



Regional Science
Association International

British and Irish Section

Registered charity No. 277247

**43rd ANNUAL CONFERENCE
and
4th ANNUAL DOCTORAL COLLOQUIUM**

**Welsh National Library,
Aberystwyth**

19th to 21st August, 2014

Conference Pack

Welcome!

Dear Participant,

The Committee of the Regional Science Association International: British and Irish Section warmly welcomes you to Aberystwyth. We hope you enjoy your stay and find the conference interesting and useful.

We are very grateful to our local organiser Maria Plotnikova and the support of colleagues in Aberystwyth University.

The RSAI-BIS welcome new members. Your conference fee includes annual membership of the Section, with all of the benefits that membership brings. Please get involved with the Section. If you have any suggestions or ideas on how to improve the Section, our annual conference or developing the Section for all members we would love to hear these. Also included in this booklet is a form to submit your name for election to the Section's committee. The committee is appointed at the AGM which takes place on Thursday afternoon. We welcome applications. The minutes of the 2013 AGM are also included in this booklet.

Please feel free to discuss any RSAI-BIS or conference matter with our Chairman Aisling Reynolds-Feighan, Treasurer Maria Abreu or myself.

On a personal note, this is the first year in my term as Secretary of the Section. I would like to acknowledge and thank my fellow officers Aisling Reynolds-Feighan and Maria Abreu, the committee and members for their help and support in this first year. In particular, my predecessor, Declan Jordan, has been an invaluable source of help and clarification.

I look forward to working with committee and the membership as the Section goes from strength to strength.

Kristinn Hermansson
Secretary

Dear Delegate,

As Chair of the Section, I would like to welcome you to Aberystwyth and to the Welsh National Library. We are delighted to see so many delegates from the UK and Ireland, as well as many from further afield in Europe, the US, Australia and New Zealand. This promises to be a terrific conference and we are very happy to welcome you all to Wales.

Dr Maria Plotnikova is the local organiser for this year's conference. We are very grateful to Maria for the fine job that she has done in preparing for the event. She has been supported by a new committee and many thanks to them for their input. Dr Kristinn Hermannsson, our secretary, has also been working hard on our behalf to help in the preparations for this year's conference.

As usual among the features of this year's conference are:

- The Early Career Prize for the Best Paper (for those within 3 years of a PhD).
- The Early Career Prize for Best Presentation (for those prior to PhD). Short-listed candidates are presenting on Wednesday.
- The Moss Madden Medal for the best journal paper on a regional science topic published by a member of the Section.

Winners of all three prizes will be presented at the Conference Dinner on Thursday night.

Many thanks to members of the Section for their support in adjudicating these prizes. Special thanks to Professor Kim Swales for his work on the Moss Madden Medal Award.

We are very happy to welcome our plenary speakers. This year we bring some very distinguished speakers and, on behalf of the section I'd like to thank them for giving of their time.

Professor Geoffrey Hewings from the University of Illinois at Urbana-Champaign will deliver a lecture on Wednesday entitled "Unraveling the Internal Complexity of a Metropolitan Economy". Professor Hewings has been a strong supporter of the British and Irish Section for the past 40 years and we very much look forward to his lecture.

On Thursday, Professor Max Munday from Cardiff University will deliver his plenary lecture entitled "Inward Investment in Wales 1970- 2010: A survey with the benefit of hindsight". Professor Munday also has a long association with the Section and we look forward to his presentation.

Both of the plenary lectures are sponsored by the Section's journal, *Spatial Economic Analysis*. The journal has gone from strength to strength under the excellent stewardship of Professor Bernard Fingleton, the founding editor. We are very pleased to showcase our outstanding journal during the conference and support the wonderful work done by the management and editorial teams.

The British and Irish Section encourages the involvement of doctoral students and early career researchers. The annual Doctoral Colloquium will take place on Tuesday afternoon. We welcome our new student members and first time presenters and hope that they will continue to be involved with the RSAIBIS.

The Annual General Meeting of the Section will take place on Wednesday at 4.30pm. We would encourage you to come to the meeting and consider joining the committee. A nomination form is included in your delegate pack. The committee has worked very diligently to support the Section's membership this year and I very much appreciate and enjoy working with such an enthusiastic and lively group of colleagues.

Thank you for participating in our annual conference. We hope you find the experience both academically rewarding and enjoyable socially.

Best Wishes

Aisling Reynolds-Feighan
Chair

Our Association

Regional Science is an expanding field devoted to the development of theory and method in urban and regional analysis and policy. It has a conscious aim of cutting across the traditional disciplinary approaches to these issues. The British & Irish Section of the Regional Science Association International was founded in 1968. The membership is drawn, in the main, from academics, consultants and scientists in local and national government, who share an interest in spatial issues. They come from a range of disciplines including economics, geography and planning.

Our Main Activities

- Organisation of an annual conference, workshops and seminars;
- Award of an annual prize, the Moss Madden Memorial Medal;
- Award of annual prizes for undergraduate, taught masters and research postgraduate students in regional science;
- Award of Early Career / Doctoral Prize for Best Presentation at the Annual Conference;
- Award of Prize for Best Paper at the Annual Conference;
- Organise joint meetings (every four years) with the Israeli Section of RSAI.

The Section is run by a committee of thirteen elected members. The committee may co-opt a further three members. The Chairman and the committee are elected at the Annual General Meeting which is held during the Annual Conference each year. The conduct of the business of the Section is governed by the Constitution.

We are continually seeking new elected members of our committee. If you are interested in becoming an elected member then please contact our Chairman (Aisling Reynolds-Feighan), Treasurer (Maria Abreu) and/or Secretary (Kristinn Hermannsson) in the first instance.

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General Information

The Conference Venue

The conference will be held in the National Library of Wales. This is located off Penglais Road, overlooking the town centre of Aberystwyth. All of the sessions will take place within the National Library of Wales. The library's website is: <http://www.llgc.org.uk/en>. Library Parking is available for £2 per day and the £2 are redeemable at the library shop.

Dining at the Conference

There are breaks each day for tea and coffee which will be as timed on the programme. Lunch will be served each day. These are included in the conference fee.

Meet and Greet, Tuesday, 19.08.2014

There will be a Meet and Greet social event in the Scholars pub in Aberystwyth on Tuesday night after the Doctoral Colloquium from 19:00 onwards. This will be an opportunity for new and old colleagues to meet in an informal atmosphere. More detail on this pub is available here: <http://www.scholarsaber.co.uk/> Italian and traditional pub food is served. The event is not included in the conference fee.

Social Event, Wednesday 20.08.2014

The social event on Wednesday evening will include a walking tour of Aberystwyth guided by Michael Freeman, the former curator at the Ceredigion museum followed by a ride on the Cliff Railway (<http://www.aberystwythcliff railway.co.uk/>) up to the Y Consti restaurant at the top of the Constitution Hill. The walking tour starts from the seafront end of Terrace Rd at 18:45 and finishes at the entrance to Cliff Railway. A two-course dinner included in the conference fee will be served (dessert is available at extra charge). The restaurant kindly asks that the delegates get their drinks at the bar on arrival. If you wish to bring an accompanying person (not a delegate) this can be booked on the conference website registration page.

Conference Dinner, Thursday 21.08.2014

The conference dinner will take place on Thursday night of the conference and will be held at Nanteos mansion in Rhydyfelin, just outside Aberystwyth. The dinner is preceded by a drinks reception at the same venue sponsored Spatial Economic Analysis. For details on the dinner venue see: <http://www.nanteos.com/> A coach will pick up delegates from Aberystwyth bus station at 19:00. This event is included in the conference fee. If you wish to bring an accompanying person (not a delegate) this can be booked on the conference website registration page.



Regional Science
Association International

British and Irish Section

Annual General Meeting

Wednesday 20th of August 2014 at 4.30 p.m.

**National Library of Wales, Aberystwyth
(Drwm Room)**

Agenda

- 1. Minutes of 2013 AGM**
- 2. Chair's Report**
- 3. Treasurers Report**
- 4. European Matters**
- 5. *Spatial Economic Analysis* Journal Report**
- 6. Election of Committee, 2014/15**
- 7. AOB**

Nominations for the Committee will close at 3 p.m. on Wednesday August 20th.



Regional Science Association International

British and Irish Section

NOMINATION FORM FOR ELECTION TO THE COMMITTEE

Members are encouraged to stand for election to the Committee.

If you would like to be considered for membership of the committee for 2014/15 please complete the details below and submit it to the Secretary, Kristinn Hermannsson, by Wednesday August 20th at 3 p.m.

Name: _____

Institutional Affiliation: _____

Address: _____

Signature: _____

Each committee member must be proposed and seconded by a member of the Section.

Proposer Name: _____

Proposer Signature: _____

Second Proposer Name: _____

Second Proposer Signature: _____

Programme

Please note that the programme may be subject to minor revisions and delegates should refer to the registration desk where a daily updated programme will be posted.

Programme Outline

<i>Tuesday 19th August- Doctoral Colloquium</i>	<i>Wednesday 20th August- Annual Conference Day 1</i>	<i>Thursday 21st August- Annual Conference Day 2</i>
Please note, all delegates are welcome to attend all or part of the doctoral colloquium	8:45 Onwards Conference Registration Drwm room foyer ground floor	
	9:00 -11:00 Parallel Sessions 1	9:00 -11:00 Parallel Sessions 3
	<i>11:00 – 11:30 Coffee /tea</i>	<i>11:00 – 11:30 Coffee /tea</i>
	11:30 – 13:00 Plenary Session 1 Council Chamber room Geoff Hewings: Unraveling the Internal Complexity of a Metropolitan Economy	11:30 – 13:00 Parallel Sessions 4
14:00 Onwards Registration/Lunch for the Doctoral Colloquium In front of Council Chamber room	13:00 – 14:00 Lunch	13:00 – 14:00 Lunch
14:30- 15:30 Doctoral Colloquium Presentations 1 Council Chamber room	14:00 – 16:00 Parallel Sessions 2	<i>14:00 – 15:30 Plenary Session 2</i> Council Chamber room Max Munday: Inward Investment in Wales 1970-2010: A survey with the benefit of hindsight
<i>15:30 – 16:00 Coffee /tea</i>		<i>15:30 – 16:00 Coffee/tea</i>
16:00- 16:30 Doctoral Colloquium Presentations 2 Council Chamber room	<i>16:00 – 16:30 Coffee/tea</i>	16:30 – 17:00 Parallel Session 5
16:30 – 18:00 Doctoral Colloquium Plenary Session Kim Swales	16:30 – 18:00 AGM – All welcome	17:00 – 18:00 RSAI:BIS Committee Meeting (Committee members only)
19:00 Meet and Greet Scholars pub 10 Queens Rd Aberystwyth	18:45 Tour of Aberystwyth starting at the seafront entrance	19:00 Meet at Aberystwyth train station for coach to Nanteos Mansion, Rhydyfelin
	19:30 meet at Cliff Railway bottom of Constitution Hill	19:30 Drinks Reception courtesy of Spatial Economic Analysis Nanteos Mansion, Rhydyfelin
	20:00 Social Event Y Consti Restaurant, Aberystwyth	20:00 Conference Dinner Nanteos Mansion, Rhydyfelin

Programme Schedule

Tuesday 19th August 2014

14:00 onwards

Registration for the Doctoral Colloquium and Annual Conference

14:30 - 15:30

Doctoral colloquium presentations 1

Lisa Noonan

School of Economics, University College Cork

Yogeswaran Sundara Murthi

Department of Geography and Planning, University of Liverpool

15:30 - 16:00

Coffee / tea

16:00 - 16:30

Doctoral colloquium presentations 2

Benjamin Kuch

Graduate School of Excellence advanced Manufacturing Engineering (GSaME), University of Stuttgart

15:30 - 18:00

Doctoral Colloquium Plenary Session

Professor Kim Swales

Fraser of Allander Institute, Department of Economics, University of Strathclyde

Doctoral Colloquium Ends

19:00 onwards

Meet and Greet Social Event - Scholars Pub, Aberystwyth

**Annual Conference Begins
Wednesday August 20th 2014 (Welsh National Library)**

8:30 Onwards - Registration

9:00 - 11:00 Parallel Sessions 1

President's Room	Council Chamber	Drwm Room	Education Room
<p>Martin Wrobel Careers of Green Card Recipients in Germany a longitudinal analysis</p> <p>Heather Dickey Migration and Labour Market Integration in Scotland and Portugal</p> <p>John Moffat Cohort size and youth unemployment in Europe: a regional analysis</p> <p>Oliver Ludewig Product market conditions and regional disparities in regional employment</p>	<p>Jonathan Jones Agglomeration Economies and the Location of Foreign Direct Investment: A Meta-Analysis</p> <p>Aleid Brouwer Locating Value Added: The Geography of Global Value Chains</p> <p>Declan Jordan The effect of local rivalry on performance: Evidence from the English Premier League 1993 to 2012</p> <p>David Maré Earnings and employment in foreign-owned firms</p>	<p>Stuart McIntyre Developing hierarchical spatial econometric models</p> <p>Justin Doran Modelling the impact of internal and regional characteristics on firms' innovation performance: a multi-level perspective</p> <p>Maria Plotnikova The Effect of Prior Educational Achievement on Academic outcomes in Economics at a UK University</p> <p>Stuart McIntyre Nowcasting the Scottish Economy</p>	<p>Grant Allan The impacts of temporary and anticipated tourism spending</p> <p>Fernando Barreiro-Pereira Neutral and Investment-Specific Technical Effects on Labour Productivity, Growth and Unemployment: the Commonwealth Case</p> <p>Aisling Reynolds-Feighan Airline network impacts of mergers in the North American and European markets</p> <p>Kim Swales The Projected Impact of Public Infrastructure Spending in Scotland under Devolution and Independence: A CGE Modelling Approach</p>

