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Regional Studies Association

# **Global Growth Agendas: Regions, Institutions and Sustainability**

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Annual Conference

Sunday 24<sup>th</sup> May - Wednesday 27<sup>th</sup> May 2015

Università Cattolica del Sacro Cuore,  
Piacenza, Italy

This volume has been compiled by  
Lesla Reynolds

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Welcome

In this, the Regional Studies Association's 50<sup>th</sup> year we are delighted to welcome you to the 2015 European Conference – 'Global Growth Agenda: Regions, Institutions, Sustainability'.

The Association will be marking its anniversary in many ways including the launch at the conference of two new RSA funded grant schemes aimed at mid- and established career researchers. These schemes complement the existing Early Career Grant Scheme. We will also announce an increase in the funding available for Research Networks to £10k a sum which greatly increases the scope of this important area of activity.

We will be circulating the call for papers for our 2016 new start journal 'Area Development and Policy' which addresses the themes of interest to those who live and work in or on BRICs (Brazil, Russia, India and China). This journal, with its international editorial team and advisory board has the unique selling point that it is ready to publish articles that have a regional voice – that is, they may not be written in the Western tradition for an academic article. Through this journal we provide an important outlet for scholars in the areas where RSA membership is expanding, which is Association owned, Routledge published, international in scope and high in quality. Circulated with *Regional Studies*, *Spatial Economic Analysis*, *Territory, Politics, Governance and Regional Studies*, *Regional Science* this new journal will have a large footprint of readers from day 1.

In your conference bag you will find a copy of the RSA published pamphlet ***Spatially Rebalancing the UK Economy: The Need for a New Policy Model***. This pamphlet has been written to inform political discussions in the UK in advance of and immediately following the UK elections in May 2015. It expresses the views of its authors and does not purport to represent the views of the Association or its members. It is being circulated to the global membership of the Association because it raises issues that have a resonance beyond the UK. Indeed, these questions were addressed at the 2014 RSA Winter Conference chaired by Martin Jones with speakers including the authors – Ron Martin, Andy Pike, Pete Tyler and Ben Gardiner along with Gillian Bristow, Andrew Carter, Frank Eckardt, Nancey Greenlegh, Richard Kenny, David Marlow, Henry Overman, Andres Rodrigues Pose and Jacqui Ward. The lively and long lasting debates at this two day event contributed to the revised version of the pamphlet which was first circulated to members for comment in December 2014. The authors address the central question of how to spatially rebalance the UK economy which now has greater regional disparities in economic performance than in any other European country. With it the RSA, as the leading forum for city and regional research and policy, wishes to stimulate and engage in the current debates with the aim to inform political discussion.

The Piacenza conference has been organised in association with Università Cattolica del Sacro Cuore. It comprises a vibrant mix of academic sessions and networking opportunities including plenary sessions, workshops, pre-conference excursions, a welcome reception and a gala dinner.

This conference addresses questions of the social and economic imbalances of the current phase of globalisation which require a rethinking of the model of international and regional development. It tackles the issues of inequality, ecological risks, and poor growth in some areas and puts at the center of the scientific and political debate the theme of values and institutions. It questions what are the values for sustainable regional development in the future and what institutional reforms are needed to overcome the negative consequences of the recession triggered by the financial turmoil of recent years? It asks which tools can strengthen the capacity of regions and cities to adapt to all changes and to increase the resilience of areas?

Papers will reflect on themes of well-being and quality of life, technological and social innovation, individual and collective entrepreneurship, by starting from the analysis of the values and motivations that drive individual and institutional action. We are very pleased to welcome presenters and delegates from over forty countries. We warmly thank all those who will be contributing to the event for their preparation time and their ongoing commitment to the Association and to work in our field.

In closing this welcome to you we wish to thank our local organising committee for their hard work and invaluable support; We also thank our plenary speakers and session chairs. Finally we thank the RSA office team members for their ongoing hard work and professionalism.

We wish you an informative, productive and above all, enjoyable conference and look forward to meeting you.

With all best wishes



Andrew Beer



Sally Hardy



# UNIVERSITÀ CATTOLICA del Sacro Cuore

**UNIVERSITÀ CATTOLICA DEL SACRO CUORE**

**PIACENZA-CREMONA CAMPUS**

**In the heart of Italy's breadbasket**

**3 Faculties and 14 degree programs: 1 single-cycle Undergraduate programs, 7 Undergraduate programs and 6 Graduate programs.**

**2,600 students and 270 professors.**

A well-planned site equipped with state-of-the-art teaching tools and facilities: this is Università Cattolica at Piacenza and Cremona. With its innovative design, the campus provides an atmosphere which encourages dialogue between students and professors, thus creating optimal conditions for learning.

The Piacenza-Cremona campus is similar to UK or US campuses, with its expansive landscaped areas for socialising and relaxation, and facilities for accommodating both efficient teaching and advanced research activity. The campus is also a microcosm of knowledge and values, which come together in the centre of the Po Valley, the heart of Italy's breadbasket. The local area stands out for its blend of rich culture and productivity.

**ECONOMICS AND LAW** Innovation in teaching, student-teacher interaction, a combination of skills drawing on different fields of study, relationships with the business world, and internationalisation: these are the key attributes of the Faculty of Economics and Law. The Faculty has two degree directions: one focusing on business, incorporating the study of marketing, business administration, finance, management and human resources; and another concentrating on law, with the study of civil, commercial, business, banking, international, private and public law. Degree programmes ■ Bachelor's Degree programme in Business Economics ■ Single-cycle Master's Degree programme in Law ■ Interclass Bachelor's Degree programme in Business and Law of Banks and Financial Markets ■ Master's Degree programme in Corporate Management ■ Master's Degree programme in Food Marketing and Commercial Strategies

## **Piacenza**

Set between the Po River and the Apennines, the province of Piacenza spreads towards the western extremity of Emilia Romagna.

Its land includes the splendid valleys of the Rivers Tidone, Trebbia, Nure and Arda, each distinguished by particular

environments.

In this place nature dominates unchallenged among rocky spurs, hills strewn with vineyards and sceneries dominated by spires, towers and impressive fortresses.

A place of particular charm is the plain which runs along the river and the rows of poplars which reflect in the river Po. It is a land full of natural beauties, valleys and mountains, but also history and art.

Over the sceneries of these particular landscapes we can find wonderful medieval villages such as for example Bobbio, Castell'Arquato, Vigoleno, Fiorenzuola d'Arda and so on, suggestive abbeys of medieval origin and a lot of Romanesque churches. It is touching to discover these places which rose in the Middle Ages along the ancient Via Francigena hosting religiosi and pilgrims on their way to Rome.

The great number of medieval castles which with their unmistakable shapes stand out all over the land, making it an extremely fascinating corner. A symbol of the Dukedoms of Parma and Piacenza's ancient splendour is the magnificent Palazzo Farnese of Piacenza, together with other wonderful aristocratic palaces of the same period.

Many other attractions are offered by this land: amusement, gastronomical specialities and great wines.

A journey in the neighborhood of Piacenza will never cease to amaze thanks to the myriad surprises that this rich land brings.

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#### INTRODUCTION

This paper outlines a counter-cyclical innovation strategy, derived from an innovative project, the California Institute for Regenerative Medicine (CIRM). CIRM was founded to provide an alternative source of support for stem cell research in the US, in response to political strictures on this emerging scientific field (Etzkowitz and Rickne, 2014). CIRM's novel feature is that it extends the physical infrastructure funding format of bond funding into the realm of intellectual infrastructure. In the following sections, we discuss the negative effects of economic downturn on innovation strategy and practice, and propose a methodology to turn it around. However, widespread institution of this method requires a paradigm shift of mind-set in response to economic crisis that is as yet only modestly underway, especially in Europe.

#### INNOVATION PARADOX

The "innovation paradox" is that the very point at which the business cycle tempts legislators to view austerity as a cure for economic downturn and reduce innovation spend, is when increase is most needed to create new industries and jobs and innovate out of recession or depression (Etzkowitz, 2012). Theoretically, the downturn is a good time to invest in new firms and in new ideas. Traditional capital as embodied in machinery and technology, as well as human capital embodied in people are more available, and thus less expensive, in the downturn than in the upturn when there is likely to be a shortage. However, the downturn is almost by definition the point at which so-called "animal spirits" are deflated, and thus funds are least available. Although the political cycle does not have to follow the business cycle, there are strong ideological and practical pressures for the political cycle to conform to the business cycle, especially during the downswing.

Europe's response to the economic downturn of 2008 has been singular. In contrast to the US, China, Japan, and other leading world economies that have engaged in various mixes of fiscal stimulus and pseudo-fiscal quantitative easing, Europe, led by Germany, has cut budgets in the hope that a reduced public sector would make room for an enlarged private sector. The negative effects increase in intensity, looking from northern to southern Europe, where unemployment levels are higher than seen in the 1930's depression. All this in spite of strong evidence suggesting that periods of near-zero short term interest rates are precisely when stimulative fiscal policy has the lowest costs and highest benefits (DeLong and Summers, 2012), and that what little fiscal stimulus was undertaken in Europe during the most recent downturn was effective (Coenen, Straub, and Trabandt, 2012).

When John Maynard Keynes analyzed the causes and cure for the great depression in the 1930s, the US economy was based on a physical productive apparatus, focused on making artifacts like steel, automobiles and the like (Janeway, 2012). The Keynesian model was based on putting people back to work by getting the existing productive apparatus to operate by government putting money into large-scale building projects such as dams and bridges, the Public Works Administration (PWA) approach, or simply putting people to work with picks and shovels, typewriters and cameras, the Works Progress Administration (WPA) approach. Employing 8.5 million people, public facilities such as schools, offices and roads were constructed, large numbers of trees were planted to avert "dust bowls," murals were painted, theatres organized and state guidebooks written, employing visual artists, writers, actors and musicians as well as unskilled laborers (Leighninger, 2007; Taylor, 2008; Etzkowitz, 2014).

As we move from a physical apparatus to an intellectual apparatus that underlies much of the economy, what is especially underutilized now is the brainpower that is being created (Bell, 1974). Graduates and PhD's are trained in ever higher numbers. Whereas in 1940 only one in twenty US adults had completed bachelor degrees, one in four had such degrees or higher by 2000. Growth of higher education is a global phenomenon, transforming an elite into a mass experience. Idle resources in the form of underutilized capital are hugely important, but the innovation conundrum is really a two-part equation, with idle brain power and idle capital.

When nobody else wants to put their money on the line and invest, government must step in and utilize society's resources by borrowing massively on the cheap. Consider that the Dutch government can borrow for ten years at an interest rate of .67%. .67%!!!!

#### FUTURE AT RISK?

Intellectual infrastructure has become the equivalent of physical infrastructure as government issued bonds; a financial mechanism heretofore utilized primarily for roads, canals, bridges, and the like, is used to support research and innovation, as well. In the transition from industrial to knowledge society, science and innovation must be treated as infrastructure, like the roads and bridges that provided the underpinnings of industrial society. This basic recognition of scientific research as a public good was established more than six decades ago (Nelson, 1959), yet establishing government support remains challenging. Mechanisms that were heretofore utilized to fund long-term investments in physical infrastructure may similarly be applied to construct knowledge infrastructure. These investments will not only directly repay government through interest payments, but generate incremental growth and thus increased tax revenues.

What might the contribution to European innovation be if large-scale funding was targeted at mid and longer term strategic bets, managed by equivalent agencies to US DARPA and NIH. But where will those funds come from if even the relatively modest Lisbon Agenda of increased innovation spend in national budgets could not be achieved? A transformative experiment in innovation potentially solves the problem of uncertain funding support tied to the ups and down of the business cycle by reappropriating the traditional Keynesian logic of debt-financed government stimulus from physical to knowledge infrastructure. Large scale projects, whose future benefits are expected to cover present costs with interest, justifies borrowing against that future on the credit of the state. When these projects have the potential to stimulate not only short-run demand, but to increase the long-run productive capacity of the economy through scientific discovery, all the better! (Etzkowitz, Levitt, and Gulbrandsen, 2000; Mazzucato, 2013)

#### THE CALIFORNIA INSTITUTE OF REGENERATIVE MEDICINE

When the George Bush Administration severely restricted federal government support for stem cell research in 2004, California stem cell scientists and their allies raised the banner of states rights and created an alternative science and technology policy at the state level that in the stem cell field is larger and more far reaching than any initiative that has yet been taken at the national or supranational level. What was novel in 2004-2005 California was that a coalition of citizens and scientists "bottom up" created an innovative RandD system in response to the anti-abortion movement's successful campaign to restrict federal government support of stem cell research. Upon passage of Proposition 71, three billion worth of bonds issued on the credit of the state, created the California Institute of Regenerative Medicine (CIRM) to disburse RandD funds for a ten-year period to advance stem cell innovation (Etzkowitz and Rickne, 2014).

Through CIRM support, a third California concentration of stem cell research has been created as the Los Angeles basin has achieved critical mass in this research area, previously dominated by the San Diego and San Francisco biotechnology complexes.

The same logic typically used for financing physical infrastructure, selling bonds on the credit of the state to build roads or bridges, and then collecting a toll on the bridge and eventually paying off those bonds, can be used to finance knowledge infrastructure. Here the hypothesis is, that the science itself will produce tangible economic benefits, and that, bondholders will be paid off directly from earnings on intellectual property or equity in firms that it has helped fund. Further, debt ratios will be reduced over time as investment in SandT helps spark economic growth, not to mention the improvement in the long run economic wellbeing of citizens.

#### POLICY IMPLICATIONS

The Triple Helix thesis is that in knowledge based society, the potential for future industrial development increasingly lies in the university, not only because of its research potential, that may be underutilized, but because the university has the students, an ever-renewing source of new ideas. Government can best boost innovation through enhanced industry-university interaction. The success of KU Leuven shows that significant spin-off activity is not only the province of MIT, Stanford, and Imperial College. It is necessary to enhance support mechanisms for university research groups to cross the university-industry boundary and create spin-offs at higher rates. Such actions are key to resolving the so-called European paradox of economic activity from useful results, lagging research advance.



Can China take global leadership in innovation from the US and Europe? Expectations that China's economic rise will stall due to rising labor costs may be misplaced if China's economic success is based on innovation, rather than inexpensive labor (Zhang and Zhou, 2015). An incremental innovation dynamic, spread widely through industries at different levels of technology, suggests that China's economy can sustain higher wages. Beyond relying on technology transfer for access to advanced technology, can China produce more fundamental forms of innovation that derive from university-industry government (Triple Helix) interactions based on an open Civil Society?

A democratic society is a competitive advantage in innovation. The former Soviet Union was able to advance in a few areas of military and space technology but failed to innovate more broadly. In the post Soviet era of increased leeway, universities improved their research capabilities and some initiated bottom-up efforts to foster entrepreneurship and create start-ups. However, in recent years, with the increase in military budgets and the growth of state orders, there is a movement to return to previous patterns of tight top-down control that never entirely loosened. By contrast, governments in continental Europe are allowing universities increased freedom of action, allowing and often incentivizing entrepreneurial initiatives. Spurred by metrics that show relatively few of their universities in the highest categories, France and Germany, among other countries, have begun programs to provide special subventions to universities that are expected to rise in the rankings. However, these special programs are rarely tied to innovation objectives as well, since the latter are not yet a significant measure in most rankings schemes (Tijssen, Gray and Etzkowitz, 2015).

#### CONCLUSION

Debt funding mechanisms could speed the transition to a knowledge-based society, a transition that is hindered, even stalled, if not reversed by economic downturn left unattended or deepened by counterproductive austerity policies. As industrializing and industrialized societies alike attempt to make the transition to a knowledge-based regime (Bluestone and Harrison, 1982), novel methods must be invented that supplement and support the venture capital format, a relatively limited model focused on potentially fast growing firms<sup>2</sup>.

Instituted in Massachusetts during the early post-war and transferred to northern California during the 1960's, the venture capital format spread more broadly in recent decades albeit with significant gaps even in its country of origin. Nevertheless, even given its recent extension into social and philanthropic realms, venture capital provides only a partial model for knowledge based development (von Bergmann-Winberg, 2104) We submit that the CIRM experiment has potential for generalization into a general model for knowledge-based regional innovation. This exemplary instance may be extrapolated into a counter-cyclical innovation policy that stimulates the creation of new clusters.

1 Early version presented to the Joint Institute for Innovation Policy (JIIP), 40th Anniversary Conference, Vienna, March, 2014

2 General George Doriot, French-born Harvard Business School Professor and head of American Research and Development (ARD), the original US venture firm, attempted to introduce the concept to his native land in the 1960's but it failed to take root at the time

## **SUBJECTIVE WELLBEING AND THE CITY**

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For several decades now it has been argued that the measures of subjective (and objective) wellbeing vary across cities (urban areas) both globally and regionally. However both the degree and the reasons for this variation remain a matter of contention. So too do the structural correlates of such variation (e.g. whether subjective wellbeing is negative in urban size and density). There are several reasons for the coexistence of different results. They include the measures of wellbeing used, the ways in which cities themselves are defined, the choice of countries or regions surveyed, whose wellbeing is being examined (and over what time period), as well as the attributes of cities and individuals that are included in the estimating equations. More

fundamentally, much of the empirical work still takes place with little connection to theory beyond that of spatial equilibrium.

This paper re-examines the published evidence on the way subjective measures of wellbeing vary by city and the models that lie behind such estimates. Several issues are explored using the author's own explorations of available surveys. A number of research frontiers at the interface of wellbeing and regional studies are identified.

## **SOCIAL INNOVATION AND INCLUSIVE DEVELOPMENT: THE SPECIFIC ROLE OF TERRITORY**

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### Concept

The squalor that comes from many tragic events and cases of destitution leads us to consider carefully the notion of "social inclusion" and to identify it with the litmus test of the seriousness of our declarations. To include means sharing, participating. It entails moving from being a stranger and misfit to be an integrated and active subject, from a subject to a sovereign citizen.

Social inclusion can take place only on the grounds of the formal recognition of equal opportunities to participate in the strategic, decisional and operative moments, distinct but converging moments, that make a social aggregate an active civil society, polyarchical and subsidiary.

### Open question for a social innovation agenda

- a) Since performance indicator of an economy have an impact upon the modes of performing, which proposals should be advanced to change the way the goodness of an economy is measured? In particular, what can be said about the Better Life Index released by OECD for the first time in May 2011? Which improvements can be proposed?
- b) Given that is impossible for marginalized people to engage in public reasoning processes without being nurtured by certain webs of relations which first recognize them as persons, what can be done, at the grass-root level, to revert processes of urban segregation and exclusion?
- c) The social economy has been reinvigorated in recent decades. Yet it has enormous, untapped potentials to be put to work. Which strategies are needed to provide the institutional and practical support which social economy organizations require if they are to be able to face the inclusion challenge?
- d) It is well accepted that the most effective route towards inclusive solidarity is the promotion of decent work for all workers in all sectors of the economy, including the informal economy. In 1999, ILO proposed to include the Decent Work Agenda within the post-2015 Development Agenda. Not much has been done so far. So, what should be done in this regards?
- e) Even during high growth, the economy often becomes exclusive leading to inequality and considerable wastage of social assets. The challenge is to identify and promote complementary economic models, innovative infrastructures, collaborative spaces that match otherwise wasted assets with social and economic needs. How to make these new sharing models both financially viable and operationally inclusive?

*Sustainability - Climate Change, Environment and Energy*

**BUSINESS INNOVATION AND WASTE MANAGEMENT SUSTAINABILITY: THE CASE OF DOOR-TO-DOOR COLLECTION**

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**Clementina Bruno, University of Piemonte Orientale, ITALY**  
**Fabrizio Erbetta, University of Piemonte Orientale, ITALY**  
**Giovanni Fraquelli, University of Piemonte Orientale, ITALY**

With the increasing awareness of environmental sustainability, legislative and regulatory efforts are being made to encourage practices that allow keeping up with ecological standards. These pressures have led the European Council to adopt rules on waste management (Directive 2008/98/EC) expected to promote recycling priority by Member States as well as an effective limitation of the reliance on landfills. The declared strategy sets a 50% recycling target at the European level by 2020, while leaving discretion to the States on the achievement of this objective.

In Italy, in 2006, the Environmental Code introduced the even more challenging target of 65% recycling rate by 2012. In this respect, recycling rates generally failed to attain the predetermined standards (ISPRA, 2013) and the ambitious target of 65% has been postponed to 2020 (Law n. 137/2013, so called "Budget Law 2014"). Moreover, the ongoing process shows wide differences within the national territory, with the Northern areas being more virtuous. In this heterogeneous context, new trends in solid waste management emerged, such as in particular the introduction of capillary door-to-door collection in some neighbourhoods.

Early studies have investigated the role of economies of scale and of other cost determinants in municipal solid waste industry, showing that small municipalities and collection based on more concentrated delivery stations may attain lower unit costs (Stevens, 1978; Tickner and McDavid, 1986; Dubin and Navarro, 1988).

Subsequent studies, specifically addressing the combination between recycling and disposal programs, do not support univocal results on the effects on costs of recycling programs (Lund, 1990; Jacobs and Everett, 1992; Ready and Ready, 1995; Highfill and McAsey, 1997; Huhtala, 1997; Tanskanen and Kaila, 2001; Larsen et al., 2010; Lavee, 2007). While acknowledging the existence of a body of literature on the impact on costs, there is a lack of studies addressing the less evident nexus between recycling programs and firms' profits. Firms entrusted with collection services actually play an instrumental role for municipalities in pursuing challenging goals otherwise hardly achievable. However, by devoting resources and organizational efforts to the assigned environmental commitment, they may reap reputational benefits and social legitimacy (Hart, 1995). In this case, due to a favourable disposition towards green services, also fostered by external institutional pressures as well as a mounting public opinion, extra costs are more likely to be transferred to users (Ambec and Lanoie, 2008), thus leaving room for greater bargaining power by firms and therefore higher rewards.

Such arguments fall within the institutional approach to legitimacy (Suchman, 1995). Suchman (1995) describes the process through which the external audiences grant a degree of approval to organizations. In particular, he defines legitimacy as "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions" (Suchman 1995: 574). An implication of this theory is that when there is an institutional pressure from various stakeholders, firm's ability to respond to such instances allows it to achieve legitimacy in the eyes of its stakeholders, also giving it the possibility of leveraging on this social merit in order to pursue an economic advantage (Oliver, 1991; Ambec and Lanoie, 2008). Furthermore, we believe the links between the environmental and economic dimension on the one hand and the economic and social one on the other (through the increasingly adopted full-cost pricing principle) can fit into the emerging Elkington (1998)'s triple-bottom-line pattern, whose sustainability concept relies on a balance among planet, profit and people (the triple P) pillars (Coffman and Umemoto, 2010).

The aim of this paper is twofold. First, drawing on the above-mentioned theoretical paradigms, we will develop a conceptual framework for analysing the context of waste management. Secondly, we will assess the economic sustainability of some characteristics of the service organization, and particularly the introduction of advanced recycling systems based on door-to-door collection service. By using a panel of around 70 Italian firms specialized in waste management observed in the period 2008-2011, we estimate a short-run cost and profit function system, where recycling rate depends on the adopted collection schemes. Results show that costs increase following the implementation of environmentally friendly programs while they decrease when recycling rates increase, possibly due to savings from the disposal side. Notable increase in profit level emerges just after the implementation of greener collection techniques as a result of enhanced mark-up. The interpretation of this effect invokes a process of social legitimacy by the firms, theorized in the context of the institutional theory.

*Critical Studies of Urban and Regional Development*

## **INNOVATION AND PRODUCTIVITY RESTRUCTURING - FUTURE CHALLENGES FOR TOLEDO CITY, BRAZIL**

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Authors as Méndez (1997), Méndez and Caravaca (1999), Marques da Costa (2000), Moulaert and Sekia (2003), Crevoisier (2003), Pike, Rodríguez-Pose, and Tomaney (2006) and Camagni and Capello (2012) highlighted different paths for new local base productive organization and the importance of the innovation and knowledge in this processes. It is common to see in many regions of Brazil a great development due to consolidated productive chains with several multiplier effects on the local environment. It is also interesting that many regions are presenting a great performance for showing an interactive space that includes a productive chain and a different industrial growth with innovation and knowledge that aren't associated. One of these cases is the city of Toledo, in Paraná State, in southern Brazil. This is a medium-sized city where big changes in the productive structure happened in the last decade. Toledo's economy traditionally linked to agriculture and that has a set of associated companies with this sector that demand a poorly qualified labour, has diversified and excelled in high technology and knowledge products, such as the production of pharmaceuticals that demands a different profile of labour, with more qualification. This socioeconomic behaviour does not seem to fit with any pattern of development mentioned by the authors aforementioned. In this context, the main objective of this paper is to show the economic changes of Toledo highlighting the employment qualification structure and their contribution to the productive restructuring in sector with more innovation and knowledge, and also to show some opinions from the economic agents about the future of the regional development. In the methodology we will use three main steps: firstly, to identify the specializations a location quotient will be used with the number of people employed divided the by economic activity sectors as the variable obtained by consulting the demographic censuses from the years of 2000 and 2010. Secondly, a new way to analyze the main specialization will be by using the census's micro data and other socioeconomic data to characterize these sectors. A profile of Toledo will be made by presenting the specialization profile and the performance of the socioeconomy, and we can expect to show how the productive change process reflected in the composition of the labour force in terms of qualifications and innovation. Thirdly, we show some opinions from 128 important economic agents about the future of this city. Thus, we expect to better understand what the contributions of the productive change for the development of the city are. Therefore, it is essential to incorporate the views of the local actors.

