Madrid)*

[[http://www.pcb.ub.es/xreap/aplicacio/fixters/Foreign\\_sourcing\\_and\\_productivity\\_\\_Final\\_\\_Revised\\_\\_version\\_March\\_16\\_2009.pdf](http://www.pcb.ub.es/xreap/aplicacio/fixters/Foreign_sourcing_and_productivity__Final__Revised__version_March_16_2009.pdf)]

11/05/2010



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## XREAP - Joint Publications

### Working Papers (2010/1)

[available at <http://www.pcb.ub.es/xreap/web/plantilla1.php?Id=46>]

#### XREAP 2010-01

*The Accessibility City. When Transport Infrastructure Matters in Urban Spatial Structure*

García-López, M.A. (GEAP)

**Abstract:** Suburbanization is changing the urban spatial structure and less monocentric metropolitan regions are becoming the new urban reality. Focused only on centers, most works have studied these spatial changes neglecting the role of transport infrastructure and its related location model, the “accessibility city”, in which employment and population concentrate in low-density settlements and close to transport infrastructure. For the case of Barcelona, we consider this location model and study the population spatial structure between 1991 and 2006. The results reveal a mix between polycentricity and the accessibility city, with movements away from the main centers, but close to the transport infrastructure.

**Keywords:** Urban Spatial Structure, Suburbanization, Decentralization, Transport Infrastructure, Location and Land Use Patterns

#### XREAP 2010-02

*Which firms want PhDs? The effect of the university-industry relationship on the PhD labour market*

García-Quevedo, J. (IEB), Mas-Verdú, F. (IEB), Polo-Otero, J. (IEB)

**Abstract:** PhD graduates hold the highest education degree, are trained to conduct research and can be considered a key element in the creation, commercialization and diffusion of innovations. The impact of PhDs on innovation and economic development takes place through several channels such as the accumulation of scientific capital stock, the enhancement of technology transfers and the promotion of cooperation relationships in innovation processes. Although the placement of PhDs in industry provides a very important mechanism for transmitting knowledge from universities to firms, information about the characteristics of the firms that employ PhDs is very scarce.

The goal of this paper is to improve understanding of the determinants of the demand for PhDs in the private sector. Three main potential determinants of the demand for PhDs are considered: cooperation between firms and universities, R&D activities of firms and several characteristics of firms, size, sector, productivity and age. The results from the econometric analysis show that cooperation between firms and universities encourages firms to recruit PhDs and point to the existence of accumulative effects in the hiring of PhD graduates.

**Keywords:** Urban sprawl, local public spending.



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## XREAP - Joint Publications

### Working Papers (2010/2)

[available at <http://www.pcb.ub.es/xreap/web/plantilla1.php?Id=46>]

#### **XREAP 2010-3:**

*An introduction to parametric and non-parametric models for bivariate positive insurance claim severity distributions*

Pitt, D.; Guillén, M. (RFA-IREA)

(<http://www.pcb.ub.es/xreap/aplicacio/fitxers/XREAP2010-3.pdf>)

**Resum:** We present a real data set of claims amounts where costs related to damage are recorded separately from those related to medical expenses. Only claims with positive costs are considered here. Two approaches to density estimation are presented: a classical parametric and a semi-parametric method, based on transformation kernel density estimation. We explore the data set with standard univariate methods. We also propose ways to select the bandwidth and transformation parameters in the univariate case based on Bayesian methods. We indicate how to compare the results of alternative methods both looking at the shape of the overall density domain and exploring the density estimates in the right tail.

#### **XREAP 2010-4:**

*Modelling dependence in a ratemaking procedure with multivariate Poisson regression models*

Bermúdez, Ll. (RFA-IREA), Karlis, D.

(<http://www.pcb.ub.es/xreap/aplicacio/fitxers/XREAP2010-4.pdf>)

**Resum:** When actuaries face with the problem of pricing an insurance contract that contains different types of coverage, such as a motor insurance or homeowner's insurance policy, they usually assume that types of claim are independent. However, this assumption may not be realistic: several studies have shown that there is a positive correlation between types of claim. Here we introduce different multivariate Poisson regression models in order to relax the independence assumption, including zero-inflated models to account for excess of zeros and overdispersion. These models have been largely ignored to date, mainly because of their computational difficulties. Bayesian inference based on MCMC helps to solve this problem (and also lets us derive, for several quantities of interest, posterior summaries to account for uncertainty). Finally, these models are applied to an automobile insurance claims database with three different types of claims. We analyse the consequences for pure and loaded premiums when the independence assumption is relaxed by using different multivariate Poisson regression models and their zero-inflated versions.

**Key words:** Multivariate Poisson regression models, Zero-inflated models, Automobile insurance, MCMC inference, Gibbs samplin



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## **XREAP - Joint Publications**

### **Working Papers (2010/2)**

[available at <http://www.pcb.ub.es/xreap/web/plantilla1.php?Id=46>]

#### **XREAP 2010-5:**

*Parental education and family characteristics: educational opportunities across cohorts in Italy and Spain*

Di Paolo, A. (IEB)

(<http://www.pcb.ub.es/xreap/aplicacio/fitxers/XREAP2010-5.pdf>)

**Resum:** Drawing on data contained in the 2005 EU-SILC, this paper investigates the disparities in educational opportunities in Italy and Spain. Its main objective is to analyse the predicted probabilities of successfully completing upper-secondary and tertiary education for individuals with different parental backgrounds, and the changes in these probabilities across birth cohorts extending from 1940 to 1980. The results suggest that the disparities in tertiary education opportunities in Italy tend to increase over time. By contrast, the gap in educational opportunity in Spain shows a marked decrease across the cohorts. Moreover, by using an intuitive decomposition strategy, the paper shows that a large part of the educational gap between individuals of different backgrounds is “composed” of the difference in the endowment of family characteristics. Specifically, it seems that more highly educated parents are more able to endow their children with a better composition of family characteristics, which accounts for a significant proportion of the disparities in educational opportunity.



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## **XREAP - Joint Publications Working Papers**

also available at



[<http://www.recercat.net/handle/2072/12897>]



[[http://dialnet.unirioja.es/servlet/revista?tipo\\_busqueda=CODIGO&clave\\_revista=9345](http://dialnet.unirioja.es/servlet/revista?tipo_busqueda=CODIGO&clave_revista=9345)]



[<http://ideas.repec.org/s/xrp/wpaper.html>]



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## Grups de XREAP



Grup d'Anàlisi Econòmica Aplicada (GEAP)



Grup d'Anàlisi Quantitativa Regional (AQR-IREA)  
<http://www.pcb.ub.es/aqr>



Centre de Recerca en Economia del Benestar (CREB)  
<http://www.eco.ub.es/~creb>



Grup de Recerca d'Indústria i Territori (GRIT)  
<http://gandalf.fcee.urv.es/departaments/economia/web/english/recerca/grups/grit/>



Institut d'Economia de Barcelona (IEB)  
<http://www.pcb.ub.es/ieb>



Grup de Recerca Govern i Mercats (GIM-IREA)  
<http://www.ub.edu/gim>



Grup de Recerca en Finances i Assegurances (RFA-IREA)  
<http://www.ub.es/dpees/risk>

## Entitat gestora



Fundació Bosch i Gimpera  
<http://www.fbg.ub.es>



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