11:00-11:30

Coffee/tea

11:30 - 13:00

Spatial Economic Analysis lecture 1

Council Chamber Room

Professor Geoffrey Hewings

Director, Regional Economic Applications Laboratory, University of Illinois at Urbana-Champaign

Unraveling the Internal Complexity of a Metropolitan Economy

13:00 - 14:00

Lunch

14:00 - 16:00 Parallel Sessions 2

Education Room	Council Chamber	Drwm Room
<p>José Vargas-Hernandez Development strategy in the northern state of Jalisco from the institutional perspective</p>	<p>Parikshit K. Basu The determinants of farm profitability and succession potential amongst farmers in Australia's Wimmera district</p>	<p>Touria Abdelkader-Conde Energy and Emissions Conflicts in Urban Areas and Countries</p>
<p>Paul Hildreth Understanding the contribution of governance institutions towards shaping economic geography of place: a local and national perspective</p>	<p>Richard Rijnks Spatial Scales of Livability How and at which spatial scales do services and amenities influence livability?</p>	<p>Cathy Xin Cui The Economic Impact of Offshore Wind Development on the UK Economy: An Input-Output Approach</p>
<p>Mike Coombes British cities and the interplay of changing migration and commuting patterns over the longer-term</p>	<p>Heike Delfmann Keeping an ageing and declining society vital: the role of local entrepreneurship</p>	<p>Andy Newing Using big data from electricity smart metering to support geodemographics and small-area profiling</p>
<p>Jacques Poot Innovation and Cultural Diversity among Firms' Employees: a Synthesis and New Comparative Evidence</p>	<p>Kristinn Hermannsson Expenditure and displacement impacts of mobile higher education students: A comparison of central and peripheral areas</p>	<p>Kush Thakar Quantifying the Value of Data obtained from River Gauging Stations in Scotland: A Users' Perspective.</p>

16:00 - 16:30

Coffee/tea

16:30 - 18:00

AGM - All welcome

18:45

Walking tour of Aberystwyth

19:30

**Cliff Railway starts taking people up to
Consti Restaurant**

20:00

Social event

Y Consti Restaurant, Aberystwyth

Thursday August 21st 2014 (Welsh National Library)

8:30 Onwards - Continuing registration

9:00 - 11:00 Parallel Sessions 3

Education Room	Council Chamber	Drwm Room
<p>Early Career Best Presentation Award Jung Won Sonn Spatial Convergence in Knowledge Production in China?</p> <p>Eoin Byrne Triple Helix Approach to Clustering: The ICT Sector in the South West Region of Ireland</p> <p>Yogeswaran Sundara Murthi Why Socio-economic analysis is important in wind farm pre-planning</p>	<p>Tom Broomhead Place effects: spatial inequalities in oral health</p> <p>Graham Clarke Combining macro and micro models to investigate the economic impacts of bioenergy production in the Scottish isles</p> <p>Karyn Morrissey A Spatial Microsimulation Model of Co-Morbidity for England</p> <p>Phil Jones Building spatial microsimulation model to explore the geographical and social determinants of health and well-being outcomes and resilience</p>	<p>Robin Lovelace Reproducibility in Regional Science</p> <p>Calvin Jones Towards a Hegemomic Model of Regional Development</p> <p>Zrinka Mendas From dominance to interdependence: Toward a sustainable development of the coastal region in the municipality of Zadar</p> <p>Lyndon Murphy The influence of social capital on levels and forms of innovation at SMEs in Sanhe and south east Wales</p>

11:00-11:30

Coffee/tea

11:30-13:00 Parallel Sessions \$

President's Room	Council Chamber	Drwm Room	Education Room
<p>Early Career Best Presentation Award Jasper van Dijk Local Multipliers, Unemployment and Migration: An Empirical Analysis of the United States</p> <p>Benjamin Kuch Regional synergies to defend market position against low-cost competitors through cooperation.</p> <p>Eoin Grealis The use of spatial microsimulation in estimating the regional pattern of new entrants in Irish Dairying</p>	<p>Gillian Bristow Growth, crisis and scalar geographies: An alternative understanding</p> <p>Bernard Fingleton Shocking Aspects of Monetary Union: The Vulnerability of Regions in Euroland</p> <p>Justin Doran Employment Resilience during the 2008 Economic Crisis: Insights from Micro Level Data for a Selection of European Countries</p>	<p>Alexander Blandon Lopez The role of value chain (VC) and regional factors in the context of formulation and implementation of regional competitiveness policies at the level of value chain. The case of Colombia.</p> <p>Gavin Harper Developing resilience through diversity in the Welsh Photovoltaic Industry</p> <p>Frank Crowley Explorations of Product Life Cycle Patterns in Emerging European Markets</p>	<p>Amangeldi Kenjegaliev Information content of rating announcements on Frankfurt Stock Exchange</p> <p>John Hobbs Kinsale Tourism: Industry Cluster or Triple Helix Cluster?</p> <p>Huan LI What Causes Spatial Agglomeration in China? —Investigating from Multi-Dimensional Externality Perspective</p>

13:00 - 14:00

Lunch

14:00 - 15:30

<p>Spatial Economic Analysis lecture 2 Professor Max Munday Inward Investment in Wales 1970-2010: A survey with the benefit of hindsight</p>	<p>Council Chamber Room Director of Welsh Economy Research Unit, University of Cardiff</p>
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15:30 - 16:00

Coffee/tea

16:00 - 17:30 Parallel Sessions 5

Education Room	Council Chamber	Drwm Room
<p>Eoin Moynihan Regional Research Driven Clusters in the Maritime Sector and the role of Cluster Organisations</p>	<p>Antonella Rita Ferrara Effectiveness of the European Cohesion policy on transport accessibility, research and innovation using a Regression Discontinuity Design approach</p>	<p>Shanaka Herath Identifying urban planning priorities through a spatial hedonic house price model</p>
<p>Patrick Collins The evolution of a Creative Cluster on the European Periphery.</p>	<p>Mika Haapanen Regional subsidies for industrial development: Time for indirect subsidies?</p>	<p>Peter Batey What can demographic-economic modelling teach the planning analyst?</p>
<p>Lisa Noonan The Effects of Agglomeration Economies and Related Variety on Productivity: Evidence from Indigenous Manufacturing Businesses in Ireland</p>	<p>Ferrara Antonella Rita Dynamics in sigma and gamma convergence of well-being in European regions</p>	<p>John Parr Overlooked Aspects of the von Thünen System</p>

17:30 - 19:00

**RSAI-BIS Committee Meeting
(President's Room)
(Committee members only)**

20:00

Conference Dinner, Nanteos Mansion, Rhydyfelin

End of Conference

Abstracts

Abstracts are listed in alphabetical order, based on the surname of first author.

Paper title: Energy and Emissions Conflicts in Urban Areas and Countries

Presenting author: Touria Abdelkader-Conde

E-mail: tabdelkader@madrid.uned.es

Affiliation: UNED University, Madrid, Spain

Additional author(s): Fernando Barreiro-Pereira

Abstract

The main aim of this paper is to observe the environmental behaviour in some cities of the world, by analyzing for each city the trends of several energy and emissions indicators that appear as explanatory variables in both energy and labour average productivity equations. At the same time we also consider the life expectancy at birth as an endogenous variable which be partially explained by these indicators to for observing the carbon dioxide (CO₂) effects on the population health. The paper also examines some conflicts coming from competition for energy resources, energy dependence and the spillover effects of the emissions on neighboring cities. To quantify how affect changes in carbon dioxide emissions, energy production and consumption on the some countries life expectancy, climate change, and labour and energy productivities, we used panel data techniques across some metropolitan areas with IEA annual data.

Following the results concerning to the proposed indicators, the energy consumption per inhabitant and CO₂ emissions by Km² are highest around the oil producer countries how Qatar, Emirates and Kuwait, and among the High-Tech user countries how China, Japan, South Korea and Singapore. The more high energy productivity is in Japan, Singapore and Turkey. Only carbon dioxide emissions are addressed in this paper, but it does not address other emmissions such as NO_x or SO_x. In other hand, we assume by simplicity perfect competition in the good markets to can calculate an energy price indicator for the renewable and non-renewable energies in each city.

The paper relates issues to central questions of international politics and theoretical debates concerning to the levels of consumption per head, carbon dioxide emissions/surface and the role of the renewable energies on the climate change and the wellbeing of the consumers. Be classifying the cities in Oil producers, Coal producers, High-Tech users, and Poor cities, if we assume perfect rationality in the energy producers we calculate the costs for change the use of fossil energies by renewable energies.

Keywords: Emissions, Renewable Energy, Cities, Economic Conflicts, Political Conflicts.

JEL Class: Q01, Q42, Q47, Q53.

Paper title: The impacts of temporary and anticipated tourism spending

Presenting author: Grant Allan

E-mail: grant.j.allan@strath.ac.uk

Affiliation: Fraser of Allander Institute, Department of Economics, University of Strathclyde

Additional author(s): Dr Patrizio Lecca (Fraser of Allander Institute, Department of Economics, University of Strathclyde) and Professor Kim Swales (Fraser of Allander Institute, Department of Economics, University of Strathclyde)

Abstract

Part of the economic impact of a major tourism event comes from the temporary expenditures in the local economy made by those attending. Input-Output (IO) modelling has been used to quantify the impacts of tourists' expenditures, however this approach has specific weaknesses in the context of modelling tourism impacts, in particular its treatment of factor supplies and its lack of dynamics. Recent work has found that Computable General Equilibrium (CGE) approaches may be more appropriate and have been widely applied. Omitted from this literature however is an understanding of the role that behavioural characteristics and factor supply assumptions play in determining the economic impact of tourist expenditures, in particular where expenditures are temporary (i.e. of limited duration) and anticipated (i.e. known to be temporary in advance). This paper uses a CGE model in which agents can have myopic- or forward-looking behaviours to show how model specifications affect the timing and scale of the economic impacts from anticipated and temporary tourism expenditure. It is shown that "pre-shock" and "legacy effects" impacts before and after the shock arise and are important for the quantitative impacts. In the forward-looking case, the economic impact is reduced when the expenditures occur earlier, suggesting that a longer period before the event maximises the economic benefit for the host economy of the temporary and anticipated expenditures.

Paper title: Dynamics in sigma and gamma convergence of well-being in European regions

Presenting author: Ferrara Antonella Rita

E-mail: antonellarita.ferrara@unical.it

Affiliation: University of Calabria

Additional author(s): McCann P., Venhorst V.

Abstract

Traditionally, the well-being of countries and regions was analyzed by focusing mainly on production indicators. However, in recent years the quality of life and social and the institutional efficiency are recognized equally important in the evaluation of the progress of different countries. The aim of this paper is to contribute to the empirical literature on the measurement of social and economic progress by calculating a synthetic indicator of well-being for the twenty seven European Union regions and the subsample of the Union with fifteen countries. We consider a data-base of 29 variables in order to construct seven sub-indicators that reflect different dimensions of human well being and social development: people's health and social conditions; higher education and long life learning; knowledge economy; local environment (in terms of infrastructures, attractiveness, security and services); age and gender inequalities in the labour market; the quality of the institutional framework and material conditions of households, by considering their disposable income. All these sub-indicators are then combined in a synthetic index of well being. Differing from other works in this field,

our analysis cover a period of eleven years, from 2000 to 2010, and two sub-periods, the first one from 2000-2005 and the second one from 2005-2010. Further, we analyze well-being dynamics over time and investigate the existence of a convergence process among European regions, both in terms of quality of life and economic progress, comparing the well being index with the trend of the Gross Domestic Product. Convergence is assessed by means of two non parametric techniques known as $\hat{I}f$ and \hat{I}^3 convergence. The $\hat{I}f$ convergence reveals if a process of reduction of the gaps among regions happened, while the \hat{I}^3 convergence, focuses on the changing of the regions' ranking. The adoption of a non parametric method avoids the issues related to the definition of the correct functional form, typical of the classical model of convergence analysis and all the problems of the misspecification of the model.