## **URBAN NETWORK IN THE METROPOLITAN AREA OF BELO HORIZONTE - BRAZIL: SELECTIVE (DES) CONCENTRATION OF THE SERVICES SECTOR**

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The objective of this paper is to analyse the evolution of employment in the services sector in municipalities of the metropolitan region of Belo Horizonte, the capital city of the state of Minas Gerais – Brazil, between 2002 and 2012. Using exploratory and fuzzy cluster analyses, we show that the dispersion of services sector to suburbs is concentrated on personal and transportation services, whereas production services became more concentrated in the capital city.

The consistent specialization of Belo Horizonte in tertiary sector activities most directly linked to the economic dynamics - advanced production services, banking and financial services, insurance, advanced transportation services, etc. - leads to the characterization of its metropolitan region as an urban space highly specialized, afar from the diversification presented by Jacobs (1969) as engine of a process of growth, modernization and urban differentiation.

The city of Belo Horizonte concentrates the vast majority of modern and even traditional services in the metropolitan region, despite some sector specific dynamics more closely related to population (personal services, public utilities, etc.) and locational attributes (e.g. suburban airport). Obviously, the concept of metropolitan hierarchy would make us expect such a result. What is negatively surprising is the intensity of this concentration even in sectors related to general productive activities in Minas Gerais. More than that, most of the public services of greater complexity - and even some basic health services - still have their supply concentrated in the capital city.

Nonetheless, the first decade of the third millennium presented signs of dispersion. Out of the 4.5 million people living in the metropolitan region in 2002, 50.4% resided in the city of Belo Horizonte. In 2012, the capital city concentrated 48.3% of the region's 4.9 million inhabitants. While in 2002 the share of the capital city in metropolitan employment in services was 80%, in 2012 this share decreased to 77%. Although quite shy, this process of dispersion was the prevailing trend throughout the decade.

The main sectors responsible for the loss of Belo Horizonte's share on employment are personal and transportation services. Regarding personal services, they are more closely related to population spreading and accompanied the increase on the average income of the suburbs in the last decade. Regarding transportation services, they are linked to the strong expansion of the logistics industry and transport in the metropolitan area outside the capital, mainly given their need for large urban spaces.

Despite the relative loss of centrality in relation to the third sector as a whole, the capital city increased its concentration of production services between 2002 and 2012. Its share of employment in this sector increased from 81% in 2002 to 87% in 2012. That is, the dispersion of the tertiary sector was selective, based mainly on personal and transportation services. On the other hand, the concentration of production services in the capital, more linked to economic dynamics as a whole, has been intensified.

The increased specialization of the capital and the overwhelming concentration of production services in Belo Horizonte compromise the insertion of the entire metropolitan region in the Brazilian metropolitan hierarchy and the country's interregional labour division. This exacerbated centrality, coupled with low economic dynamism - which is non-specific of the metropolitan area of Belo Horizonte, but also does not make exception of it - requires action by the government. The development of zones and areas of metropolitan interest plays a fundamental role in this process, since it can help to strengthen the secondary and tertiary urban hierarchy levels in the metropolitan region. This process can lead to further spreading of population and economic activity, resulting in a less concentrated and more equal metropolitan region.

## **PUBLIC STATISTICS FOR PROGRAMMING AND MONITORING COHESION POLICY – POLISH EXPERIENCE WITH THE STRATEG SYSTEM**

**Magdalena Ambroch, Central Statistical Office of Poland, POLAND**

**Robert Buciak, Central Statistical Office of Poland, POLAND**

The role of official statistics is to provide reliable information for different groups of users, with special consideration given to decision-makers. The recent ambitious challenge of public statistics, entailing significant responsibility, is to ensure information support for decision making process, for creation and monitoring of development policy, both at national and regional level. Evidence-based policy sets standards which statistics strives to meet.

Polish official statistics in close co-operation with government takes activities aiming at improving the efficiency of planning and strategic management. For this purpose the Central Statistical Office of Poland has implemented the STRATEG system, which is publicly-accessible for all recipients at [strateg.stat.gov.pl](http://strateg.stat.gov.pl), both in Polish and English version. It is a database application used for monitoring development policies and evaluation of activities undertaken to reinforce the strengthening of social cohesion. The leading role of the CSO in the monitoring process ensures durability of the provided system, its methodological consistency and development.

The STRATEG system integrates indicators derived from different sources which are used for monitoring the implementation of binding strategies in Poland (at national, supra-national and voivodship levels) as well as in the European Union (Europe 2020 strategy). It also contains indicators from documents determining the investment strategy for the new pool of European funds in Poland, such as Partnership Agreement and Operational Programmes. The set of indicators from strategic documents is supplemented by measures from public statistics of highest importance for the process of creation and monitoring the development policy. As a result, STRATEG comprises almost 1.6 thous. of indicators, disaggregated down to the LAU 2 level, where possible.

The system enables data presentation in a visually-attractive form, such as tables, maps, charts and reports. Users can also easily adjust generated elements to their personal needs. The above mentioned functionalities constitute a significant support in conducting analyses.

Apart from the principal system function as numerical data presentation, STRATEG also serves as an educational portal. Special indicator description cards were designed for the needs of the system, comprising definitions, methodological explanations and interpretational guidelines. All educational compilations are grouped in a separate text module that also includes a set of statistical publications and short analytical comments, presenting basic trends on selected subjects.

STRATEG constitutes the result of statistical cooperation with its users. The system is an excellent combination of knowledge treasury and functional tools for data presentation. Up to date experience shows that STRATEG is widely used by national and local government environments. It has contributed to the strengthening the cooperation between statisticians and decision-makers and reinforcement the role of public statistics in policy-making process.

**"GREEN CITIES" GOING GREENER: LOCAL ENVIRONMENTAL POLICYMAKING AND PLACE BRANDING IN THE "GREENEST CITY IN EUROPE"**

**Ida Andersson, Stockholm University, SWEDEN**

A growing number of cities around the world have taken advantage of their green image of the purpose of place branding. In the research literature, it is suggested that these practices are motivated by place-based competition over financial and social capital, combined with more holistic motives of sustainable urban development. However, although an increasing number of green cities are engaged in place branding, few studies have researched the impact of place branding on environmental policy-making in a city. What happens to local environmental policy-making when a framework of place branding embraces it? Addressing this issue, this paper discusses how the continuity of local environmental policy-making is affected by place-branding practices. To tackle this task, the paper first introduces an analytical framework of the elements in environmental policy-making that have been identified as generating a green status for cities. Secondly, using that framework, this paper present an in-depth case study of a city branding itself as the "Greenest city in Europe". Drawing on the growing body of work on green cities, this paper investigates the "understudied" practice of using policy for the purpose of place branding as well as the impact of place branding "on the environment".

**INVESTIGATING THE KNOWLEDGE DYNAMICS IN THE BIOTECH AND SUBSEA INDUSTRY. HOW CAN CLUSTER FACILITATION AID YOUNG FIRMS WITH RADICAL INNOVATIONS?**

**Heidi Aslesen, BI Norwegian School Of Management, NORWAY  
Inger Beate Pettersen, Bergen University College, NORWAY**

Radical innovations are critical to the long term success of firms and to ensure renewal in clusters and regional economies. Research has shown that radical innovations require the combination of different kinds of knowledge and often are introduced by new entrants, despite their liability of newness. The aim of this paper is to enhance knowledge on how cluster facilitation can aid young firms with radical innovations by analyzing the innovation process among firms in two clusters dominated by industries with distinct knowledge bases; the Oslo Cancer Cluster (OCC) dominated by research-intensive oncology companies and the Subsea cluster in Bergen clustered with firms being more involved in applied and problem-related knowledge. The paper adopts a firm level and technology life cycle perspective to understand the knowledge creating process in innovation projects from the research and development phase to the commercializing and sales phase, elaborating the variety and geography of external linkages and further questioning to what degree such variety is contingent on firms' knowledge base or if this perspective needs to be complemented in order to understand the innovation dynamics in these specific clusters. Recent literature has emphasized the complementary role of local and global linkages to promote innovations and on the distinct learning mechanism in differentiated knowledge bases including a varied set of innovation channels. Based on our research of firms' strategies with radical innovations we argue for a more dynamic approach incorporating the use of a variety of sources, channels and geography in a technology life cycle perspective. Our findings show that there are differences with regard to sources, channels and geography of linkages in the idea phase of the technological life cycle that could be ascribed to differences in innovation modes between analytical (biotech) and synthetic (subsea) firms. Further, our finding shows that the next and very early stages of the innovation process, both industries use sources of knowledge that are both analytical and synthetic regardless of their dominating knowledge base, and use learning mechanism ascribed to both DUI and STI modes of innovation, combining geographical scales using both local and global actors simultaneously. The radical character of the innovations and the uncertainties that follow this, pushes forward the need to use both STI and DUI in the more or less the whole technological life cycle regardless of initial knowledge mode. Furthermore, the rigid regulatory regimes in both industries did also influence firms' use of knowledge bases and the knowledge creation process and interaction with various actors. Consequently, the research proposes additional factors beyond firms'

knowledge base that explain the use of combinatorial sources, channels and geographic scale. Last, based on the firms' innovation processes, we propose cluster roles and facilitation initiatives that can aid firms with radical innovations.

*Innovation and Knowledge Economies*

## **A CRITICAL REFLECTION ON AN OLD AND NEW CITY-REGION CONNECTING TO THE GLOBAL KNOWLEDGE ECONOMY**

**Abdur Rab Athar, UNITED KINGDOM**

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A critical reflection on an old and new city-region connecting to the global knowledge economy

It is difficult to imagine a major city in any developed or newly emerging nation that does not regard the knowledge economy as a strategic opportunity. Strictly speaking cities themselves do not do this; we know it is the institutional infrastructure that enables a governance of place often, as Harvey (1989) identified, in entrepreneurial ways to facilitate pursuit of city economic policies. The concept of the knowledge economy is itself subject to debate and while some clarity has emerged in recent years, there is evidence to demonstrate that in the quest for a city wide knowledge economy outcomes are by no means certain to be uniform. For instance, the popularised term of knowledge economy places the idea of knowledge as a key factor of production, an integral unifying component for other factors of production including land, labour, capital and entrepreneurship. In this sense there are contemporary industries and businesses that are not simply knowledge centric, using knowledge to differentiate their products and services, they rely heavily on knowledge assets to add value to all associated activities and processes. These types of business are distinct from the lower value added enterprises that are often more visible in the local economy. The question then, is how does a city-region local economy aggregate such assets to become foremost a knowledge economy? In this paper we provide a critical reflection on two city-regions where there are attempts to strategically facilitate their place as part of the global knowledge economy.

We look at a city-region in a newly emerging economy, Dubai and a city-region in an older industrial nation in the north of England, Liverpool. Dubai city-region grew as a natural harbour and became identified as an important seaport in the Persian Gulf. However, the discovery of oil in the 1960s displaced the activities associated with a traditional regional port and laid the foundation from which a period of rapid infrastructure developed that transformed this city-region and beyond. In contrast Liverpool, it too a maritime city, suffered a long period of decline from a position of global importance in the 19th Century. During the 20th Century its deterioration as a port coincided with various regional policies and post-war corporatism, giving rise to interventions that led to a branch plant local economy that by the 1970s was becoming unsustainable. These two places seem to have reached a crossover point in their development at roughly the same time and contrast not only from each other but from the idealized types of knowledge economy often reported on, such as Cambridge in the UK or alternatively those well-known technology-driven cases of Silicon Valley on the West Coast and the Boston phenomenon, Route 128 on the East Coast, USA. An examination of a city-region with aspirations to be a global city and presenting to the world a diversified local economy with new opportunities for investment, and a city-region seeking to overcome negative perceptions within its host nation while competing with other similar places for the same inward investment are rarely seen to be exemplars of knowledge economies. Dubai and Liverpool therefore provide the basis from which we can witness the aspirations, objectives and manifest reality in how and why a city-region would want to develop its local economy in this way.

We show in this paper the contexts in which governance institutions prepare their place for a role in the global knowledge economy. We take into account the relevance of the knowledge economy to the city-region and how governance actors are keen to support supply-side initiatives around for instance, education, skills and enabling more entrepreneurial behaviour in the drive for a high skilled, high wage local economy. Similarly, we see city-region policies that provide backing to particular sectors such as biotechnology and wider diffusion of



innovation in both services and production, these regarded as key elements in what Audretsch and Thurik (2001) refer to as the entrepreneurial economy. Our discussions with key governance actors, from the public and private sector provide contrasting perspectives on how the knowledge economy can add value to the respective city-region. Results from preliminary fieldwork indicate the knowledge footprint in Dubai and Liverpool, such as designated locations for the types of creative and innovative enterprise that should drive the knowledge economy and the integration of these with the wider city-region. We consider the role of higher education institutions and how they differ and we are able to contrast the role and responsibility of the central state vis a vis the local state. We argue that the institutional infrastructure is an important contributor that helps city-regions to connect to the knowledge economy although other factors may prove difficult to overcome.

*Culture and Creativity as a Driver of Regional Development*

## **CO-WORKING SPACES AND WORKING COLLECTIVES IN THE CREATIVE INDUSTRIES; EVIDENCE FROM THE DESIGN SECTOR IN GREECE**

**Vasilis Avdikos, Panteio University, GREECE**

**Athanassios Kalogerisis, School of Spatial Planning and Development, Aristotle University of Thessaloniki, GREECE**

The recent economic crisis has changed rapidly the structure of creative economies. For instance, there is strong evidence of an increase of self-employment and employment in very small enterprises in most of the creative and cultural sectors, and a subsequent fall of employment in medium and large enterprises. Creative professionals (especially freelancers) were always characterized by precarious working conditions and high personal risks, due to the nature of project based work. However, in the last five years there is a considerable increase in the number of co-working spaces and working collectives in most of the creative sectors around Europe and the USA. These new collaborative working environments are highly influenced by the digitalization of the economy and attempt to act as an answer to precarity, as they seem to reduce the risks of creative professionals, and offer a plug-and-play collegiality, through new networks for collaboration, and a sense of community.

The paper draws data from a large survey (approx. 800 respondents) on the economic and working conditions in the design sector in Greece. The analysis divides freelance and self-employed population into two groups; those that are using co-working spaces and working collectives as means of reducing entrepreneurial risks and those that are working either from home or personal offices. The two groups are analyzed in terms of income, working conditions, networks of outsourcing and working satisfaction levels.

*Role of Institutions in Regional Development*

## **ASSESSING THE IMPACT OF 'INFORMAL GOVERNANCE' ON DEVOLUTION IN ENGLISH CITIES POST THE SCOTTISH REFERENDUM**

**Sarah Ayres, University of Bristol, UNITED KINGDOM**

The aim of this paper is to investigate the impact of informal governance on the decentralisation of power and resources to English cities post the Scottish referendum. Informal governance can be defined as a means of decision-making that is un-codified, non-institutional and where social relationships and webs of influence play crucial roles. Previous research by the author has shown that the global financial crisis and associated austerity measures have led to drastic public spending cuts in UK government departments and a reduced administrative capacity to manage central-local relations. One consequence has been the greater use of 'ad hoc' procedures and 'softer' processes for managing inter-governmental relations between Whitehall and cities. More fluid structures are viewed by Whitehall officials as more suited to deal the complexity and variability of localism and the problems of managing the English sub-national tier with diminished resources.

This research will examine the impact of these more informal governance arrangements on both the efficiency of decentralisation initiatives and its impact on democracy in English cities. Moreover, the research will examine whether these more informal structures and procedures are robust enough to support future plans for enhanced devolution post the Scottish referendum.

*Social Justice, Housing and Civil Society*

## **FREEDOM FOR AGENCY. THE CAPABILITY APPROACH AND THE PROCESS ASPECT OF LOCAL DEVELOPMENT**

**Zoltan Bajmocy, University of Szeged, HUNGARY**

**Judit Gebert, University of Szeged, HUNGARY**

According to the human development and capability approach people's ability to further their own ends and to bring about change is an inherent part of well-being. This implies that in the practice of local development not solely the results of development, but also the way leading there has great importance. The freedom to act as agents can be valued irrespective of its instrumental importance.

Present paper fits into an emerging stream of literature that approximates the human development and capability approach (CA) of Amartya Sen and the literature of regional and local development (rooted in regional science). Within this broader programme, this paper (1) specifically focuses on the process aspect of local development: citizens' ability to participate in urban planning procedures and to define and shape the framework in which participation and public deliberation occurs; (2) provides empirical evidence from a high income country, contrary to the majority of existing evidence stemming from low income settings.

The paper first approaches this issue theoretically and argues in favour of using the capability approach as a basis in local development. Then it demonstrates two applications based on cases from Hungary. The first application focuses on the construction of urban development plans and shows how the CA helps us to evaluate these planning procedures. We analyse and evaluate the "Stakeholder Reconciliation Plans" and the related documents of 23 Hungarian large cities (towns with the rights of counties) by using qualitative text analysis methodology. The second application focuses on the project level. The in-depth analysis of three development projects carried out in the city of Szeged is provided by stakeholder interviews and text analysis.

The CA helped us to recognize how the informational basis of the analysed development decisions was constructed. It draws attention to the fact, that the way considering values, interests and knowledge of certain stakeholders while neglecting others' has great importance. Beside the intrinsic value of participation, it also shapes the outcome of development: the ability to generate change that makes residents better off.

*Territorial Governance and Regional Leadership*

## **GOOD OR BAD? GOVERNANCE AND EU COHESION POLICY IN ROMANIA**

**Hunor Bajtalan, Babes-Bolyai University, ROMANIA**

Growing social and economic disparities, the overpopulation of the planet, climate change, as well as the ever deepening interrelations of the World confront today's societies with such forces and provocations that are reshaping the very foundations of our social and spatial organization. In these circumstance there is no surprise that notions like territoriality, resilience, especially on a smaller scale, on subnational, regional, place-based level has a frequent comeback not just in the academic sphere, but also in public policies and in the practice of territorial development. However any initiative, any policy to face the above mentioned challenges at the end of the day is formulated and implemented through the political, governmental framework of policy-making. In this perspective it has been long recognized that the existence of good governance and efficient institutions, as well as the predictability of governmental systems are prerequisites of successful development and policy implementation. Therefore it is understandable why in recent years the establishment of efficiency, economies of scale, the accommodation of diversity, as well as the strengthening of administrative capacity has become one of the top priorities of several countries and organizations, from which the EU doesn't constitute an exception.

Starting from this broader perspective the aim of this paper is to give an in-depth analysis about the relationship of governance and the implementation of EU Cohesion Policy in Romania. Approaching the end of the payment period of the 2007–2013 MFF (31. December 2015) we can conclude that Romania was among the worst performers in the implementation of EU Cohesion Policy. With an absorption rate of 53.3% – as of 28. January 2015 – is at the bottom of the list of EU MS, being a step ahead only to the newcomer Croatia. The existence of a highly centralized and bureaucratic administrative system with poor administrative capacity, added to this the issue of corruption, as well as the lack of appropriately qualified human resources can be regarded as the main bottlenecks in the implementation of EU Cohesion Policy. It is obvious that Romanian authorities faced some serious challenges and in this respect it is not a surprise at all that in the last few years, especially during the tight austerity budgets following the financial crisis they were obsessed with the question of non-refundable EU funds. As a result, from EU accession onwards the necessity to modernize the state administration by the implementation of a thorough administrative-territorial reform was frequently on the political agenda with varying intensity, in principle being supported by the large majority of the political spectrum. Yet unfortunately there were some serious contradictions in the intent and the content of the process itself. The paradox of the whole political discourse is that it revolved more around the ‘borders’ and ‘capitals’ of the new administrative units, and less around the actual rights, and functionality of these. Although for policy makers it was clear that the partial failure of the Cohesion Policy in Romania is not connected to the administrative configuration of the state, but rather to the organizational characteristics of public administrations, the existence of checks and balances, monitoring systems, as well as clear-cut decision making and management. The hereby presented paper will try to give a comprehensive summary of the implementation of Cohesion Policy in Romania, during the timeframe of the 2007-2013 MFF. The author will try to identify the main factors that led to the above presented situation. At the same time one of the key objectives of the inquiry is to debate whether the establishment of the administrative-territorial regions in Romania will have a positive effect on the implementation of Cohesion Policy.

*Role of Institutions in Regional Development*

**“SPECIAL ORGANIZATIONS” AND REGIONAL DEVELOPMENT PROCESSES OF “PRODUCTIVE TRANSFORMATION OF KNOWLEDGE” IN THE AGRI-FOOD INNOVATION CENTER TECNOGRANDA S.P.A. (CUNEO, ITALY)**

**Giacomo Balduzzi, Università di Pavia, ITALY**

**Michele Rostan, University of Pavia, ITALY**

The paper aims at underlining the key role played by extra-academic and autonomous organizations strongly connected with university institutions and researchers through formal and informal ties in the local and regional development. The emergence of a ‘third mission’ that universities carry out alongside their teaching and research activities has been widely acknowledged in recent decades and emphasized as an important driver of change, so much as a “second academic revolution”. These studies consider such an issue in terms of knowledge (or, mostly, “technology”) transfer and tend to concentrate their attention on university-industry collaborations. We suggest that this view, also looking at many empirical studies carried out over last decades, seems to be overly simplistic and unrealistic. The “knowledge transfer” paradigm must be replaced with the notion of “productive transformation of knowledge”. This new frame draws the role of university institutions in a multi-actors and multi-dimensional non-linear process, which stretches over time. So, it is difficult to understand it just analysing, for example, university-industry relations in a given area and time. It is necessary to extend the glance to a more complex institutional and organizational field, looking at other actors and organizations that may be relevant in enacting and operating the process.

Through a particular Italian case-study, we suggest to pay much more attention to “special organizations” in order better to understand the knowledge transformation processes within a complex set of institutional relationships. Special organizations are collective actors located midway in the knowledge transformation chain. They are something else both from academic institutions and firms. Organizations like the one this paper analyses can be understood as organizational *relé*, that is entities able to connect structures that normally are not connected. The productive transformation of knowledge involves different and complex activities: observation, sharing practices, methods and techniques, using and jointly transforming artefacts,

drawings, prototypes and other kind of objects, negotiating time, spaces and resources. On account of this, the productive transformation of knowledge requires not only the involvement of individual knowledge holders, but also the creation of adequate settings of interaction. Territory-based linkages can facilitate the process and provide the conditions for both individual and inter-organizational cooperation. Since the productive transformation of knowledge is a particular process based on the interactions of different actors, it requires specific resources, which are extremely context-dependent such as relations, cognitive sources, instruments, technics. This may suggest that the productive transformation process takes advantages from the various (physical and non-physical) dimensions of proximity: geographical, cognitive, organizational, social, cultural and institutional. Indeed such forms of proximity can facilitate the interaction and the exchange between both individual and collective actors. However, proximity as well as the desire for innovation are just preconditions. In order to get results, someone has to enact and implement the process.

The case study describes the role of a special organization, the “Tecnogrande” agri-food innovation centre operating in north-western Italy (Piemonte, near Cuneo), in the transformation of knowledge within a specific sector and local context providing an example of how inter-organizational relationships, tasks and resources are managed. The productive transformation of knowledge is a too complex and costly process to be implemented by a single individual. It requires an organization with enough resources, instruments, and legitimation. “Tecnogrande” is a research and innovation centre specialized in the agri-food industry. The organization is a relevant actor able to connect local and endogenous factors to the international and global dimensions, fostering regional development. Indeed, the company is strongly embedded in the institutional and socio-economic local and regional environment, historically dedicated to the food industry. Meanwhile, the organization carries out the function of local-global interface or gatekeeper since it manages a vast and complex system of relationships, not only with local firms and external firms, but also with technology suppliers, similar institutions operating in other countries, universities and research centres, contributing to innovation at the regional level.

#### *Regional Challenges in Health and Education*

### **SOCIAL MOBILITY IN AN ERA OF GROWING EDUCATION: TERRITORIAL PERSPECTIVES**

**Barbara Barabaschi, Catholic University, ITALY**

**Chiara Mussida, Catholic University, ITALY**

This paper analyzes the consequences of the increased education levels by adopting a gender and territorial perspective. In particular, assuming labour market insertion as a former requirement for social mobility and protection from adverse events in the life course, the study tries to answer the questions: “gender equality in educational attainments leads to better employment perspectives for women? What is the role of the country and region in which women live?” Those perspectives are measured by wage gender gap, sectorial segregation, country/regions. Again, in an era of educational expansion it is the higher level of education that count most for individual’s success in the economy?

The paper studies three countries and their regions, Italy, United Kingdom and Sweden, representing three different welfare regimes (conservative, liberal and social-democratic respectively), more or less sensitive to women employment (for example, characterized by work-life balance policies and other policies promoting women employment), along with different labor institutions and forms of regulations.

We use the European Union Labour Force Survey (EU LFS) which are very useful for our purposes as the survey is conducted in (almost) all Member States of the European Union by using the same concepts and definitions (harmonized methodology): this allows economic sound comparisons between the countries of interests. Our sample includes individuals between the age of 15 and 54 for the period 1983-2013.

The factors considered to investigate the labour market insertion are: education, wage, sector of economic activity, occupation (white- or blue-collar), characteristics of the job/contract, i.e. part-time/full-time and temporary/permanent contract, father’s education and occupation, region of residence, living in densely populated areas, marital status, family size, presence of children by age.

We examine the changing patterns of educational inequalities between countries/regions by comparing the trend of key demographic-economic indicators, especially those related to educational attainment (literacy rate, enrolments in primary, secondary and tertiary education). We estimate the role of various aspects of social origin, i.e. father's education and occupation, family size, on the educational attainment by estimating OLS regressions. This gives insights on the persistence of educational inequalities and on the role of social strata.

We also study the raw gender gap in educational attainment and we expect to find relevant differences across countries. We aim to examine those discrepancies primarily in two directions. First we analyse the economic participation and the employment opportunities by examining the occupations and subsequently the presence of segregation in mobility. Second, we decompose the gender gap in education with the aim of measuring the role of differences in the distribution of personal characteristics and in the remuneration of the same characteristics, i.e. the presence of women discrimination. Women, especially if low educated and living in depressed areas, are indeed frequently segregated in occupations characterized by lower career perspectives and therefore associated to atypical job contracts. Low educated women, therefore, might suffer more from discrimination and occupational segregation. Finally, our results also help understanding the relevant and negative impact of gender inequalities on the local economic development.