Paper title: Neutral and Investment-Specific Technical Effects on Labour Productivity, Growth and Unemployment: the Commonwealth Case

Presenting author: Fernando Barreiro-Pereira

E-mail: fbarreiro@cee.uned.es

Affiliation: UNED University, Madrid, Spain

Abstract

The productivity generated by capital goods is not uniform along the time. When there exist conventional physical capital goods the productivity obtained is minor that the one generated by quality capital goods. For this reason it can be interesting to develop a special analysis on the investment in capital goods in order to identify what are the differences between the productivity derived from physical capital and from quality capital. It seems that the differences between both kinds of capital stems from the fact that the vintage or quality capital is affected by an additional form of technical progress. This minds that the bigger part of the technological progress came from the fact of to be embodied by the firms, by means of the capital accumulation process. This new type of technical progress is then so-called embodied technical progress To obtain a correct measure of growth in presence of this embodied technical progress there exist three schools: first, the traditional growth accounting school appears due to limitations existing in the measures in efficiency units of the quality of the real investment, because of the investment is not really comparable along the time. The analysis is based in to adjust the quality or productivity of the investment goods constructing hedonic prices indices. This school is represented among others by Hulten (1992), Jovanovic and Nyarko (1996), Bartelsman and Dhrymes (1998), and Gordon (1999). The second school analyzes the productivity using longitudinal micro-level data sets. The most important contributions of this school are Griliches and Ringstad (1971), Olley and Pakes (1996), Caves (1998), McGuckin and Stiroh (1999), and Tybout (2000). The third school is the equilibrium growth accounting school, which measures the balance growth by means of vintage capital models, being represented by Greenwood, Hercowitz and Krusell (1997), Campbell (1998), Hobijn (2000), and Comin (2002).

The main aim of this paper is to analyze which are the effects of the two form of technical progress, neutral and directly embodied while capital is accumulated, on the economic growth and the labour productivity. Due to the difficulties for the construction of the hedonic prices indices and for the elaboration of the micro-level data sets, the application of the purpose above mentioned has been made into this paper following the

vintage capital model school. This model has been applied to compare the responsibility of the embodied technical progress on the economic growth and productivity during the period (1993-2011) in the most representative economies of the Commonwealth of Nations, such as U.K., South Africa, Canada, Malaysia, Australia, New Zealand, and India. The application of the vintage capital model has been made taking quarterly and annual data to each country, coming from the OECD Statistics, at constant and current prices, for the GDP, gross fixed capital formation, and private final consumption expenditure. To estimate the percentages of responsibility of the embodied and disembodied technical progress on the labor productivity growth rate in each country we use multivariate time series and cointegration techniques, in special autoregressive integrated moving average and vector autoregressive models (VAR), and autoregressive distributed lags models (ARDL). The empirical results indicate that the contribution of the embodied technical progress to the labour productivity and growth is very high in developed areas, and its impact on the unemployment rate is smaller than the one caused by the neutral technical progress. The opposite seems to happen in emerging countries.

Keywords: Endogenous technical progress, Vintage capital, Investment-specific technological change.

Paper title: The determinants of farm profitability and succession potential amongst farmers in Australia's Wimmera district

Presenting author: Parikshit K. Basu

E-mail: PBasu@csu.edu.au

Affiliation: Institute of Land Water and Society, Charles Sturt University

Additional author(s): John Hicks; Allan Curtis; Emily Mendham and Girijasankar Mallik

Abstract

Land holders across Australia have been confronted with serious drought conditions during the first decade of the 21st Century. These conditions have given rise to increasing levels of stress amongst the farming population. For many this has called into question the viability of a farming career. At the same time, a large proportion of farmers are at or approaching the normal retirement age for men of 65 years. Significant fluctuations in farming profitability have exacerbated the difficulties of succession planning and government action is often regarded as having failed to provide appropriate relief. In this paper we examine the issues confronting landholders in the Wimmera region of the Australian state of Victoria through the analysis of data from an extensive mail survey. Utilising these data we are able to estimate earnings functions for both on-farm and off-farm returns. Although years of education and/or qualifications obtained are usually a key factor in the estimation of earnings functions in general, they have typically been shown to be insignificant in farming decisions “ with the exception of a degree in agriculture. Building on this, we have substituted as our education variable an index of farming knowledge based on a series of key questions in our survey. The results highlight, amongst other factors, the role played by different levels of farming knowledge in determining farm profitability. We then turn our

attention to the issue of succession planning in an attempt to identify the key determinants of potential succession. Again, knowledge of farming is seen to be a key determinant.

Paper title: What can demographic-economic modelling teach the planning analyst?

Presenting author: Peter Batey

E-mail: pwjbatey@liv.ac.uk

Affiliation: University of Liverpool

Abstract

Input-output analysis at the regional level has traditionally focussed upon inter-industry linkages. Analysts have used it to trace the pattern of direct and indirect economic linkages within a region, enabling assessments to be made of the extent to which a change in demand in one industry is transmitted to other industries within the same economy. Thirty years ago, however, there was growing recognition among regional scientists of a major weakness these models: in most of them demographic-economic linkages were largely ignored. Household income and expenditure - generally more significant at the regional level than at the national level - were generally treated in a cursory manner, by adding a single row and column within the input-output table. This prompted a substantial amount of research activity aimed at improving the specification of the household sector in such models and the present author was one of several researchers who contributed to the development of new demographic-economic modelling tools - referred to as extended input-output models - directed towards impact analysis and forecasting in a policy context.

It is argued in this paper that there is much to be gained from a re-examination of these extended input-output models. The paper poses the question: What can demographic-economic modelling teach the planning analyst?

The paper begins by considering the inconsistency problem that occurs in planning exercises where demographic and economic analyses are performed separately. Population affects the economy and vice versa but if these relationships are ignored, misleading results may be obtained. The paper shows how the problem can be overcome by the use of extended input-output models set within an integrated demographic-economic forecasting framework. The paper shows how the basic input-output model can be elaborated upon to include different kinds of household income and expenditure, leading to the design of different forms of extended model and the calculation of a range of income and employment multipliers.

In the main body of the paper, three related themes are addressed:

1. Households matter in regional economic models, almost as much as industrial sectors. Empirical evidence is presented of how impact estimates are affected by treating household income and consumption in more detail, suggesting that there is much to be gained by a more careful specification of household types and characteristics.

2. Demographic-economic multipliers are a powerful way of capturing the economic consequences of demographic change. A systematic examination of the extended

Leontief inverse yields a rich source of such multipliers and the paper provides examples of a selection of them.

3. Extended input-output models can provide detailed estimates of the employment impacts of large infrastructure projects and how these are spread throughout a regional economy. The paper re-visits the Direct and Indirect Labour Requirements Matrix (DILRM), first advanced by Miernyk more than forty years ago, and argues for its inclusion in the socio-economic impact assessments that accompany such projects.

In a final section, conclusions are drawn.

Paper title: The role of value chain (VC) and regional factors in the context of formulation and implementation of regional competitiveness policies at the level of value chain. The case of Colombia.

Presenting author: Alexander Bandon Lopez

E-mail: abandonl@ut.edu.co; blandon2008@hotmail.com

Affiliation: PhD, Full time lecturer at the University of Tolima

Additional author(s): Janeth Gonzalez Rubio. MA. Full time lecturer at the University of Tolima

Abstract

During the 1990s, the changing nature of industrial policy, the endogenous development needs, and the devastating outcomes of the economic restructuring on several regions and key sectors such as the agriculture and livestock prompted countries such as Colombia to undertake an aggressive programme of value chain (VC) based development policies and partnerships including its decentralization to the regions. These policy undertakings have lacked an adequate theoretical underpinning to leverage them; hence, despite the empirical evidence not much theory has been built.

The research has attempted to fill these lacunae and advance the understanding of the process effectiveness of meso-level policies conducted at the local-regional value chain (VC) level. Furthermore, within this context, the influence of both value chain factors (input-output structure, geography, governance) (Gereffi 2004) and regional factors (regional economic trajectory, territorial embedding and societal embedding) on the policy process effectiveness of VC multi-stakeholders development partnerships to promote VC competitiveness at the regional level is explored. This relationship has not been explored in the value chain studies framework and is very important to shed light on questions such as how the interrelation between VC governance and regional business systems influences the outcomes of development interventions at the level of VC.

Methodologically the research contributes to the scaling down of the Global Value Chain analytical framework to the analysis of local-regional VC based development policies. This research found that VC factors are more influential than the regional factors in the implementation and developmental outcomes of value chain-based development policies. Even where the regional policy environment is favorable to

improve the conditions of local producers and where a Competitiveness Agreement of a VC has been implemented, the governance and economic structure of the VC can prevent that such goal is achieved.

Paper title: Growth, crisis and scalar geographies: An alternative understanding

Presenting author: Gillian Bristow

E-mail: bristowg1@cardiff.ac.uk

Affiliation: University of Cardiff

Additional author(s): Adrian Healy, University of Cardiff

Don Webber, University of the West of England, Bristol

Abstract

This paper examines the resilience of regional GDP to recessions at different spatial scales across European countries. Application of non-parametric simultaneous estimation techniques to a hierarchical dataset of observations between 1980 and 2012 permits us to consider explicitly the extent to which the national-level is important for understanding the resilience of regional GDP to recessions. The results show considerable national and regional-level GDP variation and asymmetries in resilience to the recent recession. We also show that resilience to one recession does not necessarily imply resilience to the next.

Paper title: Place effects: spatial inequalities in oral health

Presenting author: Tom Broomhead

E-mail: tbroomhead@sheffield.ac.uk

Affiliation: The University of Sheffield

Additional author(s): Dr Dimitris Ballas

Dr Sarah Baker

Abstract

There has been a distinct lack of theoretically driven work surrounding the subject of "place" effects on health outcomes, much less in relation to oral health. Previous area based analyses have often failed to take into account the inter-related functions and feedback mechanisms that occur between individual level characteristics ("composite") and those of the local environment ("contextual"). Often the outcomes are simply quantified and described, with little explanation as to why these patterns occur. The research presented in this paper aims to investigate how place determines patterns of spatial inequalities in oral health, and why such patterns exist. A theoretical approach to constructing pathways by which place influences oral health will be adopted, before testing these pathways to assess their impact. To achieve this, spatial microsimulation and agent-based models will be used as a means of bridging the gap between contextual and composite characteristics, and to allow measurement of these dynamic interactions. Existing secondary data sets (such as the Adult Dental Health Survey) will be a vital

resource, and will be combined with census and other small area data in order to build spatial microsimulation models, the results of which can be used to set parameters and give characteristics to the agent-based models. Whilst increasingly adopted in the social and geographical sciences, these models have never been utilised within dental research in relation to oral health. Yet, spatial microsimulation has been shown to be invaluable in policy and area based analysis through the creation of new small area microdata (Ballas et al, 2005), while Auchincloss and Diez Roux (2008) show how agent-based models can highlight the inter-dependent processes occurring between people, groups and their environment over time. The research presented in this paper demonstrates how a theoretically driven approach, combined with the huge potential and extent of information available from both types of modelling, can provide a clearer picture as to how place based effects influence spatial inequalities in oral health.

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Paper title: Locating Value Added: The Geography of Global Value Chains

Presenting author: Aleid Brouwer

E-mail: a.e.brouwer@rug.nl

Affiliation: University of Groningen

Additional author(s): Tristan Kohl

Abstract

Production has become increasingly organized in global value chains with different stages of production fragmenting across borders. Although these products are "Made in the World", fragmentation is not evenly distributed across geographic space. Indeed, research suggests that international trade is clustered regionally. But do the same clusters emerge when the geographical dispersion of fragmented production networks is accounted for? Do a select number of countries play a leading role in global production networks, regardless of where these goods are consumed? Or does the final destination of these globally sourced products matter for the geographical location of the value-adding producers?

This paper adopts the perspective of the "using" country in which final goods are consumed and trace the amount of value added by each "supplying" country. This can be done at a country or country-industry level, using a novel dataset on trade in value added for 40 countries and 35 industries for the years 1995-2011.

The analysis yields geographic clusters of global value chains, based on trade in value added. We then estimate how distance, cultural similarity, colonial heritage, education levels, sectoral diversity and other controls shape the geography of global value chains.

Paper title: Triple Helix Approach to Clustering: The ICT Sector in the South West Region of Ireland

Presenting author: Eoin Byrne

E-mail: eoin.byrne@mycit.ie

Affiliation: Cork Institute of Technology

Abstract

The European Commission, through the Seventh Framework Programme (FP7), funds an initiative entitled "Regions of knowledge" which aims to strengthen the research potential of European regions, in particular by encouraging and supporting the development of regional "Triple Helix Clusters" (EC, 2011). The Triple Helix model of university-industry-government relationships has already furthered research in knowledge-based economies, innovation and more recently innovation systems.

Porter (1990) suggests that firms in a cluster must be connected or linked in some way, which results in superior performance. However, this research suggests that a firm's linkages external to the cluster impact their performance due to the globalisation of markets. Given the importance of inter-firm linkages within the cluster and linkages reaching outside the cluster, this research documents the type, frequency and geographic scope of firms' linkages in the Information and Communication and Technology (ICT) sector in the South West Region of Ireland building on Hobbs (2010) framework for the analysis of spatial specialisation of industry. The paper provides a clear understanding of the inter-firm linkages in the ICT sector in the region, and compares and contrasts the role MNCs and SMEs play within the Triple Helix Cluster.

Paper title: Combining macro and micro models to investigate the economic impacts of bioenergy production in the Scottish isles

Presenting author: Graham Clarke

E-mail: G.P.Clarke@leeds.ac.uk

Affiliation: School of Geography, University of Leeds

Additional author(s): Eveline van Leeuwen, Kristinn Hermannsson, Kim Swales

Abstract

Due to a convergence of natural, economic and social factors the Scottish Western Isles are uniquely placed to pioneer the adoption of local bioenergy production from seaweed. Using an Input-Output model we can estimate the employment, output and GRP impacts from the resulting substitution of imported energy with locally produced

energy. This allows a clear identification of inter-sectoral and household linkages within the economy and permits us to identify, not only direct impacts, but also subsequent rounds of indirect and induced impacts, as the new bioenergy sector sources inputs from other local sectors and workers' consumption expenditures increase. However, the spatial outcomes, or indicators derived from the model, are limited and small-area impacts are hard to understand. Thus, this paper argues for the integration of the macro model with a microsimulation model which can simulate the attributes of all households on the islands and link individual households to key work locations. Then it is possible to disaggregate the effects of job growth from the region, i.e. the outputs of the input-output model, back to the localities, through this employment/household link. The paper concludes by illustrating the power of the methodology through the presentation of results at a number of spatial scales and through the running of a number of what-if scenarios.

Paper title: The evolution of a Creative Cluster on the European Periphery.

Presenting author: Patrick Collins

E-mail: p.collins@nuigalway.ie

Affiliation: School of Geography and Archaeology, NUI Galway

Abstract

This paper investigates the growth of the audiovisual sector in the west of Ireland. In so doing it identifies the key stages of development of a rural based creative cluster of economic activity. Extensive consultation in the form of participatory observation, surveying and interviewing was carried out to unearth the key milestones in the development of cluster of high value activity that supports over 600 employees on the northwestern periphery of Europe. This work contributes both to the extensive literature on cluster development as well as the emerging literature on the growth of the creative economy in non-urban areas. While concerned primarily with the historic evolution of the cluster from emergence, through growth on to sustainability the paper also posits and future development trajectory for the industry in the west of Ireland.

Paper title: British cities and the interplay of changing migration and commuting patterns over the longer-term

Presenting author: Mike Coombes

E-mail: mike.coombes@ncl.ac.uk

Affiliation: CURDS, Newcastle University

Additional author(s): Tony Champion

Abstract

This paper derives from a study on declining cities in Britain. The focus here is on the relative longer-term trends in job opportunities for citizens of large and medium cities. The methods that will be used include, but are not limited to, labour market accounts. These analyses extend earlier work which was limited to 64 Primary Urban Areas

(major built-up areas), not only by additionally including rather smaller urban areas “ whose problems often differ from those of the largest cities of which there is much current academic study “ but also by setting each built-up area in its labour market area context. These analyses at the meso scale are being paralleled by on-going micro-level research that also examines (from a very different perspective) linkages between changes in patterns of migration and commuting.

The principal aim here is to link analyses of urban demographic change to localised labour demand trends. As such the focus is less on urban decline purely in terms of population decline, and more on the several drivers of worklessness and hence risk of poverty. The different migration patterns experienced by cities and towns need to be set along-side analysis of each city"s number of job opportunities at local workplaces. At the same time the labour market accounts consider changes to the level of net commuting into each city. As the propensity to commute further has increased, cities" self-containment has declined and this means inner-city workers become more exposed to competition for local jobs from people who live further away. The aim of the labour market accounts is to assess, for each of the cities studied, the relative impact of the different labour supply and demand processes on the employment prospects of the local workforce

Paper title: Explorations of Product Life Cycle Patterns in Emerging European Markets

Presenting author: Frank Crowley

E-mail: frank.crowley@ucc.ie

Affiliation: University College Cork

Additional author(s): Prof. Philip McCann

Abstract

We empirically examine the link between innovation, product discontinuation and location using the firm as a unit of analysis in the emerging economies of the Baltic Region and Central and Eastern Europe. The data used for this paper is panel data stemming from the second to fourth rounds of the Business Environment and Enterprise Performance Survey (BEEPS). Using frameworks from the theoretical literature and evidence from the empirical literature on the product life cycle, we hypothesise that five patterns will emerge in our analysis; (1) younger firms will be more likely to product innovate; (2) older firms will be more likely to process innovate; (3) a location effect, where product innovation is more likely to occur in more urban areas and process innovation to be more likely to occur in peripheral areas; (4) older firms will be more likely to discontinue products and lastly (5) we expect product innovations to have a positive effect on the likelihood of a firm discontinuing products. We employ the use of a two-step production function approach that firstly examines a firm"s decisions to innovate and secondly, a firm"s decision to discontinue products. We control for endogeneity concerns emerging from the product life cycle indicators employed in the empirical models.

Paper title: The Economic Impact of Offshore Wind Development on the UK Economy: An Input-Output Approach
Presenting author: Cathy Xin Cui
E-mail: xin.cui@strath.ac.uk
Affiliation: Fraser of Allander Institute, University of Strathclyde

Abstract

The UK is a leading country in its deployment of offshore wind energy. The latest DECC Electricity Market Reform Delivery Plan (2013) expects offshore wind capacity to rise to 10GW by 2020 (within a range of 8-15GW). It will help the UK Government meet the EU 2020 target to source 20 per cent of the continent's energy from renewables by 2020.

We examine the economic impact of the development of the offshore wind energy industry on the UK economy. The investment in the UK offshore wind sector will stimulate economic activity and long term jobs in the UK. Offshore wind has a sizable and complex supply chain and increased supply chain capacity will in turn help to reduce the costs to consumers through greater competition in the market.

we make assumptions on the likely time path of offshore wind energy capacity in the UK up to 2035 based on DECC's projections as well as the project pipeline. Based on the DECC's projections, we choose to define two alternative scenarios for the deployment of offshore wind capacity: a Low wind capacity and High wind capacity scenario. We also consider the existing projects which will be delivered across multiple years and potential offshore wind capacity for projects in Round 3 and Scottish Territorial Waters.

We adopt an Input-Output (IO) modelling approach to the assessment of the economic consequences of the development of the offshore wind energy industry and its supply chain for the UK economy. This is one of the most sophisticated approaches typically adopted in economic impact analyses. In particular, relevant "multipliers" for calculating "knock-on" effects are derived from the analysis itself, not selected in an ad hoc manner.

Paper title: Keeping an ageing and declining society vital: the role of local entrepreneurship
Presenting author: Heike Delfmann
E-mail: h.s.delfmann@rug.nl
Affiliation: University of Groningen

Additional author(s):

Abstract

When a rural region is faced with stagnating population growth and population ageing, local businesses can contribute to building and maintaining the quality of life. New and established firms generate economic growth, however, in this context, the effects of

entrepreneurship should be assessed beyond just the economic impact. Even though these "likely small" firms may have little impact economically entrepreneurship can have a positive impact on the liveability of a region through the closely related concept of social capital. By means of focus group discussions with inhabitants, we compare two regions which are quite similar on paper but have a very different urban "rural" relation. Rural Northumberland (UK) and rural Drenthe (NL) are both facing a declining workforce and are strongly ageing. In the Netherlands, all rural regions are relatively close to an urban centre in geographical terms and peripheral regions are well connected through infrastructure, providing them with a fairly easy link to the urban centres. In England, we find more "traditional" rural regions which are more isolated with weaker links to urbanised areas. With these case studies, we assess to what extent this difference in rurality changes the impact of entrepreneurship on the local community.

Key words: ageing, rural, entrepreneurship, focus group discussions, liveability
JEL codes: M13, O18, R11

Paper title: Migration and Labour Market Integration in Scotland and Portugal

Presenting author: Heather Dickey

E-mail: h.dickey@abdn.ac.uk

Affiliation: University of Aberdeen

Additional author(s): Stephen Drinkwater

Sergei Shubin

Abstract

We explore the different factors that influence the labour market integration of Eastern European migrants into two European countries, Scotland and Portugal. The paper contributes to the debate occurring within Europe regarding migration issues (Bisin et al., 2011). Labour market integration, in particular, is currently a major issue within several EU policy areas. If labour market outcomes of migrants are important in influencing the integration of migrants in host countries, then the successful integration of migrants into host countries' labour markets will be an important contribution to the EU policy agenda (Bisin et al., 2011).

Our study investigates the main determinants of migrants' labour market integration. Specifically, we investigate two processes that we hypothesise are related for migrants: what affects the probability of employment and the probability of being integrated into the host community. In particular, we focus on the role of networks and ethnic identity in the labour market integration of migrants.

Theoretically migration networks can have positive and negative externalities. Through reducing migration costs, networks can encourage further migration; however, this may result in increased labour supply of migrants, greater competition for jobs, and reduced wages. For the role of ethnic identity, we ask whether migrants socialise mainly within their own national and language groups or whether they form networks within the local host community, and whether this affects their probability of being employed. This

decision regarding social and cultural identification has important implications for their labour market outcomes.

Unlike many studies in the literature, which model intentions to migrate, we use post migration data to empirically investigate how networks and ethnic identity affect the post migration labour market and integration outcomes of Eastern European migrants into Scotland and Portugal.

Paper title: Employment Resilience during the 2008 Economic Crisis: Insights from Micro Level Data for a Selection of European Countries

Presenting author: Justin Doran

E-mail: justin.doran@ucc.ie

Affiliation: School of Economics, University College Cork

Additional author(s): Bernard Fingleton, Department of Land Economy, University of Cambridge

Abstract

This paper analyses the resilience of employment outcomes to the 2008 economic crisis using individual level data from the European Social Survey (ESS). The research uses a multi-dimensional approach by considering individual characteristics as well as NUTS1 regional economic statistics. We model employment outcomes for individuals for the period 2002 to 2006 as a function of individual characteristics as well as regional labour market factors. Subsequently we use this model to generate a counterfactual employment outcome for 2008 and 2010 for individuals based on a no-recession assumption. We then generate a series of resilience indexes based on the difference between employment outcomes given actual economic conditions and our counterfactual predictions. We find that resilience varies substantially across NUTS1 regions and that the resilience of employment outcomes for individuals are higher in German and French regions than in regions in countries such as Ireland and Spain having controlled for individual level characteristics. We also note that at the level of the individual higher educated individuals, middle aged individuals, unionized workers and males are more resilient.

Paper title: Modelling the impact of internal and regional characteristics on firms' innovation performance: a multi-level perspective

Presenting author: Justin Doran

E-mail: justin.doran@ucc.ie

Affiliation: School of Economics, University College Cork

Additional author(s): Helena Lenihan, Department of Economics, Kemmy Business School, University of Limerick

Helen McGuirk, Kemmy Business School, Graduate Research Centre, University of Limerick

Geraldine Ryan, School of Economics, University College Cork

Abstract

This paper analyses the role of internal firm characteristics and the regional environment on the innovation performance of firms. There is a substantial literature analysing the impact of firm specific factors on the likelihood of innovation output (Romijn and Albu 2002, Roper, Youtie et al. 2010) and separately on the impact of regional characteristics on regional innovation performance (Lundvall 1995, Blazat 2006). However, there are relatively few studies which combine micro-level data with regional characteristics to analyse how the regional environment impacts upon individual firms' innovation outcomes (Srholec 2010, Bellmann, Crimmann et al. 2013). This paper is one of the few to consider the impact of regional variables on the innovation performance of individual firms and adds to the literature, by capturing a diverse array of regional indicators such as educational attainment and regional supports for innovation.

The primary data source for this paper is the Irish Community Innovation Survey (CIS) 2010, which contains information on the drivers of firm level innovation for a sample of over 3,000 firms in Ireland. This survey was conducted jointly by Forfás (Ireland's national policy advisory body) and the Central Statistics Office in Ireland. We augment the survey using regional level data at the NUTS3 level. This allows us to control for the regional environment in which the firm operates. Factors controlled for include regional innovation supports, educational levels, broadband penetration as well as a variety of other factors.

There are a number of novel elements to this paper which we would like to highlight. The first, is that we merge firm level as well as regional level data. The second, is that we apply econometric techniques to account for the hierarchical nature of the data. The third element, is that we consider a variety of socio-economic factors as well as policy factors at the regional level and assess their impact on individual firms' innovation outcomes.

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Paper title: Effectiveness of the European Cohesion policy on transport accessibility, research and innovation using a Regression Discontinuity Design approach

Presenting author: Antonella Rita Ferrara

E-mail: antonellarita.ferrara@unical.it

Affiliation: University of Calabria

Additional author(s): McCann P., Pellegrini G., Stelder. T., Terribile F.

Abstract

This paper investigates the effectiveness of European Regional Policy transfers in Research, Technological Development & Innovation and in Transport Infrastructure (programming period 2000-2006) in enhancing, respectively, patent applications and road potential accessibility. Differing from other researches on this subject, who stressed the regional policy results strictly in the economic-productive sphere, we focalize our attention to some specific fields of intervention of the policy. Traditionally, in fact, literature focused on the policy impact on the growth rate of per capita Gross Domestic Product, albeit results are, still now, not unanimous. In this paper the effects of European regional policy are assessed by considering the certified expenditure data at the Nuts 2 level for the fifteen member states that received transfers in Research & Innovation and transport fields of intervention over the period 1999-2007. We use the Regression Discontinuity Design technique in the sharp version in order to verify if regions qualified as Objective 1 experienced a greater growth than the other regions (non Objective 1). The regions eligible for the Objective 1 transfers identify the treated group, while the non-Objective 1 regions are considered the untreated. Estimations are processed by means of both a parametric (local linear regression) and a non parametric approach (different order polynomial regressions estimated with OLS). Our results show that the Objective 1 regions exhibit a higher growth rate in patent applications than the others, confirming that the European Union policy positively affects the treated regions development. Moreover, these results are robust to different periods of analysis and sample compositions. A discontinuity in favour of the treated regions is also found in the growth rate of potential transport accessibility, as an outcome of the expenditure in transport infrastructure, although in this case the results are less stronger than those regarding patent applications. Further, we find that the regions in the two groups (treated and untreated) differ more in the outcome growth rate of the outcome variable than in the respective entity of the transfers they received.