On this basis, the paper discusses the policies implications to foster gender equality in the labour market as in society as a whole. In detail, whether successful (and therefore taken as best practices), the policies implemented in some countries/regions might be adopted as well in less efficient countries/regions.

*Community Economic Development*

## **INDUSTRIAL RESTRUCTURING ACROSS ECONOMIC TRANSITION IN ROMANIA**

**Mirela Barbu, Kings College London, UNITED KINGDOM**  
**Michael Dunford, University of Sussex, UNITED KINGDOM**  
**Alexandru Tasnadi, Academy of Economic Studies, ROMANIA**

The Romanian geography of manufacturing has changed dramatically in the last two decades and the share of industrial sectors declined sharply. Conversely, there were strong increases for real estate, construction, trade and transport. Manufacturing was also influenced by these transformations. The drop in employment in large firms significantly outstripped the changes in the small and medium-sized firm sector. Apart from a short period of expansion in the clothing sector from 2000 to 2005, textile, clothing and leather industries (TCLIs) have seen falls in output, employment and profits after 2000.

This paper investigates the changing geographies of the production networks of Italian enterprises in TCLIs that have delocalized to Romania, the recent strategies for industrial upgrading put into place by Romanian subcontractors, and the impact of national policies promoting outward processing arrangements requested by western European industries in these sectors. All these evolutions are investigated in relation to the lengthy process of economic transition within which the increased importance of financial rent and the privatization of public assets play an important role.

*Labour Markets and Migration*

## **DO IMMIGRANTS DISPLACE RESIDENTS' JOBS? EMPIRICAL EVIDENCE FROM SWITZERLAND**

**Moreno Baruffini, Institute for Economic Research (IRE), Università della Svizzera italiana (USI), SWITZERLAND**  
**Rico Maggi, Institute for Economic Research (IRE), Università della Svizzera italiana, SWITZERLAND**

The consequences and implications of immigration on a receiving country's economy, particularly its labour market, are among the most controversial topics in the public debate of developed countries. This makes

immigration a lively debated topic: although there is no consensus in the existing literature about the overall effect on natives' employment, literature usually shows that immigrants have a modest effect on employment and wages of natives [Blau and Kahn, 2012]. Notwithstanding this evidence, the prevalent perception among inhabitants is that immigrants displace resident's jobs.

This holds particularly true for Switzerland where, during the last two decades, immigration policy has been in the spotlight of public agenda because of the deep change in migration policy but especially because Switzerland has experienced a substantial inflow of foreign employees in recent years. Indeed, with the agreement on the Free Movement of Persons (FMP) between Switzerland and the EU in 2002, Swiss migration policy has shifted progressively from government control of migration quotas to a more market-regulated approach of migration flows.

On the one hand, immigration from the member states of the European Union (EU) and the European Free Trade Association (EFTA) has been facilitated since the early 1990s and gradually liberated from the remaining restrictions. On the other hand, immigration from developed countries outside the EU and the EFTA has been strongly limited and immigration from the rest of the world restricted to exceptionally skilled professionals. The treaties governing the opening towards the EU and the EFTA had to pass a number of plebiscites, which has brought immigration policy on top of the political debate. Most of this debate revolved around the economic impact of unrestricted immigration: while many argued that the economy would benefit from the immigration of needed workers, the adversaries warned against losses for the domestic labour force. Finally, a federal popular initiative "against mass immigration", aiming to limit immigration through quotas, as it had been before the bilateral treaties between Switzerland and the EU, was accepted by a majority of the electorate and a majority of the cantons on 9 February 2014.

This has led to a distinctive situation: considering OECD countries, until 2014 the immigrant inflow in Switzerland was one of the biggest in the last years. As soon as immigration from the EU and the EFTA has been gradually liberated from any restrictions while immigration from other countries has been severely limited the composition of immigrant inflows changed. According to the literature the main driver of immigration to Switzerland is labor shortage: a substantial share of the immigrating employees have been highly skilled, which is in contrast to the situation analyzed in most previous studies of the labour market effects of immigration. Moreover, especially from 2011, the economic crisis in the South of Europe reinforced new forms of migration, such as temporary and circular migration. Some of these immigrants are low skilled and potentially compete for low paid jobs with natives or "older" immigrants who have been in Switzerland for longer.

This led to a mixed situation, where the economic impact of recent immigration waves is very different according to different regional labour markets or economic branches.

This paper therefore aims to study the immigration overall effect on natives' employment investigating the impact of immigrants and trans-border commuters on the unemployment/employment level of resident workers by comparing the labour market status of a resident worker in one year with his or her labor market status the next year [Cueni and Sheldon, 2011].

We use a sample of Swiss and foreign employees drawn from the Swiss Labour Force Survey (SLFS): the dependent variable is thus a dummy variable indicating whether the resident was still employed a year later or unemployed. We regress this variable for the 2010-2013 subsample (to be included in the sample a worker had to be employed almost once) on the share of immigrants and trans-border commuters in the same labour market in the first year controlling for other factors. We therefore adopt a Probit model, running a pooled model including all cases.

First results show only a slight significant immigration effect on the unemployment of residents. This relationship also varies according to regional employment conditions.

The highly qualified immigrants seem primarily to close gaps as complements, while the less skilled immigrants' competitive pressure increases in the market segments of low-skilled nationals.

Moreover, according to previous literature, immigration of high-skilled workers might have increased labour productivity in the economy. The positive externalities on native employment arising from such productivity effects of immigration are only indirectly considered in this study.

*ESPON Session: The European Territory in the Future*

## **WHAT COULD EUROPE LEARN FROM FRENCH NATIONAL AND REGIONAL TERRITORIAL FORESIGHT EXERCISES (AND VICE VERSA)?**

**Guy Baudelle, Université Rennes 2, FRANCE**

The aim of our presentation is to assess the possible contribution of the national and regional territorial foresight exercises from the example of France. More widely, the question is to evaluate how far the outcomes of various territorial institutions could feed not only the scenario building process carried on within the ESPON programmes but also possibly support the territorial visions and strategies carried on by policy makers throughout Europe.

At first glance, the ESPON programmes such as ET2050 are a privileged arena for exchanges between foresight experts from various countries so that we could expect an easy dissemination of the territorial scenarios and visions produced in national and regional contexts among the European scientists taking part in ESPON projects and thereby a diffusion to the stakeholders involved in planning in the associated countries. Indeed the contribution of researchers from several participating States should at least help to publicize the territorial scenarios developed in their respective countries.

However it is difficult to know to what extent the national and regional foresight exercises contribute to the discussions carried out within the ESPON program and in addition contribute to defining visions. The way the question is formulated – “What can Europe learn from national and regional efforts to consider long term territorial futures and in terms of visions, strategies and scenario building?” – seems to assume separate fields of reflection.

Indeed the first lesson we can regrettably draw from the territorial foresight works developed at various levels is that they often pay little interest to European stakes. The results of the ESPON-CADEC study about capitalisation and dissemination of ESPON concepts has shown a disappointing level of knowledge at the national and local levels of the main European concepts promoted on the European scale. The subnational level shows better answers, probably due to territorial cooperation within the INTERREG Strand B co-operation areas that inevitably lead the regional authorities and policy-makers to share common targets, discuss European strategic planning guidelines and concepts disseminated by ESPON and refer to documents such as ESDP or EU Territorial Agenda.

France is no exception in this regard: the transnational cooperation territories show a better level of knowledge of the main ESPON concepts and a higher capacity for the stakeholders to project themselves on an enlarged area which exceeds their usual regional and national boundaries. Spatial visions drawn within these programmes are considered a real progress. Regarding France, the Atlantic Arc is a good example of such a good pro-active integration of the European recommendations.

But in fact not only ESPON scenarios are widely unknown but the European territory is absent from most reports or appears at best as a distant reference framework. Admittedly the classical prospective works published by the DATAR in the 60s and 70s did not particularly focus on European issues. But some progress has been made in this respect since Europe was an inescapable horizon in the prospective analysis carried out in the 1990s. This was due to the irruption of the Blue Banana metaphor that was challenging the French will to remain a central area in Europe. Therefore the European neighbourhood and the possible unsafe trend to a polarized development moving towards the megalopolis and Central Europe was a constant background of the debate about regional and urban growth.

The analysis of “Territoires 2040”, the main territorial national foresight exercise supported by the former DATAR in 2010-2012, exhibits little European orientation in the issues being addressed, with some exceptions. The various “spatial systems” investigated barely refer to the European scale and almost never to ESPON results. For instance a central European concept and objective like polycentricity is now missing in the French documents. Many other indicators show low curiosity paid to European issues: that hexagonal confinement is a kind of regression.

Now if you consider the regional foresight works, you can notice that neighbouring countries and the European space as a whole are hardly ever considered. The presentation will show some cases where the European stakes are better integrated in the scenarios by looking at the examples of regional prospective exercises (Basse-Normandie, Rhône-Alpes, Brittany).

The reasons are both political and cultural. The presentation will try to elucidate this weak European orientation that probably explains why French scenarios on prospective websites dedicated to territorial foresight are rarely mentioned. For instance French Euroregions are often missing. Therefore France is clearly on the margin. Such a gap fundamentally questions the ESPON programme and some suggestions will be formulated to improve the circulation of foresight achievements between the European and other levels. This could result in a more interactive scenario building process.

*Labour Markets and Migration*

## **REGIONAL AND GENDER DIFFERENTIALS IN THE PERSISTENCE OF UNEMPLOYMENT: INITIAL CONDITIONS AND PATH DEPENDENCE**

**Maurizio Baussola, Università Cattolica Del Sacro Cuore, ITALY**

**Chiara Mussida, Università Cattolica del Sacro Cuore, ITALY**

The sharp increase in the unemployment rate during the recent economic downturn poses various issues for researchers and policy makers, including the role of structural versus cyclical factors in determining an upturn. In this framework, it is relevant to analyze old (but still relevant) issues that have been largely understated over the last decade: the role of regional and gender differentials.

It is only recently that the unemployment gender gaps at the regional level, i.e., the difference in male and female unemployment rates between regions, have again started to receive attention, after last being considered as relevant economic and policy issues in the 1970s and early 1980s.

Only since the second half of the 2000s has the regional and gender unemployment gaps regained the attention they deserve. The economic downturn also enhanced their relevance. Recent literature also focuses on international comparisons, highlighting different patterns in OECD economies. Some recent studies emphasize different unemployment gender gaps across regions in the European countries and the US using microdata collected from the European Community Household Panel Survey (ECHP) and the Current Population Survey (CPS). Those studies find that in countries where the gap is relatively high (e.g., the Mediterranean countries) - i.e., where the female unemployment rate is significantly higher than that of males in almost all regions - the unemployment problem primarily involves female unemployment. Typically, these countries also have very high youth unemployment rates. In addition, they found that in countries with higher female participation rates and subsequent higher levels of female labor market attachment, the unemployment gap is smaller (e.g., the Anglo-Saxon countries). However, they also emphasized the fact that in many European countries, in particular in southern Europe, this gap has increased despite a rise in the female participation rate in recent decades, thus suggesting that institutional factors can play a crucial role in determining such a persistent gap.

More recently, it has been shown that the gender and regional gaps have decreased even more because of the effect of the economic recession, which has primarily affected the male component of the labor force and the firms in the most developed regions.



Given this framework, we analyze the presence and persistence of regional and gender unemployment gaps in Italy during the period 2004-2013. Our analysis is relevant because we offer a geographically detailed investigation which is a quite relevant structural feature of the Italian labour market. In addition, given that the period examined encompasses the economic recession, we are also able to assess its impact on those gaps and on their persistence.

Our analysis draws on the Italian Labor Force Surveys (LFS) data. We estimate dynamic ordered probit models to accounting for state dependence (we focus especially on unemployment persistence), unobserved heterogeneity and initial conditions, i.e. the initial labour market state of the individual. In order to take into account both for regional and gender gaps in unemployment, and also in the other labour market states, we control for regional dummies (NUTS2 level) and we carry out the estimates by gender.

*Comparative Policy Approaches in the Regional Development of the Low Carbon Vehicle Sector*

## **RURAL TRANSPORT AND THE MOVE TO A LOW CARBON MOBILITY**

**Jason Begley, Centre for Business in Society (CBiS), UNITED KINGDOM**

This paper considers the implications of low carbon transport policy for rural households in the UK. Broadly speaking rural households have, on average, about 0.3 more cars per household than urban households due to greater dependency on these vehicles for travel. Consequently rural households rely more on the car, own more cars, make more journeys over longer distances and spend more per week on motoring than their urban counterparts. Moreover, rural motorists have very different driving experiences to their urban counterparts. The promotion of low carbon motoring in particular, therefore, has important consequences for rural based motorists. However, this area of study remains a comparatively under-researched one. This paper attempts to offer some insights into the challenges facing rural motorists by; firstly examining low carbon motoring and changing patterns of travel; secondly categorising rural motorists; thirdly explaining how these categories of motorists will be impacted by the move to low carbon motoring. The outcomes of these finding will have important repercussions for transport policy at regional and national level.

*Urban Tourism (Disentangling the 'Urban Character' of City Tourism)*

## **CITY TOURISM INTERSECTING FASHION VALUE CHAINS: TOWARDS 'TOURISM DESTINATION STRATEGIES' OF FASHION STAKEHOLDERS. THE CASE OF FLORENCE**

**Nicola Bellini, Groupe Sup de Co La Rochelle, FRANCE**

**Cecilia Pasquinelli, Gran Sasso Science Institute, L'Aquila, ITALY**

The city of Florence is a strong brand of art and culture, it has seen increasing tourist flows of international presence over the last ten years, and is one of the most visited art cities in Italy. Florence is the economic hub of Tuscany region (central Italy) whose cultural product and service exportation (which includes creative industries, high creativity, design and style productions, Made in Italy) is the highest among the Italian regions according to a recent report on the Italian economy. Especially, the Florentine economy is key component of the Italian fashion system, in particular for the production of luxury leather goods and generally for fashion and lifestyle products such as clothing, jewellery and home design. Ferragamo, Gucci, Ermanno Scervino and Emilio Pucci are only few of the fashion brands deeply rooted in the city. One key characteristic of the Florentine fashion system is the presence of a complete fashion value chain owing to the co-presence of a variety of firms, research centres, institutions and organizations active in design, manufacturing (handicraft and industrial production), sales and marketing.

This paper argues that fashion value chains in Florence are enriched by the multiple intersections that urban tourisms establish with all the different moments of value creation. This is particularly relevant in a time when global businesses need to design innovative adaptive strategies to changing consumer values privileging

experiences and an experiential dimension of consumption over material purchase. Not surprisingly much evidence suggests that luxury brands purchase takes place during traveling.

The analysis of the case of Florence allows to trace the intersections of a variety of urban tourism models with fashion value chains by highlighting: (1) Traveling for professional know-how (intersection of fashion design with the international higher education cluster rooted in Florence); (2) Traveling to see the 'behind the scene' of fashion (intersection of manufacturing with travelers' discover of the fashion world of production); (3) Traveling for doing business (intersection of sales and marketing with business tourism for fashion events); (4) Traveling for experiential consumption (intersection of sales and marketing with cultural tourism blending fashion edutainment with shopping).

This case analysis suggests a need for understanding urban tourism as integrated with the multiple components of an urban economy. Innovative tourist models may emerge from intersections with the different economic realities in the city, while traveling may represent a driver for local firms competitiveness in the frame of an experiential turn of global economy. Second, the coexistence and integration of different tourism within the urban context is evident in the case of Florence which, remaining strongly attractive as city of art, offers an exceptional frame to develop different tourism models. These may trigger spillovers that are not only economic but also cultural and managerial. That is, city tourism may represent a catalyst of innovation for entrepreneurial practices in an enlarging network of "tourist" stakeholders among whom connections, relations and associational efforts may be activated. However, several issues connected to an intensive touristification of the urban economy, the coexistence of different tourism and the co-presence of these and other industries in the urban space imply a need for an urban strategy and a capacity to envision and manage multiple business models emerging in the city and in need to find (physical) space, resources and support to develop their potential.

*Culture and Creativity as a Driver of Regional Development*

## **RE-INVENTING CERAMICS REGIONS AGENCIES AND CREATIVE INNOVATIONS IN "SANITARY WARE" INDUSTRIES**

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Freeman (1982) observes that innovation is a two-sided or coupling activity. It involves both the recognition of a need or a potential market for a new product or process, and technical knowledge that may or may not be new. Innovation involving experimental development and design, trial production and marketing requires a process of "matching" technical possibilities and market opportunities (Warren et al., 2000). In today's competitive environment, it is argued that design is becoming increasingly important, and that good design does not emerge by accident but as the result of a managed process (Bruce and Bessant, 2002). This involves giving the product "particular attributes of appearance, performance, ease of use, method of manufacture", with not only the creative effort, but also a whole series of technical, strategic, and market aspects (Chiva and Alegre, 2007).

This phenomena being rooted in a specific environment, a number of authors demonstrated that local skills, labour markets, specialised services, mutual trust and personal relationships - among other factors - have contributed to the industrial growth of regions (Molina-Morales, 2002). As suggested by Storper (1997, p. 26) "the rise and fall of new products and production processes takes place in territories, and depends to a great extent on their capacities for specific types of innovation". Scholars have been recently concerned with how these clusters "emerge, take hold and transform regional economies" (Feldman et al, 2005) and why certain regions are able to renew and sustain growth whilst others decline, and in so doing revisited key evolutionary themes such as path dependency, relatedness and regional resilience (Boschma and Frenken 2006; Boschma and Martin 2007, Martin, 2010).

For instance Martin (2010) proposes the idea of “path as process” in contrast with an exogenously-driven or ‘accidental’ path creation, allowing for a wider repertoire of options in the evolution of technologies, industries and regional economies, including the upgrading of a mature path, diversification through exploiting synergies between an existing path and a new one, or new path creation. Path creation views restates the role of entrepreneurs in shaping and interacting with their environment, altering existing social practices and artefacts by ‘mindfully deviating’ from existing paths (Garud and Karnoe, 2001). For Garud and Karnøe (2001), agency is distributed across a multiplicity of actors with different interpretive frameworks being involved in different ways at different stages and embedded in networks and emerging technological pathways.

In order to explore different pathways underpinning the transition of traditional clusters to more innovative one, we propose to focus our study on the sanitary ware industries. We will compare on one side the two Japanese leaders TOTO and INAX – respectively based in Kita-Kyushu and near Nagoya - and on the other side three large European companies - namely Roca in Barcelona, Jacob Delafon in France and Sanitec group in Italy. Those various contexts, we will emphasise that technological innovation and softer forms of innovation (including design) were variously combined, because of entrepreneurial practices, which ultimately drove the transition of traditional clusters to different patterns.

This industry represents an interesting playground for our research because of both the characteristics of the goods (necessity vs luxury good; export resistant; various technological and knowledge pattern; energy intensive, cultural components of demands) and the geographic concentration of diverse ceramic activities. In addition, sanitary ware crystallises two global challenges: sustainable development and health issues whether in developing countries or in wealthier parts of the world. Ultimately, this manufacturing sector in decline may inform the transitions paths of other sectors by shedding lights on the role endogenous/exogenous changes, entrepreneurial influences, path dependence and innovations dynamics.

*Innovation and Knowledge Economies*

## **WHAT MAKES THE DIFFERENCE? ANALYSING THE REGIONAL COMPONENT OF THE INFLUENCE OF UNIVERSITY’S STRUCTURAL CONFIGURATION ON ITS PERFORMANCE**

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Following an recent explosion of interest on the role of universities in regional development, there is a tendency to assert that contributing to regional development represents a (novel) third mission for universities alongside their traditional first (teaching) and second (research) missions. In the context of economic development, universities’ general-abstract roles in creating, transmitting, circulating, extended and phasing out knowledge has become linked with their capacity to fix that knowledge in specific ways and allow its exploitation to create particular regional development benefits. There is therefore increasing interest in optimising these roles, maximising universities’ specific regional contributions without undermining their ability to pursue independent scholarship and research in networks that extend beyond the region.

But missions cannot always seamlessly fit together, particularly when this demands that universities strike a balance between making their knowledge most immediately useful for users and in serving their core teaching and research goals. This highlights the tensions between the general and specific aspects of universities’ missions, between potential to build regional development activities and fitting them harmoniously into core university activities. Engaging with non-academic actors can create prima facie problems and tensions for a university , and we contend that more attention needs to be paid to how universities structure themselves to balance these tensions in delivering regional benefits. To date research into this problematic has split between small-scale case studies of particular organisational forms alongside quantitative analyses of which kinds of universities produce regional outputs.

We seek to bring quantitative clarity to this issue of universities’ internal diversity by focusing on universities’ structural and policy configuration for engagement. We conceptualise these in terms of (a) formal management choices to promote regional engagement, such as the steering core, related to the leadership and strategy of each university; (b) the administrative machinery, rules, procedures and incentives that exist at

institutional level to impulse knowledge transfer activities and social engagement at regional level; (c) the internal coupling, internal structures or departments for specific connection mechanisms with non-academic agents the support structures; and (d) academic heartland, covering collective specificities of individual academics engaged with regional agents at different levels.

Our overarching question is how universities' internal organisational dynamics and structural configurations affect the production of regional outputs, according to two difficult models of university outputs (roughly corresponding to the breadth of regional mission envisaged by the university for itself): the entrepreneurial university and the regional innovation system university (RISU). The entrepreneurial university model claims universities promote regional development by engaging in patenting, licensing and academic spin-off activities, while the RISU model considers a broader spectrum of university activities, including contract research, research collaborations and informal industrial networking.

We answer this using a quantitative analysis drawing on the UK's HE-BCI survey of university engagement activities. Our analyses uses structural equation modelling to explore how these four kinds of internal structures affect the production of third mission outputs (EU vs. RISU). Our empirical results show the importance of the internal organizational configuration analysed, being the internal coupling the construct that further explains the diversity of UK university's structures. Nevertheless, the configuration of internal coupling varies between the EU and the RIS model: while in the first is composed only by the in-house license office/department, in the RIS model this department is combined also with other intermediary structures, such as those supporting the interaction with business and community, to facilitate and guarantee the successful transfer of technology to industry. In relation to the influence of internal configuration on university outputs, the steering core and the administrative machinery influence them in both the EU and the RIS university model, the latest being specifically relevant at the regional level (related to the importance of proximity where universities magnify the benefits of short distances). Internal coupling is specifically negatively influencing outputs in the EU model, a surprising result given the importance of intermediary mechanisms as the technology transfer offices (TTOs) to overcome communication barriers and effectively link academic scientist and those who could potentially commercialise research under this model. While policy makers and university managers are often quite optimistic about the impact of TTO in fostering technology transfer into the region, results presented here are in accordance with those that evidence their superfluous and counterproductive activities. Lastly, our results also suggest that more researchers (academic heartland) involved in academic engagement are not translated into an increment of performance in either university model.

Our paper demonstrates firstly that structural university configuration affects the ways in which universities produce their regional outputs, and that it is useful to analyse how other university models (besides EU vs. RISU) create regional benefits. Arguably more importantly, our results demonstrate empirically that our conceptual distinction represents a promising theoretical avenue for further exploration. Finally, we argue that given this structural difference, policies makers should consider how to tailor regional engagement policies to stimulate not merely the delivery of outputs, but also support the structural configurations best suited for their delivery.

*Territorial Governance and Regional Leadership*

## **LEADERSHIP AND SYSTEMS OF GOVERNANCE: THE CONSTRAINTS ON THE SCOPE FOR LEADERSHIP OF PLACE-BASED DEVELOPMENT IN SUB-NATIONAL TERRITORIES**

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The interplay of global-local processes is reconfiguring the nature of regions and the practice of regional development around the world. A narrative on English sub-national development, operating within a system of governance in transition, provides the empirical opportunity to explore in conceptual terms some enabling/constraining mechanisms crucial to the capacity for place-based leadership, which are not always immediately apparent. Recently initiated public-private-partnerships, purporting to transmit a place-based

approach to development, are analyzed, to help construe the role of sub-national institutional structures in the leadership of city and regional development. A model is postulated that connects leadership to centralist/localist systems of governance in exploring the capacity for leadership and the scope for decision-making in sub-national territories benefiting from variable systems of governance. Distinguishing between vertical and horizontal dimensions of governance, the research articulates some of the defining characteristics of controlling mechanisms of the system of governance, which, it is argued, shape the degree of autonomy of leadership in sub-national terrains. A research agenda is proffered to guide analyses of whether what can be seen as permissive or acceptable controlling mechanisms strengthen or weaken the scope for leadership.

*Re-assessing Rural Areas: Approaching the Challenges for new "Ruralities"*

## **IN-BETWEEN RURAL LIFE MODES AND URBAN LIFE STYLES – PRACTICES AND MEANINGS CONNECTED TO USE OF FOREST LANDSCAPES IN A SWEDISH FOREST REGION**

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This paper aims at discussing the changing meanings of practices connected to the life and dwelling in a sparsely populated Swedish forest region in central Scandinavia. Focus will remain on practices in forest landscapes that could be described as to rest on a fringe between livelihood and leisure, such as hunting and berry picking activities. We argue that even though such activities today are considered and performed as leisure activities, they are still of value as complements in the households for urban second home owners as well as for locals. Living in a modern consumption society could also for some people be a search for spaces for experiencing qualitative and complementary aspects of life, such as senses of freedom, authenticity and control, characteristics often connected to forest regions. Drawing on empirical studies (qualitative interviews with different types of landscape users) as well as a regional survey on outdoor recreation and mushroom and berry picking, we describe and analyze the continuations and transformations of those practices and meanings. Theoretically the empirical differences we have found can be understood as reflecting changing ways of life related to societal changes and changing socialization processes according to both structural conditions (lifemodes) and individual choices (lifestyles). Humans tend today to use landscapes to reconnect to nature(s) and former rural ties, partly as symbolic enactments. This is sometimes described as postmodern expressions and part of a "new rurality", where the boundaries between urban and rural have become blurred and concepts of distinct lifemodes and lifestyles are increasingly contested.