Paper title: Shocking Aspects of Monetary Union: The Vulnerability of Regions in Euroland

Presenting author: Bernard Fingleton

E-mail: bf100@cam.ac.uk

Affiliation: Land Economy, University of Cambridge

Additional author(s): Harry Garretsen, Ron Martin

Abstract

The economic recession in Europe, triggered by the financial crisis of 2008-9 has rekindled the debate over whether Europe constitutes a viable single currency area. A key issue concerns the relationship between regional economic cyclicality and monetary union: in the absence of a common automatic fiscal stabilization mechanism and with limited geographical mobility of factors, the greater the asymmetry of shocks across the regions making up a currency area, the more that area departs from an optimal single currency space as far as monetary policy is concerned. Our aim in this paper is to investigate whether the regions in the Eurozone have become more or less similar in their vulnerability and resilience to economic shocks since the monetary union. Using predictions based on a spatial panel model with random effects, an endogenous spatial lag and spatially autoregressive errors, we find that a common contractionary shock across the Eurozone has its biggest impact on the most geographically isolated regions, which are precisely those peripheral regions in Euroland that are suffering the most acute sovereign debt crisis, and which are among the lowest productivity regions of the EU. The implications of these results for the debate over European monetary and fiscal integration are discussed.

Paper title: The use of spatial microsimulation in estimating the regional pattern of new entrants in Irish Dairying

Presenting author: Eoin Grealis

E-mail: egrealis@gmail.com

Affiliation: SEMRU/TEAGASC REDP

Additional author(s): Cathal O'Donoghue, Rowan Fealy, Ramonn Fealy

Abstract

Ireland has set ambitious targets for increasing dairy production as part of the Irish Government's Food Harvest 2020 programme. While increases in productivity and efficiency in the national dairy herd will provide a significant contribution, it is likely that a substantial number of new entrants will be required to meet targets. Given the regional heterogeneity of agricultural activity in Ireland, the future spatial pattern of dairying activity and the location of new entrants will have important economic and environmental impacts. Advanced knowledge of the likely disaggregation of dairying activity may inform the planning and identification of efficiency opportunities such as in the area of transport and related emissions. This paper presents a multi-scenario analysis for the expansion of the Irish dairy sector and uses the SMILE-NFS microsimulation model to predict the spatial pattern of new entrants required in order to meet the targets outlined in the Food Harvest 2020 programme. New entrants are initially simulated in the more traditional dairy areas with the geographical spread and number of new entrants required widening and increasing under lower productivity growth scenarios. Economic outcomes at farm level are investigated with resultant emissions outcomes compared at an aggregate level in order to assess the implications of expansion in the dairy sector for Ireland's 2020 emission obligations.

Paper title: Regional subsidies for industrial development: Time for indirect subsidies?

Presenting author: Mika Haapanen

E-mail: mika.p.haapanen@jyu.fi

Affiliation: University of Jyväskylä, School of Business and Economics

Additional author(s): Anu Tokila

Abstract

Constantly changing global environment is challenging the regional economies. Regions seek competitiveness by development measures and programs designed to promote local conditions for business. Traditionally, financial assistance is granted as direct subsidies to businesses. Their effectiveness has been extensively studied over the last decades. Empirical analyses report both successful and failing results from the impacts. Critical views on the efficacy of business subsidies are increasing in the literature.

Along with criticism towards public subsidies, recently more emphasis has been put on indirect subsidies on the development of business environment. Indirect subsidies are often allocated for projects administered by local development agencies providing services to the SMEs, organizations of entrepreneurs, non-government organizations operating for the SMEs or educational institutions. Even though subsidies are increasingly granted for these business environment projects instead of granting funding directly to individual businesses, very little is known about their effectiveness.

This paper contributes the scarce literature on the indirect business subsidies by investigating their effects on industrial development. We will consider business subsidies that were granted by the Ministry of Trade and Industry for the first time in Finland in 2000–2004. Of the 467 million euro subsidy budget, 49 million euro was spent on indirect business environment subsidies during this period. We have constructed municipal-industry level panel data on business subsidies showing whether or not an industry in a municipality in a particular year has received business environment subsidies. Together with background information on municipalities and industries, these data allow us to utilize matching methods to compare the development of subsidized and unsubsidized industries in municipalities over the period 2000-2011. Our preliminary results suggest that industrial development in terms of number of establishments has been better in municipalities that received business environment subsidies than in municipalities that did not receive them.

Paper title: Developing resilience through diversity in the Welsh Photovoltaic Industry

Presenting author: Gavin Harper

E-mail: G.Harper@glyndwr.ac.uk

Affiliation: Glyndwr University

Abstract

Far eastern manufacturers have significantly undercut European manufacturers in the production of crystalline silicon solar cells. Some have described this as a 'Solar Trade

War'. This presents a challenging context for the European Industry as crystalline silicon technologies comprise the bulk of the marketplace. In Wales, this situation has been given particular poignancy by the closure of Sharp's module assembly in Llay, Wrexham - where imported silicon solar cells were assembled into larger modules. For the UK, the regional context for this industry is emerging. Competition based on labour-cost is impossible so there is a need to discover distinct regional strengths in order to stay competitive. There is an importance to focusing on products which offer a high degree of Gross Value Added. This means focusing on strategic niches and technologies that whilst not perhaps offering the highest conversion efficiency, offer attractive returns through economic competitiveness. There are a range of other PV technology trajectories - thin-film cells and excitonic cells which occupy a much smaller proportion of the marketplace, however, whilst presently less efficient, they promise the potential of continuous production processes that may enable them to be produced more cost effectively. Furthermore, the technical properties of thin film cells lend themselves to capturing diffuse light, whereas silicon solar cells perform better with direct light. This may be considered a good fit between the technology and the weather of the regional market the technology could potentially serve! This paper provides an analysis of Wales regional strengths in PV, the interesting diversity of research into PV technologies within Wales with a view to how the nation can retain competitiveness in this arena. The work will build on extensive analysis and involvement already undertaken CSER for the DECC UK Solar Roadmap.

Paper title: Identifying urban planning priorities through a spatial hedonic house price model

Presenting author: Shanaka Herath

E-mail: s.herath@unsw.edu.au

Affiliation: City Futures Research Centre, University of New South Wales, Australia

Abstract

In honouring their spatial planning responsibilities Governments must constantly monitor the adequacy of infrastructure and urban amenities particularly in rapidly growing and evolving metropolitan areas such as Sydney. In this way, areas in need of particular facilities and areas vulnerable to over-development can be recognized and action taken accordingly.

This paper will analyse the spatial pattern of (dis)amenities in Sydney based on a house price model that controls for property size and quality. Spatial dependence among house prices will be tested and spatial hedonic house price models will be estimated alongside traditional hedonic models in order to permit comparison of findings. The estimates of marginal value(s) of bundles of (dis)amenities in specific areas can confirm or invalidate a priori knowledge on the prime locations of the city and hence can shed light on potential directions of urban growth processes.

Though there are many studies explaining local spatial disparities within housing markets based on global hedonic models, local regression methods are intuitively preferred particularly when location specific information is required for planning purposes. These local estimates mapped demonstrate detailed small-area differences of amenities. This work could thus inform urban policy by identifying areas with amenities and capacity for increased population, and areas with dis-amenities needing improvements, leading to efficient housing allocation and urban planning.

Paper title: Expenditure and displacement impacts of mobile higher education students: A comparison of central and peripheral areas

Presenting author: Kristinn Hermannsson

E-mail: kristinn.hermannsson@glasgow.ac.uk

Affiliation: Robert Owen Centre for Educational Change, School of Education, University of Glasgow

Abstract

Students in higher education are highly mobile, they move between countries and within countries to seek education. Typically this involves young adults moving from home to access the higher education institution of choice. From the point of view of an individual student and his family significant amounts have to be spent to pay for term time costs. These are at least partially funded through saving incomes earned locally. These term time expenditures are then spent at the place of study, typically a central city. This gives rise to a spatial demand-shift effect, where students increase consumption where they study and reduce consumption where they are from. Because of this, the location of HEIs can have an important impact not only upon their host economies but also on the localities where students originate from. This paper analysis the flow of students within Scotland and the resulting spatial shift of consumption expenditures. Student records data are used to determine the origin and term time destination of Scottish HE students and HE students in Scotland, allowing for differences in mode of study and term time accommodation. I analyse the flow of students in and out of Scotland, as well as between central and peripheral regions within Scotland, focusing on the Highlands & Islands (H&I) and its interaction with the Rest of Scotland (ROS). Using survey-based expenditure profiles and a custom built 2-region Input-Output table the economic impact of these student flows are estimated for both sending and receiving regions.

Paper title: Understanding the contribution of governance institutions towards shaping economic geography of place: a local and national perspective

Presenting author: Paul Hildreth

E-mail: paul.hildreth.11@ucl.ac.uk

Affiliation: University College London

Abstract

The paper examines the contribution that governance institutions might make to the realisation of economic and social potential of sub-national places. Governance institutions are central to national policy approaches in England and Wales for the achievement of economic growth and sustainable development. This investigation is not just addressing the role of sub-national governance institutions in their geographical context. It is also considering the role of national government in its interaction with sub-national places and implications for multi-governance arrangements between the national and the local. Given recent claims that "the place-based approach is the new

paradigm of regional policy", modern place-based approaches are important to the underlying framework for this study. Contrasts are being made with other institutional perspectives. The study is being given practical context through a detailed qualitative institutional case study focused around the Mersey Dee Alliance, a functional economic area that crosses the national boundaries of both England and Wales, centred on the City of Chester.

Paper title: Kinsale Tourism: Industry Cluster or Triple Helix Cluster?

Presenting author: John Hobbs

E-mail: john.hobbs@cit.ie

Affiliation: Cork Institute of Technology

Additional author(s): Michael Walsh, IT@cork, European Tech Cluster

Kate Howey, Cork Institute of Technology

Abstract

Over the past decade clusters and innovation networks have gained further importance in terms of economic development and innovation strategies of the European Union and its member states. Under the Seventh Framework Programme (FP7) the commission funded a programme "Regions of Knowledge," which aimed to strengthen the research potential of European regions, in particular by encouraging and supporting the development of regional "Triple Helix Clusters," associating universities, research centres, enterprises and regional authorities in the drive for innovation and growth (EC, 2011). This suggests a shift from Porter's (1998) "Industry Cluster" model and towards the Triple Helix Clusters (THC) by the European Commission.

This poses the question has this diminished the role for non-research intensive clusters. Is "research" now a prerequisite for designation as a cluster, if so this represents a significant shift away from Porter's theory. This review paper addresses the aforementioned questions from the perspective of a potential tourism cluster in Kinsale, a popular tourist destination in the South West Region of Ireland. Using CIT's V-LINC software the linkage pattern and geographic scope of the relationships operated by a sample of Kinsale's tourism firms are analysed. Within this context the Kinsale tourism's reliance on "research," type linkages is contextualised and reported. The findings are surprising and suggest that further investigation of the role "research" plays within triple helix clusters is of critical importance.

Paper title: Building spatial microsimulation model to explore the geographical and social determinants of health and well-being outcomes and resilience

Presenting author: Phil Jones

E-mail: phil.jones@sheffield.ac.uk

Affiliation: University of Sheffield

Additional author(s): Dimtris Ballas

Liddy Goyder

Abstract

This paper gives an overview of an ongoing research project that aims to contribute to the understanding of how social and spatial inequalities affect health and well-being outcomes and resilience in South Yorkshire and the UK. Of particular interest is how the spatial characteristics of a small geographical area affect both health outcomes and the resilience of its population. These characteristics include population movement and migration, segregation and polarisation, socio-economic inequality, and unemployment, among others.

The bulk of the project involves producing a synthetic dataset of individual-level data using the spatial microsimulation technique, specifically iterative proportional fitting (IPF). This allows analysis at the small geographical area by combining national and regional social survey micro-data with small area statistics (typically census aggregate data) in order to produce individual-level data. This has the advantage of permitting analysis in greater detail than is typically possible with traditional data sets.

The project also involves using longitudinal data to examine how the dynamics of a neighbourhood over time affect health outcomes and resilience, taking in to account evidence that factors affecting health inequalities and resilience accumulate over the lifecourse (Schoon et al. 2003).

Paper title: Towards a Hegemonic Model of Regional Development

Presenting author: Calvin Jones

E-mail: jonesc24@cf.ac.uk

Affiliation: Cardiff Business School

Additional author(s):

Abstract

Established explanations of regional (and national) development rely heavily either on an assessment of the factor endowments of place (and their application), or more rarely on the economic relationships between places – usually via trade, labour or capital flows. Such analysis is often theoretically naïve, un-evidenced and lacks place context: it is very largely a-political and a-historical. The reality is that place-prospects are driven overwhelmingly by already extant political, military and cultural power relationships. The economics of place is in fact the economics of empire. This paper seeks to develop an alternative approach to understanding place development. A hierarchical classification system is proposed for nations and regions that combines geographic and cultural hegemonic space. Relationships between places, and the importance of spatial and a-spatial socioeconomic structures in this system are discussed. The paper concludes with some tentative exploration of how such a framework might be empirically tested.