*Creative Atmosphere in Cultural Industries: Clusters, Networks and Intersectoral Linkages*

## **BEYOND CULTURAL DISTRICTS: THE ROLE OF CREATIVE ATMOSPHERE IN CULTURAL PRODUCTION**

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Theoretical background and purpose of the paper: Creativity is at the core of many human activities. The creative process is fundamental to develop new ideas, goods and services that have social, cultural and economic value. Although it is very difficult to define a notion of creativity, this term has recently become very popular within the academic, public policy and business communities. Terms like "creative industries", "creative economy" and "creative class" are increasingly being adopted in academic articles, international organizations' agendas and policy-makers' speeches (see for example, Florida, 2002; UNCTAD, 2008). Creativity is embraced in particular in local development strategies. The key argument is that as soon as intangible assets - such as ideas, skills, knowledge and information - are perceived to become relevant for societies, creativity may have a driving role for enhancing economic outcomes (Howkins, 2001). At the same time, creativity in the arts and cultural expression is perceived as a paramount source for fostering and nurturing cultural vitality in local communities and the social quality of life (Adams and Goldbard, 2005).

Likewise, culture can be a systemic activator of creativity and innovation, increasing the propensity of people to invest in their cognitive skills and knowledge (Sacco and Segre, 2009). Despite the great attention on these intangible resources, it has been so far quite difficult to provide comprehensive theoretical models that satisfactorily explain why and how at a given time of history or in certain cities or regions culture-based creativity springs so prominently to engender the highest peaks of cultural production, both quantitatively and qualitatively. At the same time, little is known about the factors and dynamics that bring about a decay of such heights in the creative atmosphere and the consequent cultural production.

Methodology and case studies: Following the notion of creative field introduced in the literature by the economic geographer Allen J. Scott, in this paper we propose a new analytical framework based on the appearing of a creative atmosphere in a local setting. Further developing Bertacchini and Santagata (2012), in order to better understand the mechanisms producing creative atmosphere a stylized pattern of cultural production will be discussed. In short, according to our model, the local production – and the local development – is the outcome of the endeavor of the three main types of players involved:

1. Culture Factories,
2. Local Systems of cultural industries,
3. Micro-Business Services for cultural industries.

We however argue that the presence of culture factories (i.e. key players and hubs in the cultural economy like publishers, fashion firms, a great museum, movies and music producers, etc.), local system of cultural industries (i.e. medium and small sized firms that often represent the backbone of the cultural economy of a place) and micro-business services (i.e. small independent production companies and service providers that support both intangible and tangible components of cultural production) is not per se a sufficient condition for local development. In order to become a dominant center in the national and international landscape, a creative atmosphere must permeate the productive milieu. The creative atmosphere thus represents the fourth building block for a comprehensive model of local development based on cultural industries that goes beyond the notion of cultural districts. Culture-based local development is the result of the interaction of the four elements. As the creative atmosphere represents the quality and intensity of relations, understanding the network structure of local systems of cultural production is particularly relevant. Networks of specialized and complementary producers, together with their associated labor markets, tend to generate flows of positive externalities captured through both the agglomerative trends of new firms in the local economy or expanding the network with the creation of new links to external actors and markets, as we tested in the case studies of the Region of Piedmont and of the Province of Ferrara, in Italy.

Conclusion and policy implications: The theoretical framework studied in this paper supports scholars and decision makers in the identification of the main actors involved in cultural production, focusing also on the structure and quality of their connections. The framework is suitable also for developing network-based methodologies to collect empirical evidence on the complex dimensions involved in local development.

*Tourism and Regional Development*

## **THEY WERE WRONG! REVISITING A THEORY OF ROLE OF CASINOS IN REGIONAL DEVELOPMENT**

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**Borut Rončević, School of Advanced Social Studies, SLOVENIA**

Liberalization of gambling has been taking place on the global level since the end of the 1960s. More and more localities, regions or countries decided to take a piece of this relatively high-value-added tourism. However, this does not mean that liberalization of gambling legislation has been perceived with enthusiasm. On the contrary, most liberalization attempts have been accompanied with heated public and expert discussions on benefits and costs of gambling, which are usually simplistic and often disregard quantitative data and inherent causal complexity.

In explaining relationship between economic benefits and social costs, gambling studies authors have traditionally relied on Eadington's theory on types of casino operations and their impact on this ratio. In his theory Eadington developed classification with six types of gambling operations, ranging from large destination resorts like those in Macau, Las Vegas or Atlantic City oriented to incoming well-off gambling tourists on one side, to tiny gambling operations catering mainly to often impoverished local populations. Eadington claims that in the case of larger types of casino operations economic benefits for the region by far outweigh their social costs, while those oriented to local population are not only economically less viable, but are also causing disproportionately high social cost.

Eadington's theory is widely accepted and is also in line with the common sense. However, it has up to date not been scientifically tested by using systematically collected empirical data. Our research investigates relationship between types of casino operations that are prevalent in a specific regional setting on one hand and ratio between economic benefits to the region and social costs on the other. Additionally, we are investigating the causal mechanisms leading to different outcomes. For that purpose we have collected data and developed relevant indicators for most relevant countries with legalized casino-type gambling. We are conducting comparative analysis by application of fuzzy-set comparative analysis (fsQCA). This method is the most appropriate to tackle our research problem, as it allows us to combine qualitative and quantitative data. Furthermore, it allows the analysis of necessary and sufficient conditions of a specific outcome and it also allows testing a variety of causal combinations.

Our results show that Eadington's theory is not correct; the type of prevailing gambling operation is neither necessary nor sufficient condition for the favourable ratio between benefits and costs of gambling. Instead, our investigation revealed that socio-cultural factors play a far more important role, via the presence of favourable attitudes towards reasonable risk and risk-taking.

*What Place for Climate Resilient Regions? Lessons Past, Present and Possible Future Trends*

## **CLIMATE ADAPTATION AND RESILIENCE PLANNING WITHIN THE U.S. GREAT LAKES REGION: A CASE STUDY OF TWO MICHIGAN COMMUNITIES**

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**Claire Bode, Michigan State University, UNITED STATES**

**Mark Wilson, Michigan State University, UNITED STATES**

This paper exams the role of two governance actors, Michigan State University Extension and the Great Lakes Sciences + Assessment, who collaborated to develop a model process that resulted in stakeholder-driven climate adaptation and resilience plans for two Michigan regions. In addition, both regions, one in the Upper Peninsula and one in the Southwest Lower Peninsula, border a Great Lake and have local economies partially dependent on tourism, creating a strong link between economic and climate resilience regional policy. The process included two community-wide meetings where resident concerns and questions about climate change were identified, discussed, and prioritized; a community vulnerability assessment self-administered by local government officials; interviews with technical experts in the community; and creation of GIS maps that focused on climate vulnerabilities. Cultural differences between the two communities influenced how the community meetings unfolded. As a result, very different perceptions and attitudes about climate change surfaced during the meetings: those held in the Upper Peninsula attracted participants who appeared united in their alarm about climate change, while the meetings in the Southwest attracted a large group of citizens who were dismissive of climate science. In both communities, the end products—a report reflecting community priorities and specific recommendations for adaptation measures, as well as the GIS maps—have been implemented into long-term regional planning documents. The paper also examines the impacts the process had on regional policy to address climate adaptation and resilience concerns. The project was funded in part by a grant from the U.S. National Oceanic and Atmospheric Administration (NOAA).

## **THE DEVELOPMENT OF AN ONLINE TOOL TO GENERATE NEW FORMS OF SUPPORT FOR NATURE AREAS: EXPLORING THE USE OF VALUES FOR THE SEGMENTATION OF NATURE FANS**

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**Frans Sijtsma, University of Groningen, THE NETHERLANDS**

The overall aim of the research project 'Sympathy for the Commons' is to investigate whether the strong appreciation of individuals for specific nature areas can be used to find new ways of community support and funding for these nature areas. We want to do this by means of building online communities around nature areas. The focus of our research project is on discovering effective ways of generating financial and other support from these communities. The project fits within a more general search for new links between ecology and economy. Is it possible to develop new forms of involvement of stakeholders? Can new coalitions be formed to support biodiversity? What are the possibilities for new financing mechanisms to further support biodiversity? These are questions which are now very topical both among policy makers and nature conservation organisations, as well as within the scientific field. Therefore this research project aims at making a scientific contribution, but also at delivering practically applicable tools and insights.

We assume that a considerable share of the members of these new coalitions to support biodiversity could have an urban origin. There is growing evidence for the relationship that exists between green areas and wellbeing, also in an urban context. And while there is an increasing attention in the literature for the use of urban green space within cities, in previous studies we have also found empirical evidence for strong ties that exist between urban residents and natural places located further away from the city. Results from a survey in the Netherlands showed Amsterdam residents' high appreciation of a wide range of natural places situated across the Netherlands, in addition to their attachment to local and regional green places.

The starting point for our research project is the Hotspotmonitor ([www.hotspotmonitor.eu](http://www.hotspotmonitor.eu)), an internet-based survey tool in which people mark their favourite natural places on a map, on a local, regional, national level and world level. Until now, around 13.000 people have marked their favourite natural places in this way. In our current research project we want to take a next step. We have developed an online tool (Hotspot +) in which people, after having filled in the Hotspotmonitor, have the opportunity to become a member of an online community around these favourite natural places. They can share their ideas about their favourite area and get in touch with other fans of the area. We suggest new nature areas to them based on their markers on the map and their personal profile and they can view and collect photo's of their favourite natural places. Later on we also want to experiment with crowdfunding for specific projects in nature areas.

The aim of this paper is to explore how to use values people have in life for creating a segmentation of the nature fans using our tool. We think that an important issue with regard to financing nature conservation is the lack of information about who are the fans of nature, in what may be seen in market terms as the 'customers' of nature. With regard to nature, the information needed to answer the question: who appreciates which nature areas and why? is largely missing. In marketing, it has become fairly common to use lifestyle variables as a supplement to socio-demographic characteristics in the prediction of preferences. One of the ways to operationalize lifestyle is by using values. We have based the value question in our survey on a short version of Schwartz Personal Values Scale (SVS) used in previous studies. In the paper we want to explore how these values can be used to develop a segmentation of fans of nature areas. This could also be useful for the development of the online tool itself because it enables a more targeted approach of the users.



**FOR A CRITICAL APPROACH OF THE GOVERNANCE OF CORE-PERIPHERY RELATIONS IN CENTRAL AND EASTERN EUROPE**

**Cyril Blondel, University of Tartu, ESTONIA**

In the last decade, despite European regional policy supposedly having heavily supported territorial cohesion, regional polarisation has increased in economic terms, in particular (but not only) in CEE. When cores, most of the time capital/metropolitan regions, have shown an impressive increase in their GDP, peripheries economic performances appear as much more limited (Blažek and Macešková 2010). Nevertheless, most of these analyses have concentrated on the economic consequences of peripheralisation at the national level, and have mainly mobilised market-oriented indicators (GDP, GDP/head). Only little research, so far, have adopted a comprehensive approach of the social and political production of core-periphery relations, especially in the context of CEE (Ehrlich, Kriszan, and Lang 2012).

This paper offers a theoretical (critical and relational) reflection to deepen the understanding of political and communicative dimensions of peripheralisation. I defend first that the widely used concept of governance may be useful to that extent, but only if critically mobilised. An epistemological break would allow to get rid of the dominant conceptualisations of multi-level or good governance, supposedly neutral but rather normative and ideological (neoliberal). Reaffirming territorial governance as a collective negotiation process is necessary for those who seek to understand the socio-political dimension of peripheralisation. Thus, it is possible to critically assess the potential contribution of the Europeanised governance of core-periphery relations in CEE to the reinforcement of pre-existing polarisations.

To do so, I advocate for more attention to be focused on symbolism and dominance/resistance relations. Rather than reproducing clichés on periphery, we should approach them as spaces of culturally contextual and politically contingent peripheralities. (1) It means that peripheralisation has very much to do with the construction and the mobilisation of spatial representations in societal and political discourses. These images are most of the time reductive for the peripheries and over-enhancing the cores. The political mobilisation of these images as a precondition of public policy contributes to make it a tool of reinforcement, rather than reduction, of peripheralisation. (2) It means also that peripheralisation has very much to do with power and capacity (of cores and peripheries actors). In an increasingly neoliberal environment, what is the real political and social capacity of local, national and European actors to deal with peripheralisation and deperipheralisation? In a relational perspective, I advocate that peripheries should not only be seen as a peripheral problem under the only responsibility (and incapacity) of the peripheries themselves. It is very much necessary to see peripheralisation as a socio-political (unequal but permanent) process that, so far, tends to develop indicators and policies that favour cores and ignore peripheries' specificities and strengths.

*Spatial Planning and Infrastructure*

**AUCKLAND AND MILAN: SHAPING CITY-REGIONS FOR SUSTAINABILITY AND RESILIENCE**

**Dushko Bogunovich, Unitec Institute of Technology, NEW ZEALAND**

This paper addresses the conference question 'What tools can strengthen the capacity of regions and cities to adapt to all changes and to increase the resilience of areas?' 'Tools' are understood very broadly and range from officially declared values and goals in strategic policy documents, to spatial planning methodologies, to infrastructure solutions selected for implementation in the actual physical development of the city.

The paper is based on an initial comparative investigation of two very different cities – Milan and Auckland – in order to better highlight the similarities and differences between them in values, priorities, approaches, solutions and prospective future outcomes.

The two cases are classified as 'city-regions' rather than 'cities' or 'metropolitan areas' in order to acknowledge the lack of clarity in the contemporary urban landscape about where the city stops and the

countryside begins, and to stress the vital importance of an integrated view of the city and its region in the quest for environmental sustainability and community resilience.

The key propositions of the paper are that: (i) global warming is the biggest issue cities face in the 21st century; (ii) adaptation, with the associated resilience agenda, is now more important than mitigation, with the associated sustainability agenda; (iii) urban form – especially the shape of the urbanised territory and the density of urban development – needs to be regulated, but there are limits to the local government control; (iv) technology is a key driver of urban growth and a wise government will use it as an ally in its attempt to regulate urban growth, rather than letting it be a loose centrifugal force.

This final point is about the need to radically rethink our conventional 19th and 20th century paradigm of urban infrastructure. It typically consists of large, heavy, centralized, energy-guzzling municipal networks. We must commence a worldwide transition to smaller, smarter, cleaner, locally powered and off-the-grid technologies of power, water, waste and telecommunication.

For this transition to take place at the global scale, and fast enough in the face of advancing climate change, radical changes ought to happen in the value systems, legislative regimes, and institutional bodies which govern the modern city-region. In principle, these changes might be the same for Milan and Auckland despite their different geographies, histories and economies. More or less, the same applies to the life-style and behavioural modifications, and the design and technologies that enable them. However, we should expect the spatial configurations and general engineering solutions for the linear city-region Auckland to be quite different from those for the radial-concentric city-region Milan.

*Labour Markets and Migration*

## **CRITICAL ISSUES OF DECENTRALIZED JOB PLACEMENT SERVICES: CASE-STUDY OF VICENZA PROVINCE**

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**Giorgia Bressan, DTG, University of Padua, ITALY**

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The delivery of active labour policies that aim to integrate broader parts of the population into the labour market has become a rather fashionable trend of welfare reform processes in the European Union. Active policies do not only consist of the introduction of new measures in existing system, but imply the establishment of new governance patterns. Since top-down policies resulted to be ineffective for the implementation of the new content of social policy programs, many national governments have modified policy making and policy implementation processes by granting, with various extent, powers and responsibilities to sub-national entities and private actors (van Berkel and Borghi, 2007). A rescaling of the state brings benefits and drawbacks (López-Santana and Moyer, 2012): it allows a more flexible approach to the specific features of the local context, but at the same time it can generate governance complexity and fragmentation, characterized by a relevant overlap of roles and efforts. Beside the providers of activation policies, labour markets are populated by a vast array of intermediaries that have a relevant role in shaping regional labour market adjustments by providing network ties between employers and workers (Benner, 2003). In fact, the success of job seekers in pursuing employment opportunities depends on various factors which include the recruitment practices and attitudes of employers and local labour market conditions (Gore, 2005). Locally based employment interventions should not consider the problem of social inclusion in isolation, but rather be sensitive to the overall economic environment in which the beneficiaries of supply-side measures are embedded (North et al., 2009).

The paper seeks to engage with debates about the decentralization of employment policies. In particular, it explores the job placement initiatives in a specific decentralized setting by unpacking the role and relations amongst the various stakeholders of the local labour market. The contribution of the paper lays in providing empirical insights into the organization of public employment services in the province of Vicenza, Italy. In that area, that until the recent past was fully employed, local economy is undergoing a process of severe

restructuring that is raising recruitment difficulties, mainly due to skill gaps. These issues are now directly faced by the local government. In fact, the Italian legislator has devolved active labour market policies powers to the Regions, which are now exercising their competencies with very limited intervention from the centre. In particular, the Veneto Region, of which the province of Vicenza is one of the seven administrative divisions, promotes the cooperation between public employment services and private agencies in the delivery of active services, based on a certification procedure of private actors. This context thus represents an interesting example of organisation of job placement services.

The study is part of a research project funded by the Veneto Region in 2014, and is aimed at understanding the critical issues related to a localized approach to employment policies, and examining possible implications for regional or national policies. It is based on a reconstruction of the main players in the employment services system of the Province of Vicenza, their role and processes, and their coordination mechanisms. A particular attention is given to the information flows that occur inside the system, and to the mechanisms and tools that should support such flows. The study is based on direct interviews with the main actors of the system, on the analysis of support systems and services (e.g. databases, job placement portals, etc.), and of available documents.

*Labour Markets and Migration*

## **ECONOMIC LINKAGES BETWEEN URBAN AND RURAL REGIONS**

**Gary Bosworth, University of Lincoln, UNITED KINGDOM**

**Viktor Venhorst, University of Groningen, THE NETHERLANDS**

The aim of this paper is to develop a model to explain the linkages between urban and rural regions in terms of their relative labour market performances, cost of living and residential preferences, commuting and migration. The paper takes Overman et al's (2010) model of a two region economy as a starting point for conceptual analysis as it offers the potential to introduce economic modelling into this otherwise conceptual debate about the interdependence of urban and rural space. Overman et al. are essentially modelling urban regions but complex interdependencies also exist between urban and rural regions where a binary rural-urban divide is a "fundamental oversimplification" (Partidge et al., 2007, p128). Nevertheless, understanding linkages between predominantly urban or predominantly rural regions remains critical to a wider understanding of the potential for rural development within a hyper-mobile (Urry, 2000) economy that does not recognise boundaries between urban and rural.

To understand these inter-relationships from a labour market perspective, we adapt Overman et al's model to consider two regions U (urban) and R (rural). In essence, we want to discover (i) whether the model can apply to an urban and rural region and if so, (ii) what it will look like and (iii) what the implications will be for understanding the interdependencies and flows between rural and urban that are attracting such attention across economic geography and rural studies. Building on the theoretical development of the model, we will apply new data analysis to test our emerging conclusions. Regional data from the UK and the Netherlands will be used to assess the relative costs of living, relative wage levels and the extent to which commuting occurs between rural and urban regions. This will also enable us to draw conclusions on the appropriate scales to consider rural and urban regions, adding to ongoing debates about how best to define or limit different types of rurality.

**Alberto Bramanti, Bocconi University, ITALY**

**Ulrich Hilpert, Friedrich-Schiller Universität, GERMANY**

The aim of the paper is to explore the future of manufacturing trends in Developed Regions within OECD Countries.

The manufacturing sector has one of the highest multiplier effects on economy as it is a major driver of knowledge building and job creation (Farshchi et al., 2009). Despite the fact that the share of manufacturing activities and employment on GDP keeps on dropping globally, manufacturing still maintains its central role in forging capabilities and disseminating knowledge across the Global Value Chains (GVC) (Hilpert, Smith, 2012).

After decades of delocalization something is changing in European industrial perspectives. Someone is wondering if a new trend of 'onshoring' could replace, in the near future, the previous offshoring trend, thus reinforcing domestic employment.

We know that in the last decades many European regions have overcome the 'comparative advantages phase' – made of factor endowments and cheap costs – to move into the 'competitiveness phase' – focused on standards, infrastructure, education, finance, ect.

But the already accomplished shift from 'competitiveness' to global competition puts a strong emphasis on a new 'capabilities phase', that is maintaining and improving competitiveness in light of declining comparative advantages (Dettori et al., 2013). This latter is a stage which tends to be innovation driven and therefore 'talent' and creative skills are what most matters. It is precisely the role played by innovative workers what changes the economy of cities and regions and enables them to attract further skilled workers, until territories leap into the knowledge-based world and become 'winners' (Moretti, 2012).

This paper will address the processes of advanced manufacturing in strong regions, implying a convergence of corporate, government and social interests. Within the GVC metrics three are the main dimensions on which competition takes place: competition over concepts, i.e. creating a new product; competition over processes, and competition over markets.

The real challenge for strong manufacturing regions is the upgrading of value chains by enhancing capabilities (Timmer, et al., 2010). These regions, nearly always, share some winning common features:

- there is a close relationship between leading edge research and application in more mature industries (mechanical engineering, precision engineering, medical instruments, apparatus building, etc.);
- there is a well trained (blue collar) and university educated labour force, and the average incomes are high;
- they are frequently well embedded in international networks.
- In addition, they are relatively well positioned also on the governance side:
- they are endowed with capable sub-national governments which can help their development path;
- they are highly responsive for changes;
- they look to their traditional industrial apparatus in terms of opportunities for innovation-oriented restructuring;
- sometimes, they can manage the labour market demand controlling for migration.

From a policymaking point of view, the analysis can suggest a more open-minded orientation towards 'smart specialization' and a different predisposition from a simple 'path dependency' view.

**Daniel Brandt, Dalarna University, SWEDEN**

Over the last 30 years many economies have witnessed a de-industrialization and a shift towards service related jobs. One of the sectors that have been in the forefront of this transformation has been the tourist industry. The expansion of number of bed nights can be used as an illustration of the changes. In 1980, the number of bed nights in Sweden reached around 16 million every year. 30 years later this figure had risen to over 50 million. Recent estimates indicate that tourism today is more important for the Swedish economy than the traditional heavy industry. Alongside this growth another important change has occurred. As the industry has expanded, new services and new niches have evolved which has changed the structure of the tourism sector. The service which is being produced today is more complex than ever before and the tourism industry is dependent on attracting a more skilled workforce than before.

These economic changes in the society have meant that the tourism industry has become more dependent on finding enough people to employ in order to be able to expand business and replace staff that retires. A dilemma for the tourism sector is that there is a strong seasonal variation and a highly mobile workforce which produces very high turnover rate of staff in the industry. The recruitment of staff is therefore a very important issue for the industry.

The focus of many countries is to expand tourism export. This produces a new challenge for the sector. Experience from other sectors and a wider cultural background among the staff is becoming increasingly important as the industry is becoming globalized. In order to be able to attract staff with suitable competencies the industry needs to increase wages and make successful careers possible.

Because of the transformation of the economy it is important to understand which factors that influence the wage career for the staff in the tourism industry. The question is if the determinants of getting a high wage in the tourism industry are the same as in other sectors of the economy? The aim with this project is to understand what is important for a successful career in terms of increased wage.

The database used in this study consists of information about all individuals that have lived or worked in four regions in central Sweden between 1991 and 2011. From this data a longitudinal strongly balanced panel data set has been constructed consisting of people who have been employed in the region between 2002 and 2011. The panel was allocated into different categories. The tourism sector was divided up into two different segments. One group consisting of individuals employed in hotels and restaurants and the other group containing individuals employed in tourism related activities. The effect of individual factors such as age, education, mobility between sectors and occupations was estimated by a longitudinal fixed effect model. These results were then compared with the rest of the economy.

The result of the paper indicates that the wage determinants in the tourism sector differ from the rest of the economy. Being employed in the tourism sector is negative for the growth of the income. The effect is less negative for people employed in the tourism related activities. This could be interpreted as a result of the growth of more knowledge based activities in this sub-section of the tourism sector. Another result from the analysis is that the career paths in the tourism sector are quite different from other parts of the economy.

## **CULTURE OF LEARNING**

**Lotta Braunerhielm, Karlstad University, SWEDEN**

**Eva Olsson, Karlstad University, SWEDEN**

**Cecilia Möller, Karlstad University, SWEDEN**

**Trude Eide, Eastern Norway Research Institute (ENRI), NORWAY**

**Tonje Lauritzen, Eastern Norway Research Institute (ENRI), NORWAY**

The border area Inner Scandinavia, in the cross-border region of Sweden and Norway, is characterized by a state of «permanent mobility» which includes both opportunities and challenges in the development of employment and skills provision. Positive effects of mobility that is often cited include the creation of larger labor markets, more jobs and better access to labor. There are at the same time common challenges with regard to low levels of education in the counties of Inner Scandinavia in Sweden and Norway. There are also problems concerning the employment targets for youth aged 18-24 years which is stated within EU 2020.

Research shows that both grade levels and drop-out in school correlates strongly with the pupils' opportunity to get work later in life. When it comes to people aged 30 -34 years, the EU's goal is that 40 percent should have completed higher education, which none of the counties are about to reach. The low level of education can also refer to a prevailing «bluecollar mentality» that go well together with the ability to work across the border (in Swedish adolescents). In the Norwegian case there is a lack of knowledge of how the adolescents in the same situations make their living.

We argue that there is a lack of knowledge about the permanent status of mobility in this area and that there are needs for further research about both the positive and the negative aspects of mobility. The study is based on the goals of increased cross-border labor mobility. We are particularly concerned with how the culture of the traditional industrial areas along the border affects attitudes to education and employment among youth. This area is traditionally characterized by youths getting a job at the factory instead of getting a higher education. Today Swedish youth chooses job in the Norwegian service sector or in the cross-border shoppingmalls. The question is how does the fact that this is a region characterized by a crossborder area affect the attitudes and the behavior among the youth? How does this affect the attitude towards higher education? How does the close relationship to Norway affect the choice of getting a low wage job in the service sector in for example the region of Oslo instead of higher education? And what happens to Norwegian youth who do not take education? Where will they go? Why is the level of higher education low in this part in relation to national level in both Sweden and Norway? What happens when the labor locally changes, will it create an expectation for the young to take education to get a job?

The aim of our study is to identify and make visible social barriers and needs, and develop methods to improve young people's role and job prospects from an employee, employer and educational perspective. The goal is also through collaborative activities and «best practice models» conduct exchanges and develop methods for cross-border collaboration on education and skills matching. The purpose is to increase the number of young people with completed primary and secondary schools in border municipalities. Through the study we will be seeking developing models for how to work with cultural development in schools together with partners working with young enterprise. These activities should be aimed at developing a culture of entrepreneurship and innovation in school through competence of students, teachers, parents and employers.

**FROM STAPLES THEORY TO NEW REGIONALISM: MANAGING DRINKING WATER  
INFRASTRUCTURE FOR REGIONAL RESILIENCE IN RURAL BRITISH COLUMBIA, CANADA**

**Sarah-Patricia Breen, Simon Fraser University, CANADA**

**Sean Markey, Canada, Resource and Environmental Management-Simon Fraser University, CANADA**

Rural regions across the globe face various challenges associated with political and economic restructuring. Common among these challenges are a lack of economies of scale, an absence of economic diversification, limited financial and human capacity, and a lack of innovation in response to change. In addition to these challenges, rural regions in Canada, particularly in British Columbia (BC), are also sparsely populated, with large and challenging geographies, a history of staples-driven economies, and a history of top-down targeted regional development efforts. When it comes to present-day development, the challenges associated with rural regions can make adaptation to new global realities difficult, not only in terms of changing economies, but changing environments, institutional structures, etc. Regional development under changing conditions requires resilience. To be considered resilient, regions must adapt successfully, being able to anticipate, prepare for, respond to, and recover from disturbances. Both regional development and resilience require rural regions to build and maintain strong foundations, not only in terms of institutions, policies, and programs, but physical foundations, such as critical infrastructure systems.

Critical infrastructure systems provide a physical foundational for rural regions, providing the platform upon which development occurs. In BC, as in the rest of Canada, many infrastructure systems are presently nearing the end of their lifespan. This 'infrastructure deficit' presents a challenge, not only in terms of replacing aged infrastructure, but in ensuring that heading forward infrastructure is supportive of future development, including both physical design and management. Infrastructure should facilitate the region's ability to adapt, building resilience as opposed to re-creating the past.

The purpose of this paper is to explore the overlap of rural regional development, infrastructure, and drinking water, examining links which are generally unrecognized and unexplored. It is the goal of this presentation to:

- I. Examine how regional development efforts affected the evolution of drinking water infrastructure and vice versa, clearly identifying links between drinking water infrastructure and development;
- II. Discuss what this legacy means in terms of the current state and management of drinking water infrastructure, and how this has affected the current resilience of rural regions; and
- III. Explore how changes in approach to regional development (e.g., new regionalism) could be applied to drinking water infrastructure so that this infrastructure system both supports rural regional resilience and enhances development.

This research uses a case study methodology to explore these goals, focusing on the Kootenay Development Region of BC (the Kootenays). The Kootenays are ~57, 800 km<sup>2</sup> (6% of BC, roughly half the size of England) with ~146,000 people (3% of BC's population, roughly the size of one English city). It is physically isolated, home to multiple mountain chains, high biodiversity, a variety of ecosystems, and multiple cultural variations. The economic history of the Kootenays is staples-driven. From mining to forestry to the development of hydroelectric power generation, this rural region consists of many, small, single-industry communities. Critical infrastructure systems within the region, including drinking water, have developed in support of the initial pattern of and approach to development. However, as drinking water systems age and change occurs the question of if the current structure and management of drinking water infrastructure is supporting or detracting from regional development and resilience is critical.

In the wake of the most recent economic crisis and a declining resource sector, communities in the Kootenays have been forced to reconsider regional development strategies. In some respects the relationship between regional development and infrastructure is obvious. For example, transportation infrastructure supports the movement of goods in and out of regions – an obvious link to economic development. However, other critical infrastructure systems, such as drinking water, are often more closely associated with quality of life or quality of environment than economic development. However, while the link between drinking water infrastructure

and rural regional development can be overlooked, drinking water remains a critical service, making this an important topic to explore.

*University Technology Transfer- The Globalization of Academic Innovation (Closed Session)*

## **UNIVERSITY TECHNOLOGY TRANSFER- THE GLOBALIZATION OF ACADEMIC INNOVATION**

**Shiri Breznitz, The Munk School of Global Affairs, CANADA**

Universities, acknowledged as centers of knowledge and symbols of technological frontiers, have become essential players in the generation of new knowledge and innovation. Through technology commercialization - the dissemination and commercialization of their ideas to the private market, universities have an ability to directly impact regional economic growth. Different commercialization models and universities have been dominating the perception of – What is a successful technology transfer process? These models and universities have been intensively studied resulting in conflicting reviews. By extending our view from the specific commercialization model to analyze universities technology transfer as part of a national and regional system, this book takes a different approach to university technology commercialization.

*Economic Resilience of Firms and Territories A: Economic Determinants and Measurements*

## **CRISIS, RESILIENCE AND THE CHANGING ECONOMIC GEOGRAPHY OF EUROPE**

**Gillian Bristow, Cardiff University, UNITED KINGDOM**

**Adrian Healy, Cardiff University, UNITED KINGDOM**

The economic crisis of 2008/9 heralded the most severe economic downturn in the history of the European Union. Yet not all regions experienced economic decline and rates of recovery have varied greatly. Whilst some places experienced a swift return to pre-crisis levels of employment and economic output, for others the process has proved much more protracted, with many economies apparently entering a period of sustained stagnation. It is only now, some eight years after the first signs of the impending economic crisis emerged, that we even begin to have the data to fully understand how this has affected the economic geography of Europe.

The purpose of this paper is to present evidence from a European study of the resilience of regions to the economic crisis and investigate what it reveals about the geographical impact of the crisis. We analyse the spatial distribution of employment loss across regions, the impact of the crisis on regional inequalities within nations and the geography of regional resilience. We also investigate key factors influencing observed spatial outcomes. We argue that not only have the effects of the recent economic crisis been highly spatially uneven, but they have produced new, more complex spatial patterns of economic performance which challenge traditional understandings of Europe's geo-economy. We reflect upon what this reveals about explanatory models of patterns of regional economic development across Europe.

*Culture and Creativity as a Driver of Regional Development*

## **CURATING THE THIRD PLACE: COWORKING AND THE MEDIATION OF CREATIVITY**

**Julie Brown, Southampton Solent University, UNITED KINGDOM**

The Creative Sector is predominantly made up of micro and one-person businesses, many of whom adopt 'unconventional' places in which to meet and do business, such as cafés and other informal social spaces. These so called 'Third Places', situated within neighbourhoods, act as vital spaces for formal and informal social interactions - serendipitous encounters which play a catalytic role in the generation of creative ideas.



This is not a new phenomenon - the European cafés littéraires of the early 20th century acted in a similar capacity. In an attempt to accelerate these types of creative collisions, coworking spaces have recently emerged in various forms and in numerous urban and spatial settings. These spaces can be seen as a new form of hybrid 'Third Place', designed to bring together creative individuals to cause specific forms of social and work-related interactions, via the carefully curated physical (spatial) and social environments they provide. Much of the literature on coworking has thus far focussed on the 'design' of these spaces, but while the spatial conditions structure the interactions taking place within these spaces, this alone does not appear to be a sufficient condition to initiate the types of interaction desired. Instead, interactions and encounters are often actively mediated. But does the structured nature of these encounters jeopardise or promote serendipity both within and beyond these spatial boundaries? This paper adds to the literature by exploring how interactions are mediated within co-working spaces and also between co-working spaces and their wider neighbourhoods and beyond, and the influence this has on creative outcomes. It is based on interview, observational and Q sort data gathered as part of an evaluation of the European funded ReCreate project, which aimed to stimulate creative business start-ups via a number of purpose designed and more 'unconventional' creative coworking spaces – such as pop-ups in former retail space - across 14 partner locations in the UK and France. As policy makers and city planners increasingly support the development of creative coworking spaces aimed at generating new 'creative clusters' as part of wider urban development projects, this research is timely.

*New Manufacturing, Creative Productions, Innovative Workplaces and Urban Space*

## **CREATIVE PRODUCTION AT THE SERVICE OF TRANSFORMATION PROCESS FOR URBAN QUALITY: CHALLENGES FOR THE PROJECT**

**Antonella Bruzzese, Politecnico of Milano - DASTU, ITALY**

**Juan Carlos Dall'asta, Politecnico of Milano - DASTU, ITALY**

The new forms of manufacturing – that in many cases can be assimilated to the activities denominated Creative and Cultural Industries (Kea, 2006) - have played over the last 10 years a significant role in generating new job and economic opportunities. One of the peculiar aspects of this kind of production is its tendency to mix intellectual work and making and factual dimension, weakening, this way, the boundaries between different practices and uses, thus defining interesting spaces of hybridization.

This border's weakening and this sort of hybridization of uses can be seen in several fields. The cultural consumption has become more and more complex (Cooke, Lazzaretti, 2008), including into the traditional fruition of museums, for instance, research or entertainment activities. Also in the field of commerce, it is increasingly frequent to see places where people can find, beside commercial services, cultural facilities, meeting opportunities and, in some cases, even places of production (Kärrholm, 2012). The most interesting and promising experiments, therefore, are the ones that promote new formats and forms of hybridization in functions and spaces.

From this perspective, "creative production" can be the occasion to combine innovative models of work, cultural production and consumption, different way of sharing, included co-working (Anderson, 2012). These forms of production, however - as the literature about creative and cultural industries suggest - can also have significant impacts on the urban space and the urban quality. In the recent years, a greater awareness has grown in the field of urban policies aimed to encourage the set up of these kind of initiatives like the Green Paper on the potential of cultural and creative industries (2010) or the programme Creative Europe 2014-20 (Bruell,2013), including them in general planning framework, trying also to improve the role of the public direction, while, on the contrary, most of these initiatives had been the result of private interventions. In addition to this, an increasing attention can be paid to small scale contexts (Waite, Gibson, 2009).

In light of this, we assume that this kind of new productions, dealing with culture and creativity in a broad sense, can have impacts on urban quality and we consider this statement as the starting hypothesis of a general reflection that - from a design perspective and the point of view of policy and strategy makers – raise questions about how to design effective strategies of urban regeneration based on new manufacturing and creative production.

In other words, the paper tries – applying a research by design method - to answer the following questions: what are the starting conditions to design effective proposals where the creative productions can become engines of urban changes? Which urban or even territorial scenarios can be defined, especially in marginal contexts and distinctively in relation to interventions on wholly or partially abandoned buildings? What actions are required to make new meanings explicit and new uses possible? How to combine the logic of architectural intervention with that aimed to build programs for new use? How is it possible, in other terms, to combine "hardware" and "software", as experimental traces of new design models, able to explore the dialectical relationship between process and project, permanent and variable, tangible and intangible?

The considerations proposed in the paper resume some contents of the multidisciplinary project named "CAPs" (CreActivePlaces), proposed to the students of Alta Scuola Politecnica by the authors, which is now arrived in the middle of its path. The CAPs project deals with the issue of the activation of "creative places" in two marginal contexts. One is a group of stations partially under-used or abandoned along the railway line in Val Susa in Piedmont, that could play an interesting role in relation with the territory's promotion on a large scale, based on the integration between traditional artisan activities, new technologies and social cohesion; the other one is a small set of under-used buildings of public property, included a deconsecrated church, in Casciago in the Varese province, waiting for a good proposal of re-use and new meaning for the town and the surrounding territory.

*Territorial Governance and Regional Leadership*

## **THE ROLE OF CITY LEADERSHIP IN MULTI-LEVEL GOVERNANCE SETTINGS: A EUROPEAN DIALOGUE BETWEEN ITALY AND UK**

**Leslie Budd, UNITED KINGDOM**

**Alessandro Sancino, Open University Business School, UNITED KINGDOM**

The institutionalisation of austerity in the Eurozone and the promotion of the concept of smart specialisation as the silver bullet of sub-national economic development have created a heady brew within the cities and regions of the European Union (EU). This brew appears to constrain achieving the objectives of the Europe2020 strategy of smart, sustainable and inclusive growth. Both the austerity regime and the universal application of smart specialisation can be viewed as existing in the realm of efficiency that subordinates equity in the form of cohesion policy.

However, as noted by both the International Monetary Fund (IMF) and the Organisation for Economic Co-operation and Development (OECD) equality also contributes significantly to economic growth (Ostry, J.D. Berg, A. and Tsangarides, 2014; Cingano, 2014). Yet in the 6th Cohesion Report Investment for jobs and growth: Promoting development and good governance in EU regions and cities, the role of cohesion is still subordinate to economic efficiency (European Commission, 2014). Furthermore, the central logic of this Report is assisting cities and regions in the EU to recover from the crisis.

The subtitle of 'promoting development and good governance' is undermined however, as there is no critical discourse on the parameter of austerity in constraining recovery in many cities and regions. Moreover, for peripheral places, pursuing smart specialisation exacerbates the continuing poor economic governance in the EU and lack of leadership by its policy makers. Faced with being squeezed between these parameters, city and regional leaders are confronted with the severe challenge of aligning their governance capacities and capabilities in order to cohere their constituent territories with sustainable economic recovery. It is the relationship between what has been termed city leadership and multi-level governance in an EU context that this paper addresses. Our starting point is that in contemporary turbulent times the role of city leadership in the existing multi-level governance settings can be the key variable for addressing the economic recovery and, more generally, the resilience of cities. The concept of Multi-Level Governance (MLG) is frequently distinguished by two types: one more formal and governmental and the other more informal and based upon institutions of governance (Hooghe and Marks, 2001).

There has been a revival of interest in MLG within the European Commission, particularly in relation to cohesion policy. This is exemplified in the Barca Report of 2009 (Barca, 2009). It sets out ten pillars of cohesion policy, based upon “placebased development: and the concept of “smart specialisation”. In order to address efficiency and equity in the EU’s cities and regions, a more developed institutional framework is needed to achieve the goals of Europe2020 and cohesion policy. It is apparent that city leadership has a powerful role to play in this process. Within, MLG the issue of distributed leadership is important, but given the variegated nature of the EU’s sub-national socio-economic and administrative territories, there is no one ideal-typical model. In this context, the possibility of exploring city leadership from an internationally comparative (and European) perspective holds out the prospect of mining a rich seam of analysis.

Recent work on mobilising leadership in cities and regions by Beer and Clower shows one way of how to mine this rich seam (Beer and Clower 2013). They comprehensively review the literature on leadership in urban and regional contexts and demonstrate its importance in relation to the government and governance. They quote a recent intervention by Rodriguez-Pose (2013) that leadership is the ‘missing variable’ in understanding the ‘variable performance of different of places. But, as noted elsewhere the question of where governance ends and leadership begins is very pertinent’ (Sotarauta, 2014). According to Stone (1989), it is possible to distinguish, at a conceptual level, between three sets of institutions that provide the capacity to govern any given city or locality: 1) government itself, 2) corporate business and 3) the network of civic organisations. The latter can be very influential in shaping public debate on policy issues and spurring voluntary activity in the community. All three sectors can provide platforms for the emergence of local leaders (Hambleton, 2003).

The literature and debates on leadership in the area of business and management is well established, in particular the work of Grint. He asks four related question concerning how leadership is established and coordinated; the dimensions are variable (Grint, 2000):

Who? – Identity

What? - The strategic vision the organisation wishes to achieve;

How? - The tactics used by organisations to achieve their objectives;

Why? - The persuasive communication used to follow leaders;

One can argue that rather than being viewed as ersatz firms, as in the competitiveness literature, cities and regions are resource-based organisations with distinct forms of government, governance and leadership. Thus these four simple questions are crucial in analysing the development of leadership at this scale. There are also different types of leadership (for example traditional, charismatic, transformational): the latter are derived from the three forms of authority set out by the German sociologist, Max Weber (Weber, 1958).

Traditional: rests on an established belief that leaders have a rational and legitimate right to exercise authority, where different traditional circumstances enable and legitimize those in command to exercise authority.

Rational-legal: rests on the belief in the "legality" of formal rules and hierarchies, and in the right of those elevated in the hierarchy to possess authority and issue commands.

Charismatic: rests on the belief in an exceptional sanctity, heroism or exemplary character of an individual, and on the normative patterns or orders revealed and issued by him or her. Charismatic leaders are often seen as legitimate in times of crisis or change when extraordinary leadership is called for, and when this extraordinary leadership is recognized in the specific authorial figure by followers.

It is within the context of these debates that this paper is proposed. There is an increasing demand for devolution and decentralisation in the rest of the United Kingdom following the referendum on independence in Scotland. Different forms of multi-level government and governance have been proposed whereas the proposals for leadership appear inchoate. In order to address these issues the paper undertakes a comparison with that of Italy, in which city and regional leadership has a well-established pedigree. In Italy, municipalities, provinces, metropolitan cities and regions are recognised as autonomous entities so it has the appearance of a federal (although unitary) state. Since the early Nineties, many functions and powers have been transferred from national to local governments and some changes in their city leadership structure have been introduced as well. For example, among the different measures taken to reform local government in Italy, the introduction of directly elected mayors and that of the city manager post) In undertaking this inter-national comparison and contrast the paper proceeds upon the basis of the following questions:

1. What does city leadership mean?
2. What are its theoretical antecedents?
3. How do we conceptualise city leadership?
4. Is city leadership the agency for the professionalization of public leadership becoming political?
5. What is the comparative experience of city leadership in Italy and the UK in a wider European context?

In addressing these questions, the paper seeks to establish a comparative framework through which the prospects for city leadership in different EU settings can be assessed. Using the contrast between a very centralised (UK) and theoretically decentralised (Italy) system of government thus opens up the possibility of extending this analysis. In terms of research methodology and methods, we use two case studies one in UK and in Italy, interviewing civic, managerial and political leaders in both the cities, and creating an extensive documentary analysis.

The structure of paper is based upon the following headings:

1. The European cities' heady brew of being between austerity and smart specialization
2. European cities in multi-level governance settings
3. The role of (European) city leadership
4. Methodology
5. A comparison between Italy and UK
6. Discussion and conclusions

*Community Economic Development*

#### **AXIS 4 OF THE EUROPEAN FISHERIES FUND – AN INNOVATIVE APPROACH TO SUPPORT LOCAL DEVELOPMENT IN FISHERIES COMMUNITIES**

**Urszula Budzich-Tabor, FARNET Support Unit, BELGIUM**  
**Margot Van Soetendael, FARNET Support Unit, BELGIUM**  
**Enrique Nieto Initial, FARNET Support Unit, BELGIUM**  
**Stanislaw Tabor, Agroline Association, POLAND**

Axis 4 of the European Fisheries Fund (EFF) involves the creation of public-private partnerships who are responsible to prepare and implement, in a participatory process, a local development strategy and to support local actors in the implementation of projects contributing to this strategy. In the period 2008-2014 such local partnerships (called Fisheries Local Action Groups or FLAGs) have been set up in over 300 fisheries areas in 21 EU Member States. Approximately 10.000 projects have been supported by FLAGs, focusing on adding value and creating linkages within the fisheries supply chain, promoting diversification of fisheries areas (for instance into tourism and other blue growth activities), capitalising on the area's environmental assets, promoting social well-being and cultural heritage, or strengthening the role of the fisheries community in local governance.

An analysis carried out by the FARNET Support Unit covers 6382 project for which basic data was available, such as total project amount, Axis 4 support and type of beneficiary. A more detailed analysis was carried out for 42 projects, for which information on the purpose of project, number of partners involved and number of jobs created could be obtained.

The average project supported by Axis 4 had a total budget of €86,200, of which 30% was contributed by the project promoter. Beneficiaries from the fisheries sector implemented 29% of all projects. Approximately 40% of projects were led by the private sector. The public sector accounts for 24% of all projects and 38% of the total budget. Projects implemented by beneficiaries from the private sector received in total €98 million from FLAG grants. These projects mobilised an additional €79.3 million of the project promoters' own funding.

Significant differences are observed between Member States as regards the number and size of project supported, type of beneficiary and aid intensity. FLAGs show a strong capacity to adapt to the national and regional priorities and delivery frameworks, as well as to the specific local context (such as characteristics of the fishing sector). A more detailed analysis of the 42 projects shows FLAGs have a strong capacity to create and maintain jobs, mobilise local actors and create linkages between fisheries and other sectors of the local economy. In total, these 42 projects have contributed to the creation of 91 full-time jobs and 347 part-time and seasonal jobs, while 135 jobs have been maintained. On average, each project has helped to create linkages between seven local actors.

*Developing Rural and Peripheral Regions*

## **THE DECLINE OF SERVICES IN RURAL ENGLAND: IMPLICATIONS FOR LOCAL COMMUNITIES, ECONOMIES AND SOCIETIES**

**Ignazio Cabras, Northumbria University, UNITED KINGDOM**

The decline of services in rural areas of England, and more generally in the UK, has been significant in the past three decades. The disappearance of village shops, libraries, pubs and other facilities has affected almost every community in the countryside. Aside changes related to both urbanisations and counter-urbanisation phenomena, the 2008 financial crisis and the consequent service centralisation and spending review public that occurred in the period 2009-2013 have also contributed to increase the number of business closures in peripheral and remote areas. These closures had and still have a dramatic impact on rural communities, depriving residents of important businesses and determining the vanishing of socio-economic benefits arising from communal initiatives which frequently have the support of local enterprises.

A number of recent studies have investigated the impact of business losses on community cohesion, social engagement and economic development within local communities (Tolbert 2009, Cabras et al. 2012; Cabras and Bosworth 2014). However, very few of these studies have been able to explore and examine the scale of this impact over time. This is mainly due to the significant paucity of data related to rural and remote areas available in England. In the past, data about services and amenities in rural areas were collected by the Survey of Rural Services (SRS) conducted by Countryside Agency; but the last SRS was conducted in 2000, while the Countryside Agency was disbanded in 2009. Since then, a comprehensive collection of data related to the number and availability of facilities and services in rural areas of England has not been conducted. However, the collection of data has continued sparsely at a local level, mainly administered by local branches of national charities and associations operating across the country, such as Rural Service Networks (RSN) and the Actions with Communities in Rural England (ACRE), and by a restricted number of local authorities. In this context, the author identified a number of local authorities and other organizations which collected data across rural parishes by using the SRS questionnaire as a platform.

The study presented in this paper explores the decline of services in rural areas of England and its impact on local communities and economies. The author uses a unique dataset comprising information about facilities and services available in the English countryside. Data are reported at a parish level, the lowest administrative level in the UK. Moreover, information is provided in two different points in time (2000 and 2010), allowing for a longitudinal analysis of the changes occurred in the selected parishes.

Results provide factual evidence of the decline of rural services, measuring the impact this decline has on a wide range of activities carried out at a local level. In addition, findings corroborate evidence gathered from previous studies on the relationships between small retailers and social engagement in rural communities. Outcomes of this analysis are discussed and explored with regard to possible policies and initiatives which could help preserving the positive impact that local businesses and entrepreneurship have on the English countryside.

## **SPATIAL ANALYSIS OF COMMUTING BEHAVIOUR: EVIDENCE FOR ITALY**

**Elena Calegari, Università Cattolica del Sacro Cuore, Piacenza, ITALY**

**Jos Van Ommeren, Free University, THE NETHERLANDS**

The boost of the number of commuters aspects several aspects of the local economy, and therefore a deep knowledge of the causes of this phenomenon is crucial in order to apply appropriate policies. A relevant question is: why do workers commute? One possible explanation is that commuting can be seen as a relevant spatial mechanism to equilibrate the imbalance between demand and supply of jobs in the labour market. Under this perspective, it is worthy to investigate why in some areas length and frequency of home-to-work-movements are higher than in others. This research focuses on how much these differences depend on heterogeneity in the spatial features of the labour markets and it represents the first time that this kind of study is performed on the whole Italian territory. It can be relevant because Italy, compared to the countries depicted in the past, shows strong miscellaneous evidences in the average commuting length.

The analysis is based on data from the XV Italian Population Census (year 2011) where, for each worker, the municipality of residence and the one of her workplace have been recorded. The individual observations have been aggregated in origin-destination matrices for each of the 611 Italian Travel To Work Areas seen as proxy of local labour markets.

The empirical evaluation is developed through a two stages model built on the one proposed by Melo et al. (2011). The main idea is that the impedance parameter of a gravity model can be interpreted as a measure of how much an increase in the length of the trip is perceived by the worker as an obstacle in commuting. According to this intuition, areas with lower impedance are those where labour forces are less sensitive to raise in distance and tend to commute more. In the first stage, the impedance parameter is estimated for each labour market. The proposed measure of distance is the travel time, obtained with a GIS evaluation of the railway and road networks. In the second stage these estimates become the dependent variable of a new regression model, which uses selected spatial features of the labour market as regressors. Some of them are related to the shape of the area, others to the presence of agglomeration economies.