Paper title: Agglomeration Economies and the Location of Foreign Direct Investment: A Meta-Analysis

Presenting author: Jonathan Jones

E-mail: jonathan.jones@ncl.ac.uk

Affiliation: Newcastle University Business School

Abstract

The location of foreign direct investment (FDI) and the factors that determine this location is the subject of a vast amount of empirical research. The empirical literature has found that a range of factors are significant determinants of location choice, although overwhelmingly, and central to most studies, the focus is on the role of agglomeration economies. Drawing inferences about the effect of agglomeration economies on the location of FDI however can be difficult given the numerous ways studies have attempted to measure and estimate these economies. Nevertheless, an advantage of the very large number of studies looking at FDI location is that a set of common measures of agglomeration economies and econometric techniques can be identified. This allows an investigation, through a meta-analysis, into how the estimates of the agglomeration economies vary, and what determines this variation, where a meta-analysis examines the statistical robustness of the estimates in the form of a quantitative literature review.

This paper undertakes a meta-analysis of 73 studies on over 300 estimates on the impact of agglomeration economies on the location of FDI to examine the characteristics that account for the variation in the magnitude of these estimates. Using a random-effects model to control for individual study-design effects the paper finds that localisation, rather than urbanisation, economies have the greatest impact on location choice, while an upward bias in the agglomeration estimates is found in studies that fail to accurately reflect the different sources of agglomeration economies, such as inter-firm production linkages. The paper also tests for publication bias in the literature and finds that although the early studies in the literature published only positive estimates of agglomeration economies, the overall average agglomeration economy estimate is not related to any form of publication bias and is a genuine determinant of FDI location.

Paper title: The effect of local rivalry on performance: Evidence from the English Premier League 1993 to 2012

Presenting author: Declan Jordan

E-mail: d.jordan@ucc.ie

Affiliation: University College Cork

Additional author(s): Justin Doran, University College Cork

Abstract

There is a strong consensus in regional economics literature that the determinants of business performance lie increasingly in factors external to the business within its locality. Local rivalry and competition are suggested as positive effects on business performance. Using data on league position for all clubs that have participated in the

English Premier League from the inaugural 1993/94 season to the most recent 2012/13 season this paper tests using spatial econometric techniques whether clubs' within-season performances are positively affected by better performances of other clubs located geographically closer to them.

The data covers all teams which have spent at least one season in the premier league over the time period 1993 to 2013, giving a total sample of 45 teams over 21 years. The dependent variable, which we refer to as team performance, is the rank of the team, in terms of league position, out of all the teams in the four divisions of the English league.

To test for spatial dependence (i.e. the importance of proximity) the paper initially considers Moran's I plots. A W matrix is constructed, which is an N*N matrix containing a measure of the 'distance' between observations. This paper defines the W matrix as the inverse of the distance in kilometres between points (where each point is the location of the stadium of each club) with the matrix being row standardised and the diagonal of the matrix possessing only zeros (as each club has no distance between itself). The paper controls for other factors that are found in the sports economics literature to affect clubs' within-season performance, club wealth (proxied by average attendance) and managerial change.

The paper finds evidence of positive spatial dependence between clubs' performance. This means that high performing clubs are in proximity to other high performing clubs while low performing clubs are in proximity to other low performing clubs.

The paper finds that distance matters for clubs' league performance. The weighted performance of rivals is increasingly important over the period studied and has a significantly positive affect on club performance from 2004. The paper controls The paper finds that higher average attendance, which is used as a proxy measure for club wealth, is associated with better league performance and managerial change in a season is associated with poorer league performance.

Paper title: Information content of rating announcements on Frankfurt Stock Exchange

Presenting author: Amangeldi Kenjegaliev

E-mail: a.kenjegaliev@hull.ac.uk

Affiliation: University of Hull

Additional author(s): Jamilya Mamedshahova (S&P)

Abstract

There are evidences of failures in credit rating assessments associated with a number of unpredicted corporate and global collapses captured by the modern history. This research investigates the information content of the rating announcements and to determine if investors rely on credit rating assessments when valuing the shares of concerned companies. The paper uses the event study methodology to evaluate the daily abnormal stock returns around credit rating changes which concerned the largest companies listed in the Frankfurt Stock Exchange. In particular, 60 rating upgrades and 71 rating downgrades made by Moody's, Standard & Poor's and Fitch Rating were

analysed within 81 business days around the announcements. The period covered by the analysis is 2002-2007yy. The results of the research found no evidence in support of the information content hypothesis due to the insignificant market reaction to the rating changes on the announcement date. It is also concluded that rating changes are highly anticipated, i.e. market participants adjust share prices long before the rating changes have been made by rating agencies

Paper title: Regional synergies to defend market position against low-cost competitors through cooperation.

Presenting author: Benjamin Kuch

E-mail: benjamin.kuch@gsame.uni-stuttgart.de

Affiliation: Graduate School of Excellence advanced Manufacturing Engineering (GSaME), University of Stuttgart

Abstract

Today's open and interconnected markets often lead to a high cost pressure on manufacturing companies. Even if the generic business strategy of the company aims for differentiation rather than cost leadership, the benefits of high quality delivery often cannot make a sufficient impact on company's performance if visibility and market power are too weak.

For the small and medium sized enterprises (SME) of the German medical device industry, this specifically means that, despite their high quality level, they face tremendous problems in defending market share against low-cost competitors, i.e. from Eastern Europe or Asia. This is mainly due to small budgets for marketing and brand initiatives, which could increase visibility and transform the quality advantage into a considerable competitive advantage.

One possible response is to make use of regional synergy potentials while cooperating with other companies in a comparable situation. Through such a cooperation-oriented approach, companies will be able to achieve economies of scale as well as economies of scope while aggregating their volumes and operating with best-practices, respectively. In order to initiate, coordinate and maintain such a cooperation effectively and efficiently, short distances within a regional network are a powerful advantage.

An important challenge arises, considering the fact that most of the potential partners naturally are competitors, which is why such approaches are often unsuccessful. Finding a common foundation as well as building trustworthy relations between partners is critical for the whole undertaking.

Therefore, this paper presents a concept and action plan that aims for the structured launching, operating, and sustaining of cooperation projects between competitors with differentiation strategies, in order to create competitive advantage over low-cost market players for all participating companies. The approach combines a literature review and a case study in the German medical device industry, in order to identify the critical success factors as well as major challenges.

Paper title: What Causes Spatial Agglomeration in China? —Investigating from Multi-Dimensional Externality Perspective

Presenting author: Huan LI

E-mail: huan.li@ucd.ie

Affiliation: University College Dublin

Abstract

Spatial agglomeration and regional disparity are main characteristics of economic geography in China since reform and open up. By constructing statistical index framework, this paper describes stylized facts of spatial evolution in China over the past three decades. And then based on insights afforded by externality theory, this paper identifies the principal determinants of spatial transformation. The main findings are as follows: In 21st century, accelerating of spatial agglomeration towards hinterland regions has narrowed the gap somewhat with dynamic coastal regions. Local specialization curve has converted from "U-shaped" to "?-shaped". Spatial distribution of manufacturing sector and traditional service sector tend to be homogeneous, modern service sector tends to be heterogeneous. "Marshall" externality has taken significant positive spillover effect on economic agglomeration in China, on the other hand, "Jacobs" externality did not. Key Words: Economic Agglomeration; Regional Differentials; Driving Force; Multi-Dimensional Externality. JEL Classification: C12? O18? R11

Paper title: Reproducibility in Regional Science

Presenting author: Robin Lovelace

E-mail: r.lovelace@leeds.ac.uk

Affiliation: University of Leeds

Abstract

Reproducibility in Regional Science

Regional science is a field that occupies a challenging position at the interface between economics, geography, policy and the physical sciences. To maintain credibility and focus in this multi-disciplinary context, early pioneers such as Walter Isard emphasised the 'scientific' methodologies to used by regional scientists. Although regional science today may be defined by what regional scientists do, the commitment to evidence, falsifiable theories and analysis can still provide a solid foundation for progress within the 'normal science' paradigm. On the other hand, positivist critics could point to unscientific practices within the field, raising the following question: to what extent is Regional Science a science at all, under Popper's classic definition? The paper explores this question by focussing one important and to some extent measurable criteria of scientific enterprise: reproducibility. The ability to replicate a finding is an important prerequisite for entry into the realm of 'scientific knowledge', yet little has been written on the potential for reproducibility in the field. The contrast with the physical sciences, where experiments are reproduced on a daily basis, highlights the relative lack of transparency surrounding methodologies and datasets in the field, which, it is argued,

hinders reproducibility in the field. Moreover, the argument is made that when results cannot be easily replicated, Regional Scientists' claim to scientific practice may be undermined, potentially harming their reputation amongst policy makers and the public eager to see increased use of 'evidence based policy'.

To tackle this problem the paper sets out simple and easy to implement criteria to increase reproducibility in the field and therefore enhance Regional Science's claim to exist in the realm of scientific enterprise. Based on guidance from key texts in the physical sciences and examples of best practice within Regional Science, three levels of reproducibility are recommended: 1) clear description of methodology used including software; 2) the provision of code and sample data and 3) complete reproducibility based on open datasets and free software. It is acknowledged that this final level of reproducibility will be unattainable for many regional scientists due to factors outside their control. The 1st and 2nd level are attainable in most research projects. The paper will conclude by outlining how increased reproducibility in Regional Science can help reassert the field's relevance at a time when evidence is sorely needed to inform the decision making processes at every level of society.

Paper title: Product market conditions and regional disparities in regional employment

Presenting author: Oliver Ludewig

E-mail: oliver.ludewig@iab.de

Affiliation: Insitute for Employment Research - Regional Labour Markets (Germany)

Additional author(s): Uwe Blien

Abstract

One of the key issues in economics is the explanation of labour market developments and their variation across different economies. Doing so, modern mainstream macroeconomics refers to the effects of financial crises and to institutional structures and their variation across countries. However, employment within the European states varies nearly as much as between these countries. Within a country, however, there are only minor differences in institutions. Therefore, the large variation in regional unemployment and in the development of employment is puzzling.

Our explanation of this regional variation of employment builds on the regional industry composition and technological progress. It is shown formally that under very general and standard preconditions the elasticity of demand on product markets is decisive: Technological progress leads to an expansion of employment if product demand is elastic. It is accompanied, however, by shrinkage of employment if product demand is inelastic. Thus, a regions labour market performance is determined by the shares of elastic and inelastic industries.

In our empirical analysis we use industry level time series data on output, prices, employment and national income for Germany provided by the Federal Statistical Office. We estimate Marshallian type demand functions using an instrumental variables estimator to derive the price elasticities for different industries. We use these elasticities in our second step to explain the development of employment in the West German Nuts III Regions. For this purpose we look at both the regional industrial employment and the

aggregated regional employment. We apply mainly two different empirical variations. The empirical findings support our theoretical results. The more price elastic an industry or region is, the better employment develops.

Paper title: Earnings and employment in foreign-owned firms

Presenting author: David Maré

E-mail: dave.mare@motu.org.nz

Affiliation: Motu & LSE

Additional author(s): Lynda Sanderson; Richard Fabling

Abstract

This paper examines remuneration and labour mobility patterns among foreign-owned firms operating in New Zealand. By tracking workers as they move across jobs in different types of firms, we document the extent of the "foreign wage premium" distinguishing between compositional factors (eg, differences in industry and employment composition across foreign and domestic firms) and remaining differences in wage levels and growth rates. We then consider whether foreign-owned firms source workers differently from other New Zealand firms and whether there are systematic differences in the destinations of departing employees by firm ownership. We find that much of the average earnings gap between foreign and domestically-owned firms is due to compositional factors { foreign firms tend to be larger and employ workers who would have received relatively high wages regardless of where they worked. However, even among apparently similar workers and firms, we find a two to four percent earnings gap between workers in domestic and foreign-owned firms. This gap is primarily associated with a wage increase of around two percent on moving from a domestic to a foreign firm, augmented by higher wage growth among foreign-owned firms. However, these premia appear to be specific to foreign-firm employment, as workers who return to domestically-owned firms do not appear to retain the additional earnings associated with foreign-firm employment into their subsequent jobs.

Paper title: Nowcasting the Scottish Economy

Presenting author: Stuart McIntyre

E-mail: s.mcintyre@strath.ac.uk

Affiliation: University of Strathclyde

Additional author(s): Grant J. Allan, Gary Koop, Paul Smith

Abstract

Harold MacMillan, UK Chancellor of the Exchequer, is quoted as saying in 1956 that ". . . some of our statistics are too late to be as useful as they ought to be. We are always, as it were, looking up a train in last year's Bradshaw [timetable]." The timeliness of economic statistics is something that is still an issue today, and indeed may be a more important problem today, given the increased attention paid to news about the economy,

than ever before. This is particularly acute for regional economies, where economic data, let alone timely economic data, are scarce.

A significant body of literature has now developed which establishes methodologies and approaches to produce better estimates of current economic variables of interest; this work is known as nowcasting (forecasting of variables like GDP, now). These measures are widely calculated and reported by central banks around the world; yet this work has so far focused only on national and supranational economies.