Results show that, on average, Italian workers are very sensitive in increases in commuting distance. Indeed the estimated value of the impedance parameter is higher than in the literature. Finally it has been proved that both the shape of the labour market and the spatial distribution of jobs across it in hence the average commuting distance. The results for the country are in line with the previous literature on other countries; commuting on average is longer in bigger labour markets, whereas tends to be shorter in more circular areas. On the other hand, an increase in urbanization economies and concentration of economic activities causes a reduction of the average length of the trips.

## **EAST-WEST MIGRATION: FROM ROMANIA TO EU27**

**Comes Calin-Adrian, Petru Maior University of Tirgu-Mures, ROMANIA**

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Recent studies that tackle the issue of regional development reveal a tendency for expanding spatial inequalities between regions in the EU (Monastiriotes, 2014). This divergence phenomenon is explained from a theoretical point of view by the existence of selective tendencies between center and periphery, convergence clubs, asymmetric shocks, which add to the deepening of spatial inequalities between regions. The significance of the proposal is argued by recent policies promoted by the European Union that aim at fostering sustainable and inclusive growth. The main objective of this proposal is to present factual data about relevant variables

that can be transformed into regional capabilities that produce sustainable and inclusive local growth in idea to avoid and prevent the migration phenomenon from Romania. The importance of the research proposal is supported by the potential to advance knowledge in various domains of interest:

- from a scientific point of view the article proposes a dynamic perspective of regional capabilities (agriculture, demographics, education, science and technology, structural business statistics, business demography, health statistics, tourism, transport, labor market, labor cost statistics, information society, environmental and energy statistics, poverty and social exclusion). The main research question that is to be answered is as follows: Which is the most appropriate local development strategy? Should a particular region favor a diversification or rather a specialization approach on development?
- from a socio-economic perspective the current study aims to provide insight into regional capabilities that will ascertain various stakeholders with relevant information supporting the economic and political decision process.

The research aims to highlight and to explain regional capabilities that can foster the process of wealth creation by the means of diversification and specialization, taking in account economic entropy (Georgescu-Roegen, 1971). The difficulty of the problem addressed stems from two different sources. First, in order to assess regional capabilities we need to evaluate the impact of various factors that can enhance/diminish local growth (i.e. positive spillovers generated by human capital, the impact of monopolistic competition, labor force and capital mobility) thus favoring different industrial strategies. In order to quantify the importance of each considered dimension the proposal draws from the classical endogenous growth theories (Romer, 1986; Lucas, 1988; Barro, 1990) and from the new economic geography (Krugman, 1991; Fujita, 1993; Venables, 1996). Regional growth is a cumulative, spatial selective process that can amplify inequalities existent in regional markets. Initial conditions, interactions and interdependence's are relevant for predicting present and future growth patterns. In the absence of counteractive policies that target market imperfections market forces will encourage regional divergence, and thus the deepening of inequalities. A second source of difficulty comes from the aggregation, processing and migration of data. Statistical Data and Metadata eXchange - SDMX represent the standard for the exchange of statistical data sponsoring by European Central Bank, Eurostat, OECD, United Nations Statistics Division.

The research proposal adds to the relevant development literature by unifying two streams of knowledge: first regional capabilities are explored and assessed under a diversity-specialization framework by using various econometric techniques; second, drawing from an artificial intelligence algorithm (the upgraded version of rSOAP special designed for this purpose) we propose a dynamic regional map of capabilities.

Past and present literature offers arguments both to use increasing economic diversity or economic specialization as a relevant policy goal at regional level. Empirical studies of the relationship between diversity and growth or specialization and growth at regional level provide similarly ambiguous conclusion. Economic theory advocates that regional specialization is aiding economic growth through returns to agglomeration in the form of Porter and MAR (Marshall-Arrow-Romer) externalities.

Porter (1990) suggests that regional specialization raises innovation through local competition in which firms compete for limited resources. Similar opinion is promoted by Glaeser et al. (1992) claiming that regional specialization, or a spatial monopoly, could be more efficient in the production and services activities than perfectly competitive companies.

On different a perspective, supporters of economic diversity argue that diverse economies are less risky because are less liable to volatility associated with the business cycle and this tipe of economies can to escape from the effects of oscillations in employment and income (Dissart, 2003). Jacobs (1969) argues that economic diversity within a region promotes technological innovation through knowledge and technology spillovers across sectors in a single geographic location. Pede (2013) has proven that economic diversity is associated with increased levels of economic growth.

## **BACKSHORING – TOWARDS A NEW RESEARCH AGENDA IN GLOBAL (RE)LOCATION**

**Pawel Capik, Keele University, UNITED KINGDOM**

For several decades the focus on manufacturing, and later services, relocation has been subsumed to the outsourcing and offshoring decisions, reflecting the dominant trends driven by businesses' desire to benefit from efficiency advantages offered by low-cost economies (e.g. Smith 2005, Coe 2011). More recently corporate attention has shifted to examine whether or not low-cost locations still provide optimal conditions for competitive and profitable operations.

One of the outcomes of the recent global recession has been a noticeable increase in support for 'made locally' expressed by customers and politicians alike, particularly in advanced nations. Both, the recession and 'made locally' attitudes, contribute to changing sourcing and production strategies employed by multinational enterprises (MNEs) and a move towards reshoring or backshoring of economic activity to the firm's country of origin (Kinkel 2011, McKinsey and Company 2012, Fratocchi et al 2013). While the 'global shift-back' is yet to fully materialise, such emerging trends in relocation of manufacturing and services influence directions and volumes of inward investment flows and create diverse impacts in home and host regional economies. Backshoring, primarily a supply chain and international strategy matter, produces significant political, social, economic and environmental consequences and shapes development processes of areas providing and receiving returning activities. Consequently, to many public institutions tasked with local and regional development, backshoring acts as an incentive to review inward investment support frameworks and regional policy approaches.

Current understanding and studies of backshoring processes focus on supply chain management (e.g. Kinkel, 2011, Grey et al 2013), international organisational behaviour (e.g. McFarlin and Sweeney 2013) and international business strategies (e.g. Peng 2013, Arlbjörn and Mikkelsen 2014). Despite a recognition of the significance of this emerging trend (e.g. McFarlin and Sweeney, 2013, Dicken 2014), to date, little attention has been paid to place-based consequences and implications of backshoring of manufacturing and service activities alike. This paper aims to contribute initial ideas on the research perspectives this new and growing trend offers. The paper identifies several key research questions pointing towards an emerging research agenda. Some relevant major research questions include: What factors stimulate the backshoring decisions within manufacturing and service sectors? What are the consequences of backshoring for host and home regional/local economies? What is the relationship between backshored activities and regional revival or downgrading of skill base? How does backshoring influence knowledge transfers and regional innovation systems? What might be regional policy implications of backshoring of manufacturing and service sectors? Suggested research directions are anticipated to provide new understandings of established concepts including global value chains, product life-cycle theory, FDI theory, particularly investment location and subsidiary typology and development.

## **THE DYNAMICS OF CHANGE IN THE EU CORE-PERIPHERY DIVISION: EASTERN VS SOUTHERN PERIPHERY AND BEYOND**

**Helen Caraveli, Athens University of Economics and Business, GREECE**

The last enlargements of the EU shifted the geographical focus of the periphery from the south to the east, upgrading the position of many southern European countries and regions, which were already in a process of convergence with the EU average. The current financial/economic crisis however, which has particularly hit southern European countries revitalized the traditional core-periphery division, known as the North-South divide. In parallel, the relocation of economic activity (industrial production and services) within the EU territory, from western-core countries to the eastern periphery, raised the competitiveness and economic significance of many areas in the new, vis-a-vis the old, periphery, leading to the emergence of a number of new centers in its metropolitan regions. The differences between old and new peripheral countries, regarding



their relationship with core countries are highlighted, together with the global geopolitical changes, affecting the international division of labour and production levels in the new periphery. What would be the implications of a possible further expansion towards EU's 'Eastern Neighbours' on its core-periphery pattern? This paper approaches critically and qualitatively the above issues from a core-periphery theoretical perspective centering on the new economic geography approach. The significance of 'regional resilience' and the impact of the EU's Cohesion Policy (including rural development policy) for reversing core-periphery patterns are finally discussed.

*Building Networks for Local Growth*

## **RECONCILING SPECIALIZATION AND VARIETY: SPATIAL AGGLOMERATIONS AND INDUSTRIAL PATTERNS IN ITALY**

**Vittorio Carlei, Università Gabriele d'Annunzio, ITALY**  
**Massimiliano Nuccio, Università degli Studi di Torino, ITALY**  
**Donatella Furia, Università Gabriele d'Annunzio, ITALY**  
**Alina Castagna, Università Gabriele d'Annunzio, ITALY**

Differences in growth rates across cities, regions and countries have been a main research concern for the economic theory. One of the most successful approaches to explain this variation focuses on the notion of clusters of closely related industries co-located in a region originally as defined by Porter. According to Henderson et al. (1995) the theory of clusters is the balancing result of two main forces: convergence as the consequence of diminishing returns and, on the contrary, agglomeration characterized with increasing returns. Notoriously, agglomeration economies fall into two main typologies, localization and urbanization, which have been a fertile battleground of academic research. Our intent is not to prove the validity of one or the other, but to find a measure which can include both. The measure and identification of clusters show a variety of quantitative approaches drawing on different sources of data, but often based on localization quotients which are only able to grasp industrial specialization.

A valid alternative approach suggests to focus on "agglomeration forces arising among related industries that constitute clusters" (Delgado et al., 2014: 1786), following the idea that diversification of local industries reduces risks more or less like in an asset portfolio. Whether or not related or unrelated variety support regional growth is the key question of an expanding research stream whose main contribution is to include an evolutionary perspective in the regional studies.

This paper builds on an original alternative methodology based on Self-Organizing Maps (SOMs) to identify spatial agglomeration of economic activities: combining a new indicator, namely the Relative Industrial Relevance (RIR) and the Shannon entropy we test an original criteria to endogenously define geography, size and industrial interdependencies of spatial agglomerations.

By applying this methodology on highly disaggregated cross-sectional spatial data on industrial employment, we show that, even when the focus is on one single industry, a rich taxonomy of industry patterns emerges, which includes concentration-based patterns among many others. Although the local system may not present a dominating presence of firms belonging to a particular productive industry, that industry may play locally and functionally a pivotal role in relative terms. It is not possible to appreciate or to evaluate this kind of industry patterns logic by looking only at one given industry, but in-depth analysis and an understanding of the whole nexus of industrial interdependencies of the local economy are needed. Differently from some literature on related variety and industrial specialization, we have not used any a priori criteria to test the validity of interdependencies amongst industries, but we observed the revealed association of industrial employment at the local level.

With RIR we achieved three main results:

1. a new measure of relevance for a given industry, i.e. high values of RIR suggest that a given industry has a relatively greater weight than the others in a defined area;

2. a strong relation between high levels of RIR and similarities of the geographic samples in terms of industrial patterns;
3. a new definition of spatial agglomeration and its size, based on the membership function defined through the Shannons entropy.

We can therefore draw a detailed picture of Italian spatial agglomerations, track its evolution over time and measure performances of specific industrial patterns.

Eventually, this paper contributes to match a conceptual with an operational definition of cluster and offers an original method of regionalization of the economic activities. Assuming as a largely accepted theoretical reference that geographical proximity (co-localization) is different from organized (relational) proximity, the paper identifies spatial agglomeration by tracking the local pattern of industrial interdependencies.

*Regional Territorial Development Policies on the move in Emilia-Romagna and other European Regions*

## **INTER-MUNICIPAL COOPERATION, LOCAL DEVELOPMENT AND REGIONAL PUBLIC POLICIES. THE CASE OF THE REGION EMILIA-ROMAGNA**

**Mattia Casula, LUISS G. Carli - Rome,**

The long-standing issue of the excessive partitioning in the Italian administrative system has been recently included in the national political agenda, opening again the same intellectual debate already proposed during the Risorgimento between the federalist Cattaneo and the republican Mazzini. The trade-off seems to be reached by preserving the cultural profile of Italian Municipality, the oldest self-governance institution in the territory, but on an economic and managerial level through the obligation imposed on small municipalities to create inter-municipal networks on the territory aimed at performing the major functions (through unions of municipalities or conventions). Yet, the complete implementation of these measures seems still far from being reached, especially following the recent (and by now annual) postponement until January 1st 2016 of their compliance. Nonetheless, in order to face the disjointed incrementalism typical of Italian policy maker that continues to create a situation of uncertainty and concern for small Italian municipalities, some Regions are proactively elaborating specific intervention strategies aimed at directing and leading the process of territorial reorganization, taking advantage of their residual competences on the matter. Though not always uniform, these regional policies share the idea that the current process of territorial reorganization can represent a unique opportunity for Italian local government to redesign completely the supramunicipal governance, in line with the logic of wide area and on a cross-sectoral level.

Compared to the other Italian regions, the exceptional nature of Emilia-Romagna is based on its undisputed capacity of exploiting simultaneously financial incentives and the instrument of persuasion in order to (re)map the local administrative boundaries, so succeeding in directing nearly all the municipalities in this Region (both constrained and non-constrained) towards the creation of large unions of municipalities capable of coinciding with the more general planning areas. Emilia-Romagna policy makers start mainly from the assumption that unions of municipalities are the only institutions that can both redesign supramunicipal governance and act as coordinators with the purpose of maximizing the strategic role municipalities can play in the economic, social and cultural development of the territory, thus aiming at combining the dimension of service provision and the formulation (and subsequent implementation) of public policies, including those related to territorial development.

The paper focuses, above all, on the incentive systems the Region Emilia-Romagna puts into place for the more general process of territorial reorganization and the measures it adopted to guarantee the coincidence between service management and planning areas. The normative analysis will be followed by an empirical investigation in the actual activities performed in the current 47 unions, with particular reference to both the functions related to the social, health and economic development sectors, and the role of coordination they played in the planning of 2014-2020 EU Structural Funds.

## **UNIVERSITY COMPETITION AND DIFFERENTIATION: THE MODERATING EFFECT OF MARKET ORIENTATION**

**Mattia Cattaneo, University of Bergamo, ITALY**

**Paolo Malighetti, University of Bergamo, ITALY**

**Michele Meoli, University of Bergamo, ITALY**

**Stefano Paleari, University of Bergamo, ITALY**

There is a large consensus that the amount of human capital in areas plays a crucial role for regional economic development. Previous evidence on regional economics highlight that a higher concentration of human capital is associated with more population, employment growth, income and ability to innovate (e.g., Carlino et al., 2007; Glaeser and Saiz, 2004; Glaeser, 2005). First, a higher level of human capital on a specific area fosters knowledge spillovers (Moretti, 2004), further human capital is known to boost the productivity of individuals and regions (Becker, 1964). Therefore, it is crucial to identify the factors that drives differences in human capital accumulation in specific areas (e.g., Boschma et al., 2013). Among others, universities have been identified as focal institutions for the attraction of highly skilled human capital toward specific areas, especially after the recent financial crisis where a change in the distribution of students and graduates have been occurred (Cattaneo et al. 2014; Long, 2013).

Although some recent contributions have already investigated whether universities are able to affect the distribution of human capital at a regional level (Ciriaci, 2013; Abel and Deitz, 2012), less attention has been paid to the effects that some crucial universities' characteristics play in this respect.

As far as university diversity is expected to be an effective strategy to deal with the different needs of local areas (labour market) and given the recent transformation of territories' attractiveness due to the level of competition for students universities located in those areas are subjected to, it is crucial to analyze in detail the relationship between university competition and university diversity. Previous studies have already tried to investigate this relationship (e.g., Italian context Rossi 2009, 2010 and Teixeira et al., 2012) providing mixed results. The present work aims to investigate such a relationship accurately measuring the competition level that universities have been subjected to rather than assuming that, on average, the level of competition has been increased in the last decade. Further, the reaction to competitors' pressure may not be assumed equal across different academic institutions. Universities have indeed different budget structures, and therefore dissimilar needs with respect to their positioning on the market.

We thus hypothesize that university competition influences the differentiation of a university in relation to its business model, here defined as the market orientation of an institution (tuition fees on total state-allocated funding). In particular, the relationship is expected to be significant and positive for market oriented universities (lower levels of the fee-state funding ratio) as universities in financial unstable conditions that have to differentiate themselves from competitors in order to increase their attractiveness to students and collect important financial resources for their daily core activities, and long-term survival. At the same time, the relationship is expected be positive for higher levels of the fees-state funding ratio, meaning that universities receiving more funding from the government in relation to tuition fees are more financially stable in the short-middle term, allowing them to promote disciplinary differentiation to perceive excellence and become hub of education inside the higher education system.

In order to test our hypotheses, we investigate the extent to which a university is differentiated in terms of mix of disciplines offered relative to the "average offer" of the other competitors on the market relying on the sample of 75 private and public universities in Italy over the period 2002-2012. University's differentiation is here measured considering three different sub-markets, wherein a universities is operating against its competitors. We define the three markets, according to the distance between the university destination and the student's province of origin (day for a distance below 50 km; week for a distance between 50 and 300 km; term for distance above 300 km).

According to competing destinations literature, university competition is measured considering the distance-weighted characteristics of the attractiveness of all university competitors in each corresponding market (Sà et al. 2004, Fotheringham et al. 2001). Preliminary results confirm our expectations. Universities having the

highest or the lowest levels of the fees-state funding ratio have shown a positive relationship between competition and diversity in the last decade.

*Re-assessing Rural Areas: Approaching the Challenges for new "Ruralities"*

## **RURAL AREAS BETWEEN DECLINE AND ECONOMIC RECOVERY. A BRIEF OVERVIEW OF ECONOMIC, TERRITORIAL AND SOCIAL SITUATION OF RURAL AREAS IN EUROPE**

**Valentina Cattivelli, ITALY**

Rural areas are at times assumed to be characterized by low distribution income and low levels of social and economic capital. This lagging condition was due to a multitude of constraints to development: poor economic potential, isolation, absence of agglomeration economies and creativity. In addition, many scholars thought that these areas were only reservoir of natural resources or specialized only in traditional agricultural activities.

At present, these areas are facing severe pressure: urban sprawl and secondary and tertiary sectors restructuring promote their evident transformation into new territories with untraditional characteristics. In fact, these changes are not only economic, but also define social and environmental variations; at the same time, the reaction to these changes is not identical for all rural areas.

"Rural" area is now a succession of full and empty spaces, marginal and rehabilitated areas, from the apparent concentration of population and economic activities or disorderly dispersion of settlements, sometimes abandoned. It has a variety of landscapes, such as small urban areas and cities, forests, farms, greenfield sites, concentrations of industrial crops. It has also a social structure and relationship that is not based on the most typical values of rural society and an economic structure based not only on agriculture.

Rural areas are facing their traditional isolation, weakness and vulnerability in new ways.

In this brief introduction, I would like to understand economic, territorial and social situation of rural areas in Europe. Thanks to Eurostat data and other recent publications, I will give an overview of real situation of these territories and understand if there are some differences among European regions. In particular, I would like to point out the reaction of these areas to the last changes due to recent economic crisis.

*The Geography of Finance*

## **DYNAMICS OF URBAN CENTRALITIES AND THE BANKING SYSTEM**

**Anderson Cavalcante, CEDEPLAR - Universidade Federal de Minas Gerais, BRAZIL**

This paper addresses the urban dynamics of central places. The concept of centrality accrues to a process that structures the urban space, gathering people, objects, signs, symbols, practical relations, and the space itself in a material reality that is historically built. The discussions over centrality have always revolved around the comprehension of the interrelationship between these agents and the space as cultural, social, political and economic agglomeration areas. From the theoretical developments offered by an array of authors, such as Christaller, Losch, Lefebvre, and Castells, one can generally understand centralities through a function that describe the orientation of local supply spots towards neighbouring areas. The central localities work as specialised suppliers of services and activities fulfilling specific demands of other places. Moreover, the position in a hierarchy of central places is determined by the degree of specialisation in goods and services that are offered. More specifically, the degree of complexity of a good or a service is related to the maximum spatial range such goods are capable of reaching, which determines the power of the centrality. The rank of a good or service increases according to the sophistication of the goods and/or the size of their market area. Therefore, the regional distribution of economic activities follows a hierarchical system, from low order places

with very few sophisticated goods/services to high order central places, their interconnections and diversified range of services.

Following such theoretical approach, this study has the more specific objective of analysing the urban effects accruing from the developments of the local banking system. Therefore, this paper novelty is twofold: first, it approaches the centrality theme from the urban perspective. Secondly, it addresses the urban centrality issue from the point of view of one of the dynamics of financial (banking) services. In order to present a more detailed perspective of the dynamics of the urban centralities, one must account for the growth determinants of such. Financial centralisation can be analysed by the number of complex financial services being offered at each locality according to a specific local hierarchy. The existence of different types of financial services with different specialisation degrees are deemed to be unequally spread over the territory. High-order central places offer a wider range of services than lower ranked places and, thereby, are capable of reaching more distant markets. The spatial differentiation in the set of financial services being offered causes relative diversification in the regional costs for these financial services.

The objective of this paper is, thus, to understand the interaction between the dynamics of the banking system (and its financial services), the parameters behind the location of its branches, and the dynamics of the urban centrality. More specifically, the idea is to discuss whether the expansion of the urban network is subjected (or not) to the intra-urban localisation of banks and its subsidiaries. Banks are prominent service providers, and as such they are able to offer a diversified range of financial services for different groups of people. The offer of such services also depend on specific characteristics of demand, which is conditioned by the urban space. As such, the presence of banks in specific neighbourhoods might be subjected to specific local characteristics and may also be related to the growth dynamics of urban centres. The intention is, thus, to discuss the interactions between the spread of banks' subsidiaries and the urban expansion of cities. For this purpose, the paper first discusses the regional theories addressing centrality. Secondly, it investigates the interactions between the banking (and financial) system and its relation to the dynamics of central places. After that, an empirical work is conducted to provide some preliminary evidence over banks' intra-urban localisation choices and the distribution of other services in the city of Belo Horizonte in Brazil.

#### *Labour Markets and Migration*

### **AGRISYSTEM SUSTAINABILITY: LEGALITY AND LABOUR PROTECTION, CORPORATE SOCIAL RESPONSIBILITY AND CRITICAL CONSUMPTION WITH A FOCUS ON PREVENTING EXPLOITATION AND DISCRIMINATION OF MIGRANT PEOPLE**

**Paola Cavanna, Universita Cattolica Del Sacro Cuore, ITALY**

What and who is behind any label "Made in..."? The purchase of goods and even more of food inevitably puts us in touch with the lives of workers who have made them. The paper argues the objective of sustainability in agriculture will be achieved by producing with less impact on the environment, but also with the full respect of working conditions.

Underground economy, wages below the minimum set by collective agreements and poor living conditions as well as failure to integrate migrant workers create thousands of victims in the fields, without legal, social neither health protection. They are vulnerable because they are invisible: migrant workers live in isolates farmhouses, under the blackmail of their gangmaster. Of course invisibility feeds their vulnerability. Our society needs migrants as workforce but then it looks like they should disappear from spaces of social life.

Thus, the paper reviews and analyses policies and initiatives for more effectively governing labour migration, linking migration and development, and promoting the protection of rights of migrant workers and their families through a wise use of non-criminal branches of the legal order within a multilevel strategy. It is the idea of promoting decent work through an "outreach union activity" (that goes together with inspections of workplaces), recovering in constructive terms corporate social

responsibility, fair trade and critical consumption as tools to fight social dumping, being aware of the effects certain labour policies may have indirectly on public order. In this, large-scale retailers can provide an important stimulus adopting socially responsible behaviour and especially being liable for the selected suppliers.

Since labor is not a commodity like any other, economists and lawyers have to work together in order to design common strategies to address forced labour, a phenomenon that is likely to permanently mark the future of the healthy part of our production system, that is dealing with two enemies, the economic crisis and the unfair competition of sweatshops.

“Civilizing globalization” in order to put out of business poverty and social exclusion in search of the optimal balance between profits and rights, therefore recovering the human dimension of work. The agri-food sector may be seen as a workshop of social inclusion, transforming areas of exploitation into a space of rights and social dignity. In protecting vulnerability law has still an important mission to play.

*Sustainability - Climate Change, Environment and Energy*

## **ASSESSING RENEWABLE ENERGIES' IMPACT ON LOCAL COMMUNITY DEVELOPMENT**

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Generation from renewable energy sources in Romania increased from 1% in 2010 to approximately 11% in 2014 and is expected to reach 20% in 2020. This increase was due to the support scheme designed by the government to encourage generation from renewable energy sources. While the development of renewables has a serious impact on the energy system, there are no studies which interconnect renewable energy projects with the development of local communities in Romania. It worth asking however if renewable energy projects can have an impact on the development of communities where those RES projects are located.

Present study aims to enlarge the debate on renewables by observing the possible effects renewables projects can have on peripheral communities' development. While observing the general industry context, this research moves the debate on renewables from the field of energy management to the broader field of economic development of peripheral communities. Enlarging the theoretical and empirical debate is necessary in this context of a higher importance renewables play in our day to day life. Studying renewables separated from other important social processes presents a serious lack since it does not allow for a complex understanding of renewables roles beyond the energy system.

In order to answer the research question, current study evaluates the impact of RES on local community development by studying the relationship between different types of renewable energy projects (wind, solar, biomass and hydro) and variables which describe socio-political and economic development. Particularly it looks into what economic and social effects is produced by each type of RES project.

The first part of the project maps the RES resources in north-western Romania and existing RES projects in the region. Further on, the research collects data on employment, infrastructure investments, local and regional taxes and revenues as well as on possible forward and backward linkage effects (both economical and institutional) which were produced or influenced by RES projects. The result showed important differences between types of renewable energy projects and effects those can have on local communities. Comparing solar and biomass power plants for example, we can easily observe that biomass power plants are stronger interconnected with local community economic activities, while solar power plants have a limited effect on local economy.