To date, little work has been done on nowcasting regional economies, which is in part what this paper hopes to begin to correct. Using data available for Scotland, encompassing a range of measures from employment data, economic survey data, VAT receipts, energy statistics, as well as data on the other regions of the national economy, this paper seeks to produce a series of nowcasts of the Scottish economy, and to evaluate the importance of each of the explanatory variables considered in reducing the forecast error.

Timely, and reliable, economic indicators are important signals to markets and policymakers, and can play an essential role in guiding public policy. In addition, understanding the measures that reduce the forecast errors the most helps us to understand the reliability of a nowcast undertaken at a particular stage in the calendar of data releases.

Paper title: Developing hierarchical spatial econometric models

Presenting author: Stuart McIntyre

E-mail: s.mcintyre@strath.ac.uk

Affiliation: University of Strathclyde

Additional author(s): Donald J. Lacombe

Abstract

Multilevel or hierarchical models are statistical models that control for and allow parameter estimation at more than one level. Many empirical research questions in regional science involve hierarchically--structured data, e.g counties nested within states. Standard normal linear models are ill--suited to these problems because they ignore, by assumption, this nesting of the data.

To date, little work has been done on capturing spatial dynamics in hierarchical models; for instance the idea that the random intercept at the second (or group) level might follow a spatial process. In this paper, we develop and introduce models that incorporate a hierarchical spatial dimension. Using now familiar Bayesian computational techniques, this paper derives and illustrates these models. We demonstrate through a generated data example that the model is well coded, and we provided empirical examples of practical applications for these models.

Paper title: From dominance to interdependence: Toward a sustainable development of the coastal region in the municipality of Zadar

Presenting author: Zrinka Mendas

E-mail: zrinka.mendas@anglia.ac.uk

Affiliation: Lecturer in Economic and Development

Abstract

The paper revisits Perroux's concept of economic space and growth pole within the underdeveloped coastal region of the municipality of Zadar, Croatia, located within the coastal and island geographical zone, including an archipelago of peripheral islands.

The absence of the competitiveness in Croatian maritime industry raises the question of growth, innovation and opportunities available to local SMEs. The current state of the government's run ferry provision in Zadar archipelago is unattainable in the long term. Social problems such as litoralisation, emigration of islanders, disappearance of the island identity, lack of education, emergence of the ghost villages, are already happening.

There is a need for the alternative economically viable routes between the islands that could play an important role in redesigning the island Ugljan as a growth pole in long-term. Introducing the competition into the ferry provision market in 2016, arguably, will be crucial for survival of the local SMEs and meeting the European Union's regulations for the competitiveness. It will increase a number of ferry service providers between the mainland and islands, provide a greater choice for users and serve as a medium for encouraging technological innovations in sea transport. Some proponents argue that introducing the new inter-island ferry routes will reduce the effect of litoralisation. This paper evaluates this idea of inter-island route between island Ugljan and peripheral islands within the Zadar archipelago. It is hoped that this will result in a shift of the balance of the growth from Zadar to Ugljan and from Ugljan to peripheral islands, resulting in moving from dominance to a greater independence model of development

This paper, thus, proposes that Perroux's economic space could be further developed as a socio-economic space. Social aspect is often seen as a trade-off when evaluating the strategic case proposals, for example, meeting the transport demand of local population, that this paper discusses.

Paper title: Cohort size and youth unemployment in Europe: a regional analysis

Presenting author: John Moffat

E-mail: john.moffat@durham.ac.uk

Affiliation: Durham University

Additional author(s): Duncan Roth
University of Marburg

Abstract

European labour markets display substantial variation in the rate of youth unemployment at the national and regional level. Population structures, specifically the share of young people, also differ greatly across European regions. By utilising this cross-regional variation in population structures, this paper employs instrumental variables estimation to identify the causal effect of the relative size of the youth population on the probability of young individuals being unemployed. The results of this study will contribute to a better understanding of the determinants of youth unemployment and thus to a better design of labour market policies to tackle this problem.

Paper title: A Spatial Microsimulation Model of Co-Morbidity for England

Presenting author: Karyn Morrissey

E-mail: KARYN.MORRISSEY@LIV.AC.UK

Affiliation: Department of Geography and Planning, University of Liverpool

Additional author(s): Dr Ferran Espuny

Dr Paul Williamson

Abstract

Co-morbidity is associated with a significant decline in both life expectancy and quality of life and increased costs in the provisioning of health services for individuals. The World Health Organisation (2005) has identified increased rates of co-morbidity as a major challenge for health policy. To establish the key determinants of health status at both the individual and small area level a large variety of spatially referenced demographic, socio-economic and health data is required at the individual level. Although there are a number of national datasets that contain detailed health and health usage data, these data tend to be aspatial or at too high a spatial resolution to permit health data analysis at the required local level. One solution to this problem that has emerged in the last two decades is the growing use of spatial microsimulation models to represent and simulate health processes at the individual and small area level. This paper seeks to develop and validate a spatial microsimulation of comorbidity (cardio-vascular disease, diabetes and obesity) for England using the Health Survey of England, the 2011 Census of Population and NHS administrative data. A novel hybrid simulated annealing algorithm will produce the first output area rates of comorbidity for England. Using a GIS, and once the data is fully validated; this paper will present the first small area maps of co-morbidity for England. Mapping the co-morbidity data will allow hot spots of co-morbidity to be identified, thus allowing future management programs for co-morbidity to be spatially targeted.

Paper title: Regional Research Driven Clusters in the Maritime Sector and the role of Cluster Organisations

Presenting author: Eoin Moynihan

E-mail: emoynihan@gmail.com

Affiliation: Cork Institute of Technology

Abstract

The Department of Agriculture, Food and Marine (DAFM, 2012) specifically highlights the maritime sector as being of national importance to Ireland's economic development and future potential. At present the maritime sector generates 1.2% of Gross Domestic Product (GDP), or an estimated €3.4 billion in annual turnover. The Irish Government has set a target of doubling the value of the maritime economy to 2.4% of GDP by 2030, and increasing the turnover from the maritime sector to exceed €6.4bn by 2020.

Cluster theory has in recent years become popular amongst policy makers for elements such as an "increased focus on the microeconomic business environment as opposed to a traditional macro focus", "an emphasis on regional and local areas" and "partnerships across the 'triple helix', involving not only cluster firms and government, but also the academic community".

The objective of this study to answer two main questions: Firstly, to measure the effectiveness of the role cluster organisations perform within a cluster and how their role can be best tailored to the make-up of an individual cluster in order to maximise their impact and benefits as an enabling mechanism. Secondly, to what extent is there a functioning maritime cluster in Cork and what model best describes its structure and its development to date. Most importantly, how does a cluster organisation facilitate linkages from a relationship perspective.

Paper title: The influence of social capital on levels and forms of innovation at SMEs in Sanhe and south east Wales

Presenting author: Lyndon Murphy

E-mail: lyndon.murphy@southwales.ac.uk

Affiliation: University of South Wales

Additional author(s): Brychan Thomas, Abdulai Fatahi Abdulai, Khushnood Anwar

Abstract

This paper ascertains the influence social capital has on levels of innovation at SMEs in both regions. The research involved an analysis of social capital and innovation present at SMEs Finally identifying relationships between the presence of forms of social capital and types of innovative activity.

The results show that there are differences between the volume and forms of social capital present amongst SMEs in both regions.

Analysis of the survey data shows that the SMEs are supportive of building both bonding and bridging social capital, although bonding social capital appears to be positively correlated with certain indicators of innovative activity. However, it is bridging social capital, which seems to be more significantly related to innovation outcomes. It can be stated that policy should more closely and explicitly reflect the relevance of building and maintaining bridging social capital.

Methodology: To achieve the project objectives mixed methods are employed (Creswell, 2003; Denscombe, 2007). The data collection involves a survey of SMEs in Sanhe City, China and south east Wales and a series of interviews with SME representatives in south east Wales. From Sanhe City 114 usable questionnaires have been returned and analysed, the figure for south east Wales is 71 usable questionnaires.

Paper title: Using big data from electricity smart metering to support geodemographics and small-area profiling

Presenting author: Andy Newing

E-mail: a.newing@soton.ac.uk

Affiliation: University of Southampton

Additional author(s): Dr Ben Anderson, University of Southampton

Abstract

We present outputs from applied research seeking to evaluate the potential use of commercial sector "big data" to support the production of small area census-type neighbourhood statistics. In light of future census taking options in the UK, we explore the feasibility of using high temporal resolution domestic energy consumption data to extract valuable information on household characteristics and behaviour. Such insight could supplement census delivery and support geodemographics and market research at the neighbourhood level.

We use data from a household energy monitoring study incorporating up to 184 households in two south of England neighbourhoods. These data are similar in nature to those available from domestic smart metering, currently being rolled out to all UK households, but are linked to household survey data revealing dwelling and residents' characteristics and associated behaviours. We assess the link between household patterns of temporal energy consumption (termed load profiles) and key household characteristics (including the presence of children and their employment status).

We use these load profiles to develop a series of novel neighbourhood indicators not currently collected by the census. We demonstrate that load profile data can be used to predict area level temporal patterns of household "active occupancy" (times when at least one householder is inferred to be at home and awake), to identify the most appropriate time to make contact with households as a tool support service delivery and to understand household spatio-temporal behaviours and routines. We also present a neighbourhood indicator of energy inequality, providing novel insight into small-area variations in household energy consumption.

Commenting briefly on privacy concerns, we note, with some confidence, that data collected via electricity smart metering would enable development of approaches to use observed electricity consumption to predict household characteristics. This would in turn provide a timely and robust source of neighbourhood census-type statistics to support geodemographics and market research.

Paper title: The Effects of Agglomeration Economies and Related Variety on Productivity: Evidence from Indigenous Manufacturing Businesses in Ireland

Presenting author: Lisa Noonan

E-mail: l.noonan@ucc.ie

Affiliation: School of Economics, University College Cork

Additional author(s): Eoin O'Leary

Abstract

While the effects of agglomeration economies and related variety on productivity have been studied internationally, there exist only a limited number of studies examining agglomeration economies in the Irish context. Also, from a policy perspective the role of agglomeration economies has been generally overlooked as policy documents, such as the Culliton Report (1992), have tended to focus on the role of clusters for improving productivity. This paper addresses the gap in the literature by examining how different categories of internal and external agglomeration economies and related variety affect the labour productivity of indigenous manufacturing businesses operating in Ireland.

The paper considers various methods of measuring agglomeration economies and related variety and proposes theory-based measures which allow for an in-depth analysis to be conducted. Firm-level microdata are supplemented with administrative data to allow for in-depth measures of agglomeration economies and related variety to be estimated. Once estimated, the impact of the various agglomeration economies and related variety on the labour productivity of indigenous manufacturing businesses is tested. The paper also tests for differences in the effects of agglomeration economies and related variety across manufacturing sectors. Implications of the findings for policymakers are also discussed.

Paper title: Overlooked Aspects of the von Thünen System

Presenting author: John Parr

E-mail: John.Parr@glasgow.ac.uk

Affiliation: University of Glasgow

Abstract

The Isolated State by Johann Heinrich von Thünen, which may be regarded as one of the earliest contributions to location theory, attempted to identify certain fundamental regularities in the spatial organisation of the rural economy. And following the pioneering analyses of Alonso and others, it formed the foundation of our understanding of urban spatial structure. The concern here, however, will features of the original von Thünen model that appear to have been disregarded or not explored in any great depth, but which continue to have a relevance with the broader realms of regional analysis and economic development. Such features were sometimes presented in the form of sketches, or mentioned in passing, perhaps because von Thünen regarded these as self-evident or of secondary importance and therefore not in need of greater elaboration. In any event there appear to be various areas of his path-breaking work which have gone

largely unrecognised. Among those that fall into this category, four have been selected, these forming the basis for the present discussion. The first focuses on the significance of the ring pattern of agricultural production, perhaps the best known feature of the von Thünen model. A second is concerned with the prevailing transportation regime, which is complicated by the fact that horses consume part of the output; being carried to the market. The third neglected feature involves the form of the underlying urban system, about which von Thünen only supplied the merest of details. The fourth and more general aspect outlines the resulting pattern of economic interaction. Little can be inferred about the movement of capital and the effect of governmental taxes and expenditures within the Isolated State, although there exists an intricate pattern of trade relationships.

Paper title: The Effect of Prior Educational Achievement on Academic outcomes in Economics at a UK University

Presenting author: Maria Plotnikova

E-mail: map26@aber.ac.uk

Affiliation: Aberystwyth University

Abstract

The objective of this study is to ascertain the effect of prior educational achievement on academic outcomes in undergraduate Economics program at a UK University. Academic outcome is measured as the weighted average score for the 2nd and 3rd years of undergraduate study. The analysis is done using Generalized Linear Mixed Model accounting for unobserved factors related to teaching and learning. The results underscore the importance of ability and gender effects in academic performance in Economics. The result suggests that students are not disadvantaged by not studying Economics and Maths prior to entering an Economics programme at University. This study has implications for admissions policy and for approaching students' transition between school and University.