Based on the collected information, the present research builds an RES impact index. The main role of which is to assess the general impact a specific type of renewable energy project can have on the economic and social development of rural communities in Romania. The RES impact index can be used as a complementary tool to re-evaluate the support scheme for renewable energy projects in Romania, encouraging the ones that have

also a positive effect on social and economic development of local communities. RES impact index can have an important public policy application since it can be also used by local and regional decision-makers in order to promote a RES project which can have positive effects on their communities.

Complex understanding of effects renewable energy projects can have on our society is crucial given the higher share that those have in the energy generation mix. Integrating RES projects in our understanding of development is very important because it also allows for a re-assessment of communities' resources and the way those resources can be used in order to develop local economy and increase the political power of peripheral communities.

*Role of Social Networks in Regional Development*

## **CONTEXTUALIZING THE CONTEXT: SOCIAL NETWORKS AS A TOOL FOR REGIONAL DEVELOPMENT – A META-ANALYSIS**

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The influence of social setting on regional development and competitiveness has been extensively researched through exploration of interrelated and partially overlapping concepts like social networks, social capital, inter-organizational trust etc. While the boundaries between these concepts have not been satisfactorily clarified and we are still dealing with plethora of definitions and in some case even some basic questions remained unresolved, such as the question whether any of these phenomena is the cause, dimension and consequence of another, or whether they are just different approaches to analysis of the same phenomenon, this research has anyway been very helpful in understanding how the varied relationships between different individual and collective actors influence regional performance via increase in their strategic competences, which includes both technocratic competence and social aspects.

In this paper we focus on the role of social networks in enhancing or hindering regional performance. More specifically, we will analyze the mechanisms through which they contribute to regional competitiveness via enhancing or limiting individual and collective actors' choices as well as their access to resources, both tangible and intangible, material and symbolic, which are necessary for upgrading strategic competencies.

We start the paper with a detailed account of conceptual dilemmas and proposed solutions. Here we are including the discussions that have been taking place since the early beginning of these debates since the end of the 19th century when these issues first came to the fore in discussions on "industrial districts", but the main focus here will be on the more recent advances in the framework of new economic sociology. After that we will continue with a detailed comprehensive review and meta-analysis of the published relevant studies and research reports that are dealing with the role of social networks enhancing regional competitiveness and development. On the basis of this we identify key research approaches and dilemmas, as well as the most relevant results, which are shaping the future research strategies and are making their way into international research programs. Here we offer suggestions for future research directions and approaches.

In the last part of the paper we are focusing on the possible strategic utilization of networks as a purposeful policy a tool. This topic has not been completely ignored by the researchers, but has nevertheless curiously under-researched, although it offers an important topic not only in terms of scientific results, but also in terms of utilization of scientific knowledge and in terms of access to research funding.

**THE NATURE AND EFFECTIVENESS OF INNOVATION SUPPORT IN THE ERDF, 1989-2013**

**David Charles, University of Lincoln, UNITED KINGDOM**

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Over the past twenty five years there has been a steady growth in innovation measures within the European Regional Development Fund, promoted by a variety of strategic frameworks such as Regional Innovation Strategies and more recently Smart Specialisation Strategies. The rationale for these interventions, and the shift away from physical infrastructure support has been underpinned by developments in economic geography embodied in the form of new regional strategies and by an overarching European strategy for competitiveness and innovation in the form of the Lisbon Agenda.

This paper examines the effects of these developments at the regional scale in the form of the evolution of innovation measures in the ERDF programmes of 15 regions across the EU 15. It is based on an evaluation study commissioned by DG Regio to investigate the main achievements of Cohesion policy programmes and projects and their effectiveness and utility over the longer term. It is the first longitudinal and comparative analysis of the implementation of the Funds from 1989 to 2012 covering almost four full programme periods. Quantitative data from the 15 regions are used to identify the growth in the scale of innovation support across the four programme periods and the shifts in the nature of specific interventions. Case study material from across the regions is drawn upon to identify the effectiveness and utility of these measures and the extent to which regions have been able to make effective use of ERDF support to underpin their regional development strategies.

Several alternative paths can be identified, and these are reflected in the varied nature of the achievements. In some of the Objective 1/Convergence regions, the initial focus was on building up public research capacity, mainly in universities, with a gradual broadening out of the agenda to encompass business RandD, innovation support and science parks. The former Objective 2 regions typically began with a focus on support for innovation in SMEs, as they were already reasonably well endowed with innovation centres and universities, but emerging sectoral strategies have involved new technology centres, investment in research and new forms of science park. A number of the case-study regions focused on stimulating RandD growth, especially after 2000, to meet Lisbon and Barcelona targets. Often this was led by investment in the public sector, and especially universities, which could most easily absorb the investment. Such approaches have undoubtedly been beneficial in boosting the overall level of research in some of the regions, although the degree of sustainability varies. Many regions also pursued cluster-type initiatives with a varied success rate as the time needed for the maturity of these policies is quite extended. There has been criticism that some strategies are insufficiently focused and do not build on existing strengths – criticisms addressed in part by the proposals for smart specialisation from 2014 onwards.

*Re-assessing Rural Areas: Approaching the Challenges for new "Ruralities"*

**FROM RURAL VILLAGES TO RESIDENTIAL CLUBS. A FRENCH CASE STUDY**

**Eric Charmes, ENTPE / University of Lyon, FRANCE**

Today in France, almost 16,000 municipalities (out of 36 600) are classified as periurban by the French national statistics office (INSEE). These are generally former villages that have been absorbed into a city's sphere of influence. In nine out of ten cases, these municipalities have fewer than 2,000 inhabitants, and their built-up areas – made up for the most part of individual houses – are surrounded by natural and agricultural spaces. From a morphological perspective, the periurban municipalities may thus be still be qualified as village. But, from a socio-political perspective, the change is tremendous. We propose to call this change "clubbisation" – an inelegant neologism, but one whose meaning is nonetheless clear. Clubbisation is the transition from a relationship with the local environment close to that found in the ideal-type of a community (and which could



still be found in many French rural villages in the 1960s) to a relationship close to that found in the ideal-type of an exclusive club (and which can be found today in condominium complexes and increasingly, as we will see, in French periurban towns and villages).

*Alternative Spaces in the Urban Region: Translocal Movements and Communities in a Time of Global Growth Agendas*

## **GRAMMARS AND GEOGRAPHIES OF MAKING: TOWARDS A COHERENT RESEARCH AGENDA**

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**Jens Kaae Fisker, University of Southern Denmark, DENMARK**

This paper aims to enrich current debates by reaching across space and scale to tease out knowledges that have fallen under the radar due to geographically induced blindspots. To do this the paper (re)visits both literature and empirical sites, and emphasises issues of local authenticity, global uniformity and translocality as they appear across urban networks and hierarchies encompassing the full range of urban society. Stretching the meaning of cultural scenes, the paper travels from the makers movement in Milan, through creative spaces in deindustrializing small cities and onwards to surfer communities in peripheral villages.

The makers movement, a new wave of Do-it-yourself culture, emerged by the recent introduction on low-budget digital fabrication that allows de-centralize production of high-tech goods, such as 3d printer and lasercut. This movement reflects interesting characteristics and mechanisms that interrelate with urban transformation and developments of societal change under late capitalism. Indeed, in a global economy, the city can handle the development of offline networks, improving the exchange of information and knowledge and therefore allow the concentration of activities, events and resources.

Notwithstanding technologies that appear to allow for frictionless communication and interaction across space, overcoming geographical distance in the process, the city retains its centrality and continues to harbour concentrated hubs of activity. Indeed, despite the fact that technology and the production of material objects is part of makers phenomenon, it remains embedded in the city. As Michael Storper [2013: 147] wonders “why does interaction remain local in such a borderless world of knowledge flows, in particular in technology?”. The Maker movement as a form of common-based peer production has been either celebrated as expression of a new generation of artisans that puts at the centre of the scene the local and collaborative nature of the production, representing an example of a new model of production to come, or defined as a marginal phenomenon of a few enthusiastic hobbyists of new technologies, which consequences for society are irrelevant.

It is time to begin understanding the maker movement’s role in the city and its real potentials. For this to happen, rigorous empirical research on the processes and effects of the maker movement is needed. In this paper, we are interested in understanding how the city is able to accommodate new diffused collaborative practices and the role that local context has in determining relationships and interactions among makers. We set out to answer these questions by establishing both the grammar and the geography of the maker movement.

*Culture and Creativity as a Driver of Regional Development*

## **URBAN DEVELOPMENT WITH FASHION? RELATIONS BETWEEN THE PRODUCTION NETWORK AND THE CREATIVE FIELD OF FASHION DESIGNERS IN BERLIN**

**Marco Copercini, Universität Potsdam, GERMANY**

Creative industries play a relevant role in the economy of Berlin and within its sectors the fashion design stands out for its economic dynamism and the image creation potential it has for the city. The paper will discuss the relation between the production network of Berlin fashion designers and the creative field of the

city in relation to the urban economic development. The production network of Berlin fashion designer has at its centre the designer as creative actor and groups together the different phases needed to produce, market and sell the products, which incorporate not only economic relations, but also social relations of the designer. Both economic and social relations of fashion designers can be embedded at the territorial level, namely in the city, or in professional networks at an interregional and global level. With this approach to the production organisation of fashion design as creative industry is possible on one side to underline the analytic distance with the more linear Global Commodity Chain that is often used to describe the production structure in the apparel sector. On the other side is also possible to understand the relation the designers have with the city and how it can play an important role in the production organisation. With the help of the production network framework is than possible to underline the heterogeneity of the production organisational structures and the social organisation of the fashion design in Berlin, so that different constellations are highlighted. The variety and the common ground of this sector has to be understood in order to consider the impact it can have on the economic urban development and the mutual exchange it is based on. On the side of the city, Berlin has not only the higher concentration of fashion designer in Germany, but also more than ten facilities that provide fashion design related courses, that contribute to the cluster of fashion designer and also to the local market of potential work forces that can be hired with temporary low or not paid positions by the fashion label in the city. Furthermore in Berlin take place fashion events, like the Fashion Week and other trade fairs, that not only mobilise local actors – i.e. photographers, press, models, buyers – but also draw other there, even though this kind of events in Berlin have mainly a regional appeal. On the side of the designers, even though the majority of the labels are low budget small enterprises, is not only the spatial organisation of the production inhomogeneous, from small local production to international networks, but also the relation that binds the designers with the city show significant differences: relatively low living costs, openness and variety of life styles and creative scenes, personal motivations, presence of other designers and design institutions are the main motives that bind designer in the Berlin. Combining the fashion design production network and the work of the designers with the characteristics of this sector in Berlin it is possible to recognise that only one part of the production organisation and its actors can be associated to potential urban development and virtuous intersectoral relations, while in other cases the concentration and the work organisation of the fashion designer is based mainly on the socio-economic context of the city, therefore development strategies may modify the conditions on which a good part of fashion designer are at now working in Berlin.

*Re-assessing Rural Areas: Approaching the Challenges for new "Ruralities"*

## **PATTERNS OF SOCIO-ECONOMIC PERFORMANCE IN RURAL SCOTLAND**

**Andrew Copus, James Hutton Institute, UNITED KINGDOM**

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Scotland's rural areas present a wide range of socio-economic environments, from prosperous peri-urban, relatively poor former mining areas, intensive agricultural areas, to sparsely populated highlands and islands. In recent years these have, like the rest of rural Europe, been subject to powerful forces for economic restructuring. Foremost among these have been the declining profitability and dwindling labour requirement of agriculture and other primary activities, together with increasing mobility/accessibility combined with the increasing importance of information and communications technology (ICT) and advances in logistics. As a consequence of these, and other, trends, the spatial organisation of economic activity and settlement is gradually changing. Patterns of "performance" are also evolving. Some of the reassuring conventional stereotypes, (rural/remote = lagging, rural-urban net migration flows, agriculture driving the rural economy) are increasingly questionable.

This paper provides an account of an attempt to map micro-geographical patterns of socio-economic performance across rural Scotland in 2011. This was an exercise funded by the Scottish Government in order to establish an objective basis upon which to allocate budget for the new Leader programme. The definition of "socio-economic performance" is derived from the Scottish Government's National Performance Framework, a set of indicators and targets established as a means of monitoring the impact of those policies which are devolved to the Edinburgh administration.

The analysis is based upon a database of twenty indicators, each available for more than 2,000 “data zones” which according to the Scottish Government’s official classification are rural or within small towns. Data zones in the major urban areas are excluded from the analysis. Of the twenty indicators, six relate to the Scottish Government’s strategic objective “Wealthier and Fairer”, four relate to “Healthier”, six to “Safer and Stronger” and four to the “Smarter” objective. A simple decile-based scoring procedure allows scores for each of the four strategic objectives to be derived. These are then combined to form an overall socio-economic performance (SEP) index.

Analysis has shown that the wealthier/fairer and smarter thematic indices are relatively strongly correlated – i.e. data zones with a more highly educated population tend to be wealthier and to have lower levels of inequality. Data zones with healthier populations tend to perform better on the safer/stronger objective, suggesting a nexus of well-being. However neither aspect of well-being is closely related to the wealthier/fairer index; i.e. well-being seems to some extent independent of economic performance.

The maps of the four strategic objective indices all (though to differing degrees) reveal bands of higher performing data zones surrounding the Central Belt, Aberdeen and Inverness. Poor performing data zones are generally found in the Western Isles, the smaller islands of Orkney and Shetland, and in the NW Highlands, but also (conspicuously) in Dumfries and Galloway. Pockets of poor performance are found in the former coalfield and heavy industrial areas of the Central Belt, Lanarkshire, Ayrshire and Fife. The overall SEP index map thus captures two dimensions of spatial variation in performance; accessibility-remoteness and structural legacy effects.

Using a 6-fold urban-rural classification of data zones as a “filter” suggest that in hard economic terms small towns out-perform the surrounding rural areas, but in softer aspects of health, human and social capital, rural areas seem to have the edge. Cutting across both these contrasts is the pervasive advantage of accessibility. As the unweighted average of the four strategic objective indices, the overall SEP Index exhibits a hybrid pattern. The strongest performing group of data-zones are the accessible rural ones. At the other extreme, the poorest performance is associated with remote small towns. The accessible small towns and the remote rural data zones occupy intermediate positions.

In conclusion these patterns are reflected upon in relation to recent commentaries on the New Rural Economy, and its changing spatial organisation. Is the relative prosperity of accessible rural areas in Scotland likely to be a consequence of urban spread effects, or of (rural) endogenous growth processes? To what extent have remote rural areas benefited from a reduction in the role of geographic distance due to changes in logistics and the increasing adoption of ICT? Although the SEP index cannot provide conclusive answers about processes driving spatial re-organisation of the rural economy, it can provide strong hints about specific avenues for further research.

*Culture and Creativity as a Driver of Regional Development*

## **REGIONAL CULTURE AND NEW FIRM CREATION IN EUROPE**

**Carlo Corradini, Aston Business School, UNITED KINGDOM**

This paper offers a novel perspective on the role of regional culture as possible determinant of new firm creation, exploring several elements that characterise regional social attitudes and behaviour patterns and their relationship with economic well-being.

Extensive research has been devoted to the analysis of structural and economic elements to explain the significant and persistent variation in the rate of new business formation and self-employment across regions. More recently, scholars have turned their attention towards the role played by institutions reflecting norms, attitudes and values that collectively define regional culture. The importance of both formal and informal institutions on regional economic development and new business venturing has been long recognised, representing essential elements in theoretical concepts such as industrial districts, regional systems of innovation and learning regions. However, partly reflecting the difficulty in finding data at regional level to measure informal institutions and regional culture, there is still scant empirical evidence on their relationship

with regional growth and, in particular, new business formation. A growing strand of research is exploring the mechanisms through which values that define entrepreneurial attitudes and the social legitimacy of entrepreneurship influence regional entrepreneurship rates and economic growth. Yet, evidence on the effects exerted by the broader system of social norms and beliefs that define regional capabilities to support and facilitate the birth of new firms is still rather scant.

This paper explores the role of informal institutions, defined in terms of shared values, trust and social interaction, in shaping the web of locally embedded relations that is essential in sharing information and reducing uncertainty as well as searching for and connecting ideas, thereby fostering the development of new firms. Most importantly, this paper argues the effect of these characteristics is crucially dependent upon the level of economic development in the region. As the economic well-being progresses, contacts and exchange of information are increasingly codified through formal institutions. Thus, the role of informal connections and social relationships becomes gradually less relevant.

Combining data from Eurostat and the European Social Survey for over 300 NUTS3 regions in 10 European countries, the paper provides empirical evidence from GLM and GEE models that the identified dimensions of regional culture play an important role in fostering both the creation of new companies and promoting regional employment. In this sense, the results indicate that the combinative opportunities resulting from informal channels of knowledge exchange in regions characterised by higher levels of social trust, interaction and shared cultural norms may play a key role in supporting the formation of new businesses. After controlling for economic characteristics such as education and unemployment as well as country-specific effects, the results also support the hypothesis that the level of economic well-being exerts a critical mediating effect over this relationship, as the importance of the social elements of regional culture decreases in regions characterised by increasing levels of economic development.

This paper contributes to the literature on regional culture pointing to the importance of the relationship between formal and informal institutions in fostering social interactions which enhance the opportunities for sharing knowledge competences and information, and connecting previously unrelated ideas, leading to the development of new business formation.

*Innovation and Knowledge Economies*

## **PUBLIC RANDD FUNDING AND INNOVATION STRATEGIES. EVIDENCE FROM ITALY**

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**Laura Barbieri, Università Cattolica di Piacenza, ITALY**

**Daniela Bragoli, Università Cattolica di Milano, ITALY**

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In recent years, rapid technological change, shorter product life cycles and globalization processes, have deeply transformed the current competitive environment. These changes are inducing firms to face stronger competitive pressure which push them to develop new products, to improve productive processes and/or to implement new technologies. The possibility of engaging in collaboration with research oriented partners, which allows to continually advance knowledge, is one way of dealing with the above mentioned competitive environment. As a consequence, the conventional paradigm of having organizational core RandD activities exclusively (Make strategy) is becoming less critical, while more recent models of innovation suggest how firms are opening up their RandD borders to tap into external sources of knowledge (Buy strategy) and improve RandD performance. Empirical evidence suggests that firms with a "Make and Buy" strategy are more likely to profit from innovation.

At the same time, public policies on innovation play an essential role in fostering RandD activities in order to promote long term growth. Different levels of government, i.e. regional, national and EU, put great effort into implementing measures to improve the RandD performance of firms.

Most of the research advocating for the effectiveness of public intervention is based on the concept of additionality (Luukkonen 2000, Res. Policy), that is measuring the extent to which public intervention gives rise to a new activity or outcome that would not otherwise have come into being. According to this strand of research, public funding is responsible for stimulating additional investments. On the other hand, another strand of the literature argues that public funding leads to a crowding out of private investments, thus reducing the incentive for private investors to invest in RandD (Hall and Van Reenen 2000, Res. Policy). Although the debate is still open, recent empirical literature discard total crowding out effects of public funds at the firm or project level and the additionality effect seems to prevail.

Our paper contributes to this evidence and aims at investigating the effectiveness of public innovation policies on Italian innovative firms, by evaluating behavioral indicators (see Bayona-Sáez, Cruz-Cázares and García-Marco 2013, Technol Anal Strateg).

Using a unique dataset of Italian companies, which combines the information of the Community Innovation Survey (referring year 2010) with balance sheet data on companies characteristics (year 2010, AIDA Bureau van Dijk), we construct an econometric model able to measure the treatment effect of a given policy program (Public subsidy to RandD) in a non experimental set up taking into account that the assignment of the beneficiaries of the subsidies is non random.

We evaluate the effectiveness of public innovation policies on the firm's decision to produce technology itself (Make strategy) or to source technology externally (Buy strategy) or both (Make and Buy strategy). Moreover, while a large proportion of the research focuses on a specific public initiative, we instead focus on three different degrees of government intervention (i.e. funds from regional governments, state and other sources, including the EU).

The Italian case is relevant in the international comparison because Italian firms are usually characterized by a low level of innovation activities (Hall, Lotti and Mairesse 2013, EINT).

In particular in Italy only large firms assign a high priority to formal RandD activities (internal RandD) while SMEs resort mostly to external RandD, in the form of intermediate and capital goods (Santarelli, Sterlacchini 1990, Small Bus Econ). On the other hand other forms of external RandD activities that involve the cooperation with universities and/or firms and that are considered to be more likely to have a positive impact on innovation outcome, are less frequent. In this context, it becomes particularly interesting understanding what strategy public funding mostly incentivizes.

The policy implications of our work are twofold.

Firstly, we report evidence on the effectiveness of public funding (regional, state and EU) in fostering RandD activity in Italy. Secondly, suggestions are given on which RandD strategies (in house, outsourced or a combination of the two) policymakers should support, since each strategy has a different implication on innovation performance.

*Urbanisation and Cities*

## **A REGIONAL FORESIGHT METHOD AS A CATALYST FOR STAKEHOLDER ENGAGEMENT**

**Paul Cowie, Newcastle University, UNITED KINGDOM**

Cities in the UK, and elsewhere around the globe, are currently struggling to cope with increasing demands, for better public services in an era of fiscal pressures, with fluctuations in population and changing demographics, weak economies and business closures, set against ongoing uncertainty about global trade, the rising cost and sustainability of energy supplies and the impact of climate change. Cities are the engines of future growth and there remains untapped potential to create innovative solutions and improved institutional arrangements to benefit citizens and businesses. But changing institutional frameworks have weakened the availability of evidence, data and strategic thinking, to enable appropriately evaluated and robust collection of intelligence and methods to guide cities through complexity both now and in the medium to long term.

Agencies and institutions responsible to supply public services such as transport and utilities, or health and education, are separate to those responsible for formulating long term city visions, regulating land, and other commodities. This fragmented and constantly changing governance structure during a time of economic upheaval is a common feature of cities and states that have witnessed the privatisation of public services, public finance cut backs, and a changing and changeable architecture of policy making. Where different agencies do collect different sorts of data and intelligence about the same places, they often do not share that intelligence across the sectors or actors.

In the UK a further restructuring of regional institutions is taking place. This swing of the pendulum back in favour of regional devolution is partly due to the relative success, both politically in the case of Scotland and economically in the case of Greater London, of those areas which currently enjoy a degree of political and financial autonomy. The phenomenal move towards devolution in Scotland, and its success in securing new powers away from the centre, has encouraged the English regions to demand higher levels of autonomy. At the same time, the noticeable popularity and visibility of the directly-elected mayor in Greater London and his capacity for coordinating strategic policy making for the capital region have been seen as the way forward for the other English regions. This shift towards greater regional devolution is a mixed blessing. With greater powers comes greater responsibility. Regions will need to develop greater governance capacity and ensure they are able to engage a wide spectrum of stakeholders in the development of sound evidence based policy.

This paper outlines the experience of the Newcastle Urban Foresight project. The project is a partnership between the national Foresight Future of Cities programme, Newcastle University and Newcastle City Council. In essence this project aims to pilot a foresight methodology which is capable of being applied at a city region by mobilising the intellectual resources of universities and their local stakeholders and which could be adopted elsewhere. The project is a piece of applied research which has both undertaken a regional foresight process and at the same time has expanded and challenged existing methods of foresighting.

*Innovation and Knowledge Economies*

## **THE "REGIONAL INNOVATION PARADOX" AND EUROPE'S LAGGING REGIONS**

**Niall Crosbie, Waterford Institute of Technology, IRELAND**

**Bill O'Gorman, Waterford Institute of Technology, IRELAND**

**Frank Peck, University of Cumbria, UNITED KINGDOM**

This paper is a follow-up to a presentation at the RSA Winter Conference 2014, which presented an ongoing doctoral research project investigating the "regional innovation paradox". This paradox, first referred to by Oughton et al (2002), describes "... the apparent contradiction between the comparatively greater need to spend on innovation in lagging regions and their relatively lower capacity to absorb public funds earmarked for the promotion of innovation and to invest in innovation related activities, compared to more advanced regions" (Oughton et al, 2002, p. 98). The regional innovation paradox has received renewed interest in recent years through analysis in the EU's Regional Innovation Scoreboard (2012, 2014) and through research carried out by Muscio et al (2013). Proposed solutions to this paradox, such as improved institutional or governance capacity, are also often grounded in the concept of "regional innovation systems", which has been prominent in academic debate on regional innovation since the mid- to late-1990s. However, review of the literature on the paradox and on regional innovation systems generally demonstrates the complex nature of the issues that influence the ability to both absorb investment and use it effectively, particularly at the regional level, which merits further research.

The doctoral research, therefore, makes a contribution to the existing body of research and debate by examining some evidence for the regional innovation paradox in lagging regions and developing a critique of some of its assumptions. One central hypothesis drawn from the paradox, for example, is that some regions underperform in terms of innovation and seem unable to address the issue even when resources are made available for that purpose, with the "cause" being weaknesses in innovation and institutional capacity. Key research objectives are thus to examine:

- the relationship between changes in levels of investment in RandD/innovation and changes in innovative performance in lagging regions;
- how public/EU funds have influenced RandD and innovation policies and practices in lagging regions;
- to what extent institutional structures or other salient factors influence the relationship between levels of RandD/innovation investment and innovative performance in lagging regions.

For the purposes of this research, lagging regions are defined as being the former “Objective 1” regions that were prioritised for funding during the EU’s 2000-06 Structural Fund programming period, i.e. regions which (in most cases) had a GDP per capita of less than 75% of the EU-15 average over a 1994-96 reference period.

The methodology primarily adopts a mixed methods approach that uses both quantitative and qualitative techniques. Stage 1 of the research, for example, presents an empirical analysis of the regional innovation paradox through review of indicators of innovation activity and performance for lagging regions, based on NUTS classifications, but from a dynamic rather than static perspective (i.e. how performance has changed over time), and with a particular focus on changes between the 1994-99 and 2000-06 Structural Fund programming periods. In particular, the analysis seeks to compare trends in innovation “inputs” (RandD investment, RandD personnel) with trends in possible innovation “outputs” (patents, sectoral employment), while also taking account of other key variables (population, GDP, economic structure, education levels). Early findings suggest that lagging regions, in general, have made some progress in improving their levels of innovation investment and performance relative to more advanced regions. However, innovation in such regions remains well behind that in more advanced regions, while correlation between innovation inputs and possible innovation outputs appears at best mixed.

A key goal of Stage 1 data analysis, however, is also to identify lagging regions whose innovation activity and performance over time might provide interesting candidates for deeper, more qualitative case study analysis of issues underlying the regional innovation paradox. Stage 2 of the research therefore proposes to adopt a more interpretive approach to exploring the nature of the paradox, based on case study research in a small number of lagging regions, which provide varying evidence of innovation performance and an opportunity to test assumptions that are implicit in the paradox, e.g.:

- regions showing evidence of progress in addressing the paradox through improved spend of public RandD funds, increased RandD investment and improved innovation performance;
- regions showing evidence of failure to absorb public funds and generate RandD investment, which therefore appear to remain rooted in the perceived paradox;
- regions showing improved spend of public RandD funds and overall RandD investment levels, without improving innovation performance, raising questions about the effectiveness of spend.

Candidates for case study research will be highlighted at the conference, while the proposed investigative process in these regions will involve dialogue with key informants and stakeholders (policy makers, policy implementers and relevant senior executives from local, regional and national government), in which conflicting interpretations of regional performance will be discussed and negotiated. Added to this, the case studies will incorporate review of innovation policy documents and strategies, examination of reports on regional innovation performance, and further contextual data analysis, using other indicators that reflect concepts and dynamics of regional innovation systems and the regional innovation paradox.

## **KNOWLEDGE TRANSFER TO AGRICULTURE IN POLAND – ROLE OF SKILLS, EDUCATION AND WISDOM**

**Konrad Czapiewski, Institute Of Geography And Spatial Organization Polish Academy Of Sciences, POLAND**

Diversification of sources of income on family farms is seen to stand in the way of what would otherwise be a steadily worsening economic situation reflecting fluctuating agricultural prices. This implies that a farm's success may be markedly associated with skilful resource reallocation. "Skilful" is a key word, since the effectiveness of reallocation is found to depend on the degree of innovativeness farmers show as they explore the multifunctionality of rural areas. This is to say that the multifunctional rural development concept is demands more in terms of knowledge than the traditional one focusing on agriculture per se.

The main aim is to investigate the knowledge transfer to farmers in Poland. There are proposed three models: peer to peer, global information and direct from supplier. In such transfer different kinds of knowledge are important: embodied knowledge usually identified with the level of education and tacit knowledge (wisdom) consists mainly in the conveyance of own experiences.

The presentation will be based primarily on theoretical discourse, analysis of existing data – farm accountancy and censuses – and the use of primary data derived from survey of 2,500 Polish farmers.

The analyses performed showed that both local and codified knowledge are important factors in everyday functioning of farms. The efficient management of farm is essential with both types of knowledge; they are complementary attitudes. Within the investigated models the peer to peer is recognised as sensitive to tacit kind knowledge. The global information model appear to be of the lowest effectiveness concerning knowledge transfer to rural areas. Most effective transfer knowledge with the use of direct from supplier model is of higher limitation in agriculture due to high initial knowledge level obstacle.

Presentation prepared within project "Models of knowledge transfer in agriculture and its influence on agricultural productivity - spatial analysis", financed by the NCN.

## **INTERNAL MIGRATION AND LABOUR MARKETS IN BRAZIL: THE PROFILE DYNAMICS OF MIGRANT WORKERS BETWEEN 1980 AND 2010**

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The dynamics of labour markets in Brazil is extremely related to its internal migration patterns. The most developed regions of the country have a more expressive capacity of population attraction in comparison to the less dynamic regions. These dynamic locations tend to attract individuals with higher levels of education and professional skills, and simultaneously individuals with low qualification. This fact has expressive implications to the dynamics of labour markets at the migrants' areas of origin and destiny. Furthermore, several studies indicate that a process of migration transition has been started in Brazil since the mid-1990, stimulated by the economic expansion of mid-sized cities and by return displacements of the migrants. In this context, the aim of this paper is to characterize the profile of migrant workers in Brazil during its recent period of development (1980-2010). We intend to identify the main characteristics of migrant workers in Brazil (sex, race, educational level, marital status, occupation, economic sector, labour income, etc.), as well as their regional specificities. To achieve this goal, we analyze data from demographic censuses (1980-2010), provided by Brazilian Institute of Geography and Statistics (IBGE). We also estimate logistic models to determine the individual migration condition, and to identify possible changes in the probability to migrate according to the individual characteristics (productive or not). The migration criterion adopted considers migrant the individual



who lives in a region for less than 05 years, regardless of his place of birth. Moreover, migrant workers are classified according the displacement range (short or long distance), and the return displacements. This classification is very important to identify if there are dissimilarities among migrant workers according the distance traveled. The spatial units of analysis are 413 Regional Comparable Areas (RCA's), built from data provided by IBGE. They are equivalent to the micro-regional scale. The results of the econometric models indicate that the differences between migrant workers in Brazil decreased in the period analyzed, however, migration selectivity and regional specificities persist, especially in relation to migrants' labour income. Results demonstrate that migration is positively related to the variable sex: men have a higher probability to migrate than women (on average 10% higher). This result shows that despite women's emancipation in recent decades, there are subjective factors that contribute to the immobility of women. In relation to individual race, it is possible to observe a decrease in the differences between the analyzed groups (white individuals and black and multiracial individuals). In the 1980's white individuals had a probability to migrate 9% higher than black and multiracial individuals, and this percentage decreased in the period analyzed, approaching to zero in 2010. The probable reason to explain these results is related to the reduction of race discrimination in Brazilian labour markets. This reduction may have contributed to decrease the uncertainties related to the return of the displacement of individuals with non-productive characteristics traditionally excluded of the process of labour insertion. However, it is important to highlight that, although less expressive, this discrimination persists, and continues to contribute to labour income differentials. Migration is also selective in relation to individual age: individuals with age between 25 to 34 years have a higher probability to migrate in comparison to eldest individuals. These results confirm the hypothesis about the facility to migrate of young people related to their high adaptability to new social contexts and to their high risk propension. Furthermore, the higher the level of education, the higher the individual probability to migrate. In summary, the results of the models show that young white men with higher educational level have a higher probability to migrate in Brazil between 1980 and 2010. There are evidences of increase in the probability to migrate of women and black and multiracial individuals, however, these changes were insufficient to influence the selectivity of migration process. The characterization of migrant workers' profile demonstrates that the displacement generates monetary returns only to the individuals who have productive and non-productive characteristics traditionally benefited by Brazilian labour markets. These returns also differ between Brazilian regions.

*Sustainability - Climate Change, Environment and Energy*

## **GOVERNANCE CHALLENGES OF CLIMATE ADAPTATION IN FLOOD-PRONE DELTA CITIES: BRIDGING THE GAP BETWEEN SPATIAL DEVELOPMENT AND FLOOD RISK**

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As coastal cities are increasingly found to be exposed to the risk of flooding and consequential losses due to a changing climate, city governments are faced with tough challenges. These are related to spatial planning –the way land is used and developed; to the management of flooding –the control of storm surges, sea-level rise and land subsidence; and to governance –the ability of governmental and non-governmental actors to collaborate in decision-making. This paper has two lines of inquiry. First, it scrutinizes the climate adaptation literature for the linkages and gaps between the concepts of spatial planning, flood risk management and governance. Second, it studies the delta cities of Hong Kong, Guangzhou and Rotterdam to illustrate how and why their spatial development, management of floods, and governance dynamics are shaping climate adaptation decisions. The paper finds that while spatial development and flood management policies and practices are important 'tools' in rendering the cities resilient to the risks posed by climate change, it is the steering and rowing capacity of institutions and their actors that is crucial in addressing climate-related risks.

## **REALISING THE BIOECONOMY: DEVELOPING MULTI- AND TRANSDISCIPLINARY KNOWLEDGE DYNAMICS**

**Margareta Dahlström, Karlstad University, SWEDEN**

**Cecilia Nahnfeldt, Karlstad University, SWEDEN**

How can we “do” sustainability transitions? This paper addresses the tall order of making a transition to a sustainable development, through focusing on knowledge dynamics in the bio economy. The paper is based in the ten-year initiative ‘Paper Province 2.0 – an innovation system for a bio based economy’. This € 13M-initiative is co-funded by the Swedish Governmental Agency for Innovation Systems (VINNOVA) and a triple helix consortium of partners including member firms of the cluster organisation Paper Province, Region Värmland, the County Administrative Board of Värmland, local authorities, the Swedish Forest Agency and Karlstad University.

To realise the bioeconomy innovation of goods, services, processes, business models are needed as well as development of new organisational systems and behavioural changes that contribute to sustainable development. Key aspects of such multi-faceted innovation processes include the understanding of knowledge dynamics. That is to say, to understand the development of knowledge and learning as processes involving relations and interactions between people. Knowledge dynamics that can contribute to a transition to a sustainable bioeconomy needs to be cross-sectoral, i.e. interactions that draw on different disciplines, industries and expertise. It also needs to involve different actors such as researchers, firms and industry actors, public authorities and agencies, consumers and the civil society. To be able to “do” sustainability transitions and contribute towards solutions to the global challenges, multidisciplinary and transdisciplinary research and development projects involving stake holders needs to be developed.

This paper reports back on a workshop that explored ways of starting to develop methods for multi- and transdisciplinary research and development aiming at contributing to a realisation of the bioeconomy. Based in the ‘Paper Province 2.0’ initiative with partners working with issues of transition to a sustainable bioeconomy in Finland and Estonia, and researchers at Nordregio research institute, the workshop addressed the overarching question ‘How do we make the transition to a sustainable regional development based in the bioeconomy’. The multi-national workshop was also truly cross-sectoral and multi-actor involving researchers from different disciplines, different types of regional public actors, and partners from industry. The result of the workshop was very promising since it identified key themes to focus as well as preliminary research questions and development issues that formed a good platform to cultivate in joint research applications as well as different development actions among the various partners. In addition, the workshop also provided empirical material to an article focusing on development of methods for multidisciplinary and transdisciplinary research.

One of the themes that were identified as important for realising the bioeconomy was the so called ‘quadruple helix’. Broadly speaking this means that in addition to the concept triple helix that is commonly used within innovation research and policy, further actors are increasingly needed to generate new knowledge and innovation, particularly in relation to needs-driven research and innovations. Such actors may include voluntary organisations and associations, trade unions, customers, clients and others. A result of the workshop was a small research project focusing on the fourth helix, both in relation to research and to policy. A paper based in this project is presented by Dr Ida Grundel at this conference.

**REGIONAL POLICIES IN THE FACE OF ECONOMIC CRISIS: FROM EMERGENCY MANAGEMENT TO POLICY DEVELOPMENT. THE CASE OF THE LOMBARDY REGION**

**Antonio Dal Bianco, Eupolis Lombardia, ITALY**  
**Alberto Brugnoli, University of Bergamo, ITALY**

The management of the economic crisis that hit Italy in 2008-2009 has tested the ability of the regional authorities to handle emergencies on a large scale and across different sectors.

Even Lombardy, one of the most important production systems in the country, has yet to come to terms with the effects of the recession. The prolonged crisis has contributed to question the development model focus on SMEs centrality and to start a change of setting of regional policies.

A pivotal role was played by labor market policy and crisis management that were forced to adapt the tools available. Indeed economic crisis has fostered the transition of labor policies toward an approach more active policy oriented, while the corporate crisis management led to the establishment of a special task force with the aim of enhancing the opportunities for recovery.

These initiatives often lack of an organic vision about development strategies.

The aim of the paper is to examine the effects of the recession in Lombardy, highlighting the role played by regional policies and the lessons learned. The results are interpreted using the concept of economic resilience that denotes the ability of a territory to maintain or improve the growth path as a result of a structural economic change.

**MODELLING ECONOMIC FUTURES FOR NEW ZEALAND REGIONS**

**Paul Dalziel, AERU, Lincoln University, NEW ZEALAND**  
**Caroline Saunders, AERU, Lincoln University, NEW ZEALAND**

In 2014, the New Zealand Ministry of Transport commissioned the Agribusiness and Economics Research Unit (AERU) at Lincoln University to review the economics literature on approaches to economic development and to model plausible futures for New Zealand's economic development. To complete the second task, the authors developed the Future Options for the New Zealand Economy (FONZE) model. FONZE begins with a baseline analysis of the industry and regional economic structure between 2007 and 2042 that might emerge under certain assumptions. It then assesses the impacts on those structures of seven different futures. The approach taken in the modelling builds on the neoclassical (Swan-Solow) growth model that identifies economic growth as the result of two factors: population growth and labour productivity growth. The baseline uses Statistics New Zealand projections for regional population growth and Treasury projections for labour productivity growth. The seven futures are then generated by varying some of the assumptions in the baseline analysis.

**FLANDERS AND THE EUROPE 2020-STRATEGY: MULTILEVEL GOVERNANCE IN PRACTICE**

**Joeri De Blauwer, Vlaanderen, BELGIUM**

The scope of this contribution is to illustrate a practitioner's perspective (period 2010-2014) with regard to the following up of the Europe 2020-strategy in Flanders. The contribution will highlight the increasing impact of

the European semester on the Europe 2020-governance mechanisms in Flanders. In particular the contribution gives an overview of the ownership of Flanders with regard to the Europe 2020-strategy, but will also deal with the cooperation of Flanders with the federal level in the follow up of the European semester (with the Europe 2020 strategy as an important part of it). The multilevel governance dimension is a characteristic feature of the Europe 2020-strategy and crucial for the success of the implementation of the strategy.

Flanders finds it evident that in the scope of the Europe 2020 strategy and in a wider sense, of the European Semester, it assumes the necessary ownership, of which having its own reform programme is a perfect example. Both at political and administrative level mechanisms were developed so that the Europe 2020 strategy can be closely monitored. That's the reason why in the period 2011-2014, the Government of Flanders yearly took note of the Flemish Reform Programme (FRP) within the framework of the Europe 2020 Strategy. Flanders is one of the few European regions that has elaborated a Europe 2020-reform programme.

The FRP consists of the necessary measures to achieve the realization of the Flemish Europe 2020 targets. In addition, with regard to the Flemish competences, the FRP provides a response to the country-specific recommendations that yearly are directed to Belgium. The government of Flanders also attaches great importance to reinforcing the support for the Europe 2020 Strategy in Flanders. That's the reason why the social partners, (supra)local authorities en the Flemish Parliament are closely involved in the drawing up of the FRP. Also the new Flemish Government (since July 2014) attaches great importance at the Europe 2020-strategy ("a strong Flanders in a strong Europe" is an important element in the new Flemish governmental agreement 2014-2019) and wants to increase the interaction between Flanders and the European institutions, also with regard to the Europe 2020-strategy. Flanders also took part in the EC public Europe 2020-consultation and submitted eight concrete proposals for the review of Europe 2020.

The FRP is also at the basis of the input by the Flemish authorities for the national reform programme (NRP). There are intensive cooperation mechanisms between the federal level and Flanders in the drawing up of the NRP. The drafting Committee (at administrative level) and a Policy Monitoring Committee (at political level) play a paramount role in this process. By doing so, the NRP includes the priority measures of the federal government and the governments of the regions and communities and an executive summary of the FRP is also included as an annex to the NRP. Flanders is also closely involved in the bilateral meetings between the European Commission and Belgium that are focused on the implementation of the country specific recommendations of Belgium.

The FRP is also the starting point for the Flemish contribution to the activities of the Europe 2020 platform of the Committee of the Regions.

*Role of Institutions in Regional Development*

## **ECONOMIC COMPLEXITY AND GROWTH: EVIDENCE FOR BRAZILIAN STATES**

**Heder Carlos de Oliveira, Federal University of Ouro Preto/Brazil, BRAZIL**

Why are some countries or regions richer, with a high level of economic development, while others are poorer? Why does some countries or regions industrialize and offer a good patter of life to the people, while others remain on the edge of the industrialization process? Which are the causes of the economic growth in some countries or regions and the stagnation of others? These questions point to the dichotomy between developed and underdeveloped regions, and the big challenge of economic development theory is to try to explain the difference of economic performance between countries or regions. In the case of the Brazilian economy, the evolution of regional inequality indicators, whether through the participation of the neediest regions in national income, or through technological and industrial concentration, or through social indicators, among other forms, presents itself as an obstacle to the national economy's development process. This environment makes the need to analyze and understand the causes of regional disparities in Brazil even more latent in order to propose policies that aim to contribute to the growth of the poorest regions, that is, strive towards improvements to the growth rate conditioning variables of these economies. The productive structure and structural transformation have regained attention in the academic and policy-making world as being one of the most important engines of growth and development (McMillan and Rodrik, 2011; Lin, 2012). Hidalgo et

al (2007) have put forward that the structure of a region's economy is a direct determinant of its success. Some of the reasons evoked are the existence of knowledge spillovers and the empirical evidence that countries are the reflex of what they export. Concerning a measure of the productive structure, Hidalgo and Hausmann (2009) and Hausmann et al. (2011) developed a new methodology to capture the economic complexity of a region using an Economic Complexity Index (ECI). This index captures the amount of capabilities and knowledge in a country or region productive structure. To the authors, the economic complexity of an economy represents the knowledge it carries and it can be measured through the composition of its productive output. In that sense, the aim of this paper is to analyze the effects of economic complexity in Brazil's regional GDP growth rate. The results are robust to the econometric methods and they show that the economic complexity affected the regional economic growth in Brazil from 2003 to 2010 positively. These results suggest that productive structure is an important driver of the Brazilian economy growth. It also shows the importance of the institutions involvement to help reduce the problem of the coordination's fault when the countries or regions try to accumulate and build capabilities.

*New Global Dynamics in Manufacturing and Services Relocation*

### **SHORTENING BRITISH MANUFACTURING VALUE CHAINS: ONSHORE OR RESHORE?**

**Lisa De Propriis, Birmingham Business School, UNITED KINGDOM**

**David Bailey, Aston Business School, UNITED KINGDOM**

The instability of an imbalanced economy in the UK before and after the Global Financial Crisis has refocused attention back to considering the benefits of re-industrialising Britain. We believe that the current interest in the manufacturing sector has to be pushed by two parallel emerging agendas and forces: one is the crucial importance of new firms formation in the light of the recent "distributed manufacturing" literature and the other is the opportunity for larger firms to shorten their value chains by seeking subcontractors closer to home.

The current paper explores both arguments. It examines the drivers of, and bottlenecks to, such forces in the UK context, as well as more global developments (persistent austerity, cheap oil, China's slowing growth, the possibility of 'Brexit' and EU deflation and stagnation). We also explore whether current UK policies have created the context to seize on some of these opportunities and paved the way for the development of a more competitive manufacturing sector.

The paper starts by considering the current debate on the "new manufacturing" and what are the implications of this in the UK as well as the UK's readiness in the EU context. It presents evidence of sector dynamics by considering firm size and spatial composition. It then integrates this with current considerations on reshoring trends in some sectors by analysing reshoring in manufacturing and automotive in particular. Shorter lead times, for example, may be linked in some cases with more bespoke manufacturing activity where consumers co-create product with manufacturers; and where manufacturing is therefore as much value and design or product development.

*New Global Dynamics in Manufacturing and Services Relocation*

### **RELOCATION OF ECONOMIC ACTIVITY WITHIN METROPOLITAN AREAS IN POLAND – SCALE AND KEY DRIVERS**

**Magdalena Dej, Institute of Urban Development, POLAND**

**Maciej Huculak, Institute of Urban Development, POLAND**

**Wojciech Jarczewski, Institute of Urban Development, POLAND**

Relocation of economic activity is a key subject in contemporary academic discourse. There exists a fair amount of research on the spatial and strategic aspects of this issue, which is examined from the perspective of decision-making behaviors of individual companies (for example Charles 1979; Van Dijk and Pellenberg

2000; Leitham et al. 2000; Wissen 2000; Brouwer et al. 2004; Holguín-Veras et al. 2005; Clifton et al. 2006; Ozmen-Ertekin et al. 2007, •••Cao Y. Nguyen Kazushi Sano Tu Vu Tran Tan Thanh Doan, 2013) and its consequences and determinants (Pennings E., Sleuwaegen L., 2000), as well as in the context of a wider set of actors and some wider global trends. In contemporary academic debate, there is also a discussion concerning relocation factors, which exert influence in the relocation decision-making process. Such factors include access to global networks, company size, rate of innovation, industry type, and many others.

This presentation is designed to add to the conversation. Metropolitan areas in Poland are experiencing a rapid rate of business relocation from the central city to suburban areas. Suburban townships with special economic zones are especially popular relocation targets. The purpose of the presentation is to show the scale of business relocation in the metropolitan areas of Warsaw, Kraków, Łódź, Wrocław, and Poznań. Changes in the rate of relocation will be discussed for the last two decades. Research was performed on all companies in the study area employing at least 10 workers. Personal interviews with company representatives were used to assess the reasons for relocation and the effects of relocation. This study makes reference to research on the determinants of company relocation in urban areas (Risselada, Schutjens, Van Oort 2012).

*ESPON Session: Practical Tools for Analysis and Policy-Making*

## **PRACTICAL TOOLS FOR ANALYSIS AND POLICY-MAKING**

**Sandra Di Biaggio, ESPON Coordination Unit, LUXEMBOURG**

This presentation will provide a brief overview of the practical tools developed within the ESPON Programme aimed at facilitating the use of territorial evidence by policy makers and researchers. In addition, one or two of the tools linked to other presentations in the session might be further explored based on a possible usage scenario by specific target groups.

In general, the tools developed by the ESPON Programme are available through the ESPON website. The majority of the ESPON Tools are aimed to support policymakers to find in a user-friendly way the data and maps they are interested in or to support them on specific types of issues such as TIA. With the ESPON tools policy makers are also enabled to position their region in a wider European context, compare a region with other regions and understand the main relevant European policies that might impact territorial development.

In addition, some ESPON tools are more targeted towards the scientific community, .i.e tools for analysis. These tools support the TPG's work on ESPON project, their research and analysis and with that they also indirectly the policy makers.

The ESPON tools available can be categorised based on their use, i.e. databases and statistics, analytical tools and monitoring tools.

Regarding databases and statistics, these include the ESPON Database, Data Navigator and Online MapFinder. In relation to other databases such as the ones of EUROSTAT, data available through ESPON focuses in particular on current policy debate and objectives on European Cohesion Policy and the Territorial Agenda 2020. The data in the ESPON Database also serves as a starting point for ESPON projects carrying out applied research on different thematic. Moreover, the ESPON Database also addresses in a coherent way time series, various geographical levels and all EU27+4 countries.

Concerning analytical tools, three analytical tools have been developed in the ESPON 2013 Programme: an interactive mapping tool, a Functional Indicators Tool and a web application to support workshops regarding Territorial Impact Assessments. In addition, the ESPON HyperAtlas, developed in the 2006 Programme has been improved and new data has been included. These four more analytical tools are interactive and require inputs from the users analysing territorial issues based on ESPON data. Data stored in the ESPON Database serves as input for the RIMAP mapping tool and the Functional Indicators Tool.

In relation to tools to compare territorial aspects, monitoring tools, the ESPON 2013 Programme broadened the scope of ESPON research. Therefore, comparing and benchmarking different regions or cities has become more relevant. Three new tools have been developed in the ESPON 2013 Programme to support policy-makers to compare territorial aspects in their region against European wide territorial developments, in time and with other regions and cities in Europe. These three tools are a European Territorial Monitoring System, a Territorial Monitoring System for the Baltic Sea Region and the CityBench tool, enabling to compare cities across Europe. All tools are complementary and some can be linked to each other, for example data stored and harmonised in the ESPON Database serves as input for the Functional Indicators tool and RIMAP tool. Inter-linkages between the ESPON Database and the other tools and between tools are possible as well. Web services can be provided focusing on the exchange of geospatial and statistical data in an interoperable way, as addressed in the M4D project. Web services allow easy access to distributed geographic data and geoprocessing applications. Web services enable the possibility to construct web-based application using any platform, object model and programming language. Projects related to the Scientific Platform have assessed and tested these possibilities and more inter-linkages can be expected in the ESPON 2020 Programme.

*Economic Resilience of Firms and Territories A: Economic Determinants and Measurements*

## **REGIONAL RESILIENCE IN ITALY: DO EMPLOYMENT AND INCOME TELL THE SAME STORY?**

**Paolo Di Caro, University of Catania - Department of Economics and Business, ITALY**

**Roberto Cellini, University of Catania, ITALY**

**Gianpiero Torrasi, University of Portsmouth, UNITED KINGDOM**

The concept of resilience has attracted increasing interest in regional economics. In the flourishing literature, however, results are far from being conclusive, even when referring to the same case study. Undoubtedly, this mixed evidence potentially stems also from different operationalization of the multifaceted resilience concept; the main difference being between studies using GDP series and those measuring regional economic performance in terms of fluctuations in employment levels. The different choices and the subsequent results, far from being interpreted as lack of robustness, are research specific; nevertheless, it is important to address what kind of relationship – if any – exists between the two measures. To this end, we analyse and compare the results concerning the regional resilience in Italy, over the last 40 years, focussing on the differences deriving from the choice between the two aforementioned measures. Our analysis reveals that the information contained in the different series, rather than being alternative and overlapping, is complementary