Paper title: Innovation and Cultural Diversity among Firms' Employees: a Synthesis and New Comparative Evidence

Presenting author: Jacques Poot

E-mail: jpoot@waikato.ac.nz

Affiliation: University of Waikato

Abstract

The increasing international mobility of labor has important effects on the workforce composition of firms in all migrant-receiving countries. The consequences of these changes for firm performance have attracted growing attention in recent years. In this paper we focus explicitly on the impact of cultural diversity among employees on the innovativeness of firms. We briefly synthesize empirical evidence from a range of contexts across Europe, North America and New Zealand. We then utilize two unique and harmonized linked employer-employee datasets to provide comparative micro-econometric evidence for Germany and the Netherlands. Our panel datasets contain detailed information on the generation of new products and services, determinants of innovation success and the composition of employment in firms over the period 1999 to 2006. We find that innovation in both countries is predominantly determined by firm size and industry. Obstacles or organization change faced by firms drive innovation too. With respect to the composition of employment, high skills matter more for innovation than cultural diversity. Cultural diversity has a positive partial correlation with product innovation. This effect is statistically significant in our data in The Netherlands but not in Germany. However, controlling for reverse causality by instrumental variables, the correlation vanishes in the Netherlands but becomes significant in Germany. We conclude from the literature synthesis and the new comparative evidence that cultural diversity can make a positive but modest contribution to firms' innovativeness. The size of this contribution is strongly context specific.

Additional author(s): Ceren Ozgen, Cornelius Peters, Annekatrin Niebuhr and Peter Nijkamp

Paper title: Airline network impacts of mergers in the North American and European markets

Presenting author: Aisling Reynolds-Feighan

E-mail: aisling.reynolds@ucd.ie

Affiliation: University College Dublin

Abstract

This paper examines the impacts of airline mergers on airline networks by examining each of the mergers in the European and North American markets since 1996. This paper explores the changing patterns of connectivity, access and vulnerability of overall accessibility in the European and North American air transport markets, using a variety of graph theory and statistical metrics. The impacts of recent mergers in both markets are quantified in terms of their effects on route restructurings and the resultant changes in system-wide connectivity, robustness and accessibility. The merger guidelines used by regulators in both markets are critically evaluated in light of the longer term impacts on community accessibility.

Paper title: Spatial Scales of Livability How and at which spatial scales do services and amenities influence livability?

Presenting author: Richard Rijnks

E-mail: r.h.rijnks@rug.nl

Affiliation: University of Groningen

Additional author(s): Sierdjan Koster, Philip McCann

Abstract

The concept of livability has gained a lot of traction within regional policy making, especially with the focus on (rural) population decline. The anticipated decline in service- and amenity-levels as a consequence of population decline is argued to cause a downward spiral: regions suffering from a declining population, followed by declining levels of services, become unattractive for people choosing a new place to live as well as current residents. However, the requirements of regional services and amenities is highly dependent on personal context and attitudes. This study, focusing on the north of the Netherlands, attempts to explore local differences in the link between socio-economic status, the presence of services and amenities, and livability. Data from the LifeLines survey (N=165.000) and LISA business-location data are used to estimate a geographically weighted regression (GWR) with general happiness as the LHS variable and distance to services and amenities as the RHS variable, while controlling for personal factors. The local estimates show for which services and amenities distance is a deciding factor in livability, and how the importance of this distance varies locally. The resulting coefficient surfaces provide further insight into the importance of regional functions in retaining current residents and attracting new residents.

Paper title: Spatial Convergence in Knowledge Production in China?

Presenting author: Jung Won Sonn

E-mail: j.sonn@ucl.ac.uk

Affiliation: University College London

Additional author(s): Dazhi Chu

Zhigao Liu

Abstract

Continued growth of Chinese economy owes a great deal to the country's gradual transformation to knowledge-based economy. That transformation is, however, geographically uneven. Major cities in the Coastal Region along with smaller number of cities in other parts of China are certainly part of this transformation while some others are still dependent upon low-cost manufacturing. This paper looks at this geographical unevenness of the transformation.

To explain the uneven geography of knowledge production in China, we combine three competing approaches within geography of knowledge production. Those approaches are, 1) Grilich-Jaffe knowledge production function approach, 2) Å“ hUallahÅ“jin's

regional structure approach and finally 3) Sonn and Park's convergence decomposition approach.

Using US patent data and various public data sources in China, our analysis found some evidence of convergence at prefecture level. However, the majority of catching up happened in prefectures that are close to traditional cores of technology. This creates divergence at regional level, pushing the coastal region farther away from the rest of the country.

The theoretical implication of this finding is that the spatial scale of knowledge production is growing beyond boundary of administrative city.

Paper title: Why Socio-economic analysis is important in wind farm pre-planning

Presenting author: Yogeswaran Sundara Murthi

E-mail: sgysunda@liv.ac.uk

Affiliation: Department of Geography and Planning, University of Liverpool

Additional author(s): Dr Karyn Morrissey, Department of Geography and Planning, University of Liverpool

Abstract

Renewable energy development such as wind farms is one of the keys solutions for a sustainable future. The impact of developments in renewable energy is often projected through the reduction in greenhouse gas and dependability on fossil fuels. However, developments in the renewable sector will also have impacts on the economy and societal welfare these wider socio-economic impacts are usually not projected. This leads to an important gap in the literature on the socio-economic impact of renewable energy development. The impacts of these developments are geographically diverse and include national level, community level and individual level impacts. This leads towards the need for a socio-economic analysis of wind farms to date.

This paper attempts to examine the socio-economic impact of wind farm development in England using the Index of Multiple Deprivation. Data for the IMD is available for England for 2002, 2007 and 2010. Merging historical data on wind farm developments with the IMD allows one to identify the socio-economic impacts created by these developments in those areas. This could be achieved using before and after or control-impacted approaches.

This paper should support a move forward in socio-economic impact assessment of wind farm development through diverse set of outcomes based on the IMD. Thus, providing a socio-economic reference for future wind farm developments. Potentially the results could also demonstrate the positive impact of the wind industry in UK.

Paper title: The Projected Impact of Public Infrastructure Spending in Scotland under Devolution and Independence: A CGE Modelling Approach

Presenting author: Kim Swales

E-mail: j.k.swales@strath.ac.uk

Affiliation: Fraser of Allander Institute, University of Strathclyde

Additional author(s): Peter McGregor, Kim Swales

Abstract

The appropriate distribution of current and capital public expenditure is a live issue in Scotland. In particular, the Scottish Government have argued that independence will give a greater incentive to stimulate economic growth in Scotland. One central element of this argument is the notion that with independence Scotland will "get the tax back" [1]. That is to say, any increase in economic activity occurring as a result of government policy which increases the tax base will increase the future local tax take. Therefore in making investments in both physical and human capital the return is increased both to the politician and the citizen in terms of potentially higher government expenditure and/or lower tax rates in the future.

In this paper we look at the theoretical arguments and evidence behind this view. This is augmented by Computable General Equilibrium (CGE) simulation which we use to quantify the system-wide impacts of public infrastructure expenditure. The results are relevant not only to the debate over independence, but also to the appropriate degree of devolution of tax powers if a "no" vote prevails in the September referendum on whether Scotland should be an independent country.

Paper title: Quantifying the Value of Data obtained from River Gauging Stations in Scotland: A Users' Perspective.

Presenting author: Kush Thakar

E-mail: Kush.Thakar@liverpool.ac.uk

Affiliation: University of Liverpool

Additional author(s): None.

Abstract

The Scottish Environment Protection Agency (SEPA) monitors river water level and quality at 392 gauging stations throughout Scotland. Data on river flow and water quality is used by a diverse range of interest groups, including industry, water authorities, wildlife and water managers, hydrologists, recreational and industrial fishers among others; but most importantly, Category 1 Emergency Responders and local populations are reliant on the data produced by the gauging stations to provide flood warnings. Data from gauging stations inform the management of water resources to help meet EU Water Framework Directive objectives, the design of new infrastructure on and across flood plains, and have been increasingly used by scientists and policy practitioners to evaluate the impact of changes in land use and climate change. The data obtained from river gauging stations are thus a public good and accrue benefits above their market value, but to date no evaluation of the economic benefit has been made.

The aim of this project is to examine the value of the data provided by river gauging stations in Scotland using non-market valuation techniques, specifically choice experiments (CE). A particular objective within this context is to examine the spatial effects of distance from a river on the user value attached to stream gauge data. Findings are expected to inform public policy decisions about the utility and future consumption patterns of data from a regional stream gauge network.

Paper title: Local Multipliers, Unemployment and Migration: An Empirical Analysis of the United States

Presenting author: Jasper van Dijk

E-mail: jaspervandijk@gmail.com

Affiliation: University of Oxford

Abstract

I show that the nontradable sector of a regional economy benefits from attracting jobs in the tradable sector. I find that on average one new job in a tradable industry in a city will attract 1.02 extra jobs in the nontradable sector of that same city. This local multiplier effect increases with the unemployment rate, as the labour market becomes more elastic. The extra jobs created in the local nontradable labour market are mainly fulfilled by workers from other regions. I do not find a significant multiplier in the nontradable sector for current inhabitants.

These findings are important for regional economic policy, as they suggest that cities with a high unemployment rate will be most successful at increasing local employment levels by attracting tradable industries, but their current residents are not likely to benefit from the additional multiplier.

Currently the U.S. emphasize "labour supply policies" to reduce poverty. These policies consist of a direct interaction with the unemployed to increase the quantity or quality of their labour supply. Common examples are job training or welfare reform policies that make it harder to get benefits. There is little emphasis on "labour demand policies". Labour demand policies stimulate employers to provide more jobs or increase the quality of their jobs (Bartik, 2001). Bartik argues that a successful reduction of poverty will only be achieved by a combination of both policies.

A key aspect of understanding labour supply policies is the interplay between jobs in the tradable and jobs in the nontradable sector. Attracting jobs in the tradable sector can be especially effective in low growth regions with high unemployment because this will induce the most extra jobs in the nontradable sector. Insights in the effects of the tradable sector on the regional economy is therefore crucial for the development of regional policy.

Paper title: Development strategy in the northern state of Jalisco from the institutional perspective

Presenting author: José Vargas-Hernandez

E-mail: jvargas2006@gmail.com

Affiliation: University center for economic and managerial Sciences, University of Guadalajara

Additional author(s): Monica Isabel García-Mora

Abstract

The regionalization process in Jalisco occurred in the nineties leading to the decentralization of regions and formulating a regional development plan for each of them. Currently, despite the measures taken to establish regional plans, it appears that there are disparities in regional development, being the most affected, the North Zone of the State. The aim of this paper is to analyze a key factor, the ratio of the institutions with the development of the Northern region of the State of Jalisco, with a brief analysis of the role of institutions from economic, political and social perspectives. The method used is a review of the existing literature on institutional theory and the development of the Northern Zone of Estado. It concludes by stating as a strategy to promote the development, evaluation and strengthening of the institutions involved in this process.

Keywords: Development, regional development institutions, region, northern state of Jalisco.

JEL: D02, O43, R11, R58

Paper title: Core city prosperity: towards rules-based policies

Presenting author: Damian Whittard

E-mail: damian.whittard@uwe.ac.uk

Affiliation: University of the West of England, Bristol

Additional author(s): Don Webber, University of the West of England, Bristol

Abstract

Economic and social wellbeing is at the core of the local policy agenda. This paper attempts to identify a simple rules-based system that can allow policy makers to maximise the economic and societal wellbeing of its population. The empirical part of this paper examines disparities in un/employment, skills, earnings, crime/safety, deprivation and productivity growth in order to identify policy foci for different core cities within England. Applications of a difference-in-difference approach reveal that core cities should have distinct policy objectives given their performances relative to their comparator core cities and their deficiencies and contextual problems.

Paper title: Careers of Green Card Recipients in Germany a longitudinal analysis

Presenting author: Martin Wrobel

E-mail: Martin.Wrobel@iab.de

Affiliation: Institute for Employment Research

Abstract

In Germany, a booming labour market and the demographic challenges ahead underline the key role of migration in securing the country's prospering economy. Observers however note that so Green and Blue Card initiatives of the German government, designed to attract high-skilled migrants from all over the world, have shown little effect since over 75% of the net migration to Germany is from old and new member countries of the European Union and countries belonging to the European Free Trade Association (Brücker 2013: 16).

German government's "Green Card Initiative" of the years between 2000 and 2004 represents a particular effort to attract migrants to Germany. In these years, against the background of a shortage of IT specialists and computer scientists, the German government decided to distribute a total of 20,000 Green Cards to high-skilled migrants in the field if the recipients had the respective higher education degree or could provide evidence that they would earn a minimum salary per year of 100,000 German Mark (€51,000). The majority of migrants found employment in the cities of Stuttgart, Munich, and Frankfurt (Main). The overall effect of the initiative on the German economy is considered negligible (Kolb 2003). However, little is known about the individual careers and the success of beneficiaries on the German labour market in the long run.

To analyse the careers of Green Card recipients in Germany, I use unique longitudinal data on more than 1,500 beneficiaries from Munich, covering the years from 2000 until 2012. I examine their demography and regional and labour market mobility. I show that half of them were still living in Germany in 2012, with the majority working regular jobs (75%) and the Green Card program, in this sense, proven to be effective. Sequence analyses of the employment careers show that on the one hand most recipients were employed continuously, almost always in the company that originally hired them. On the other hand, a significant proportion of Green Card beneficiaries had discontinuous employment careers in Germany, often in combination with unemployment or training episodes. In multivariate analyses, the determinants of successful and less successful careers are examined.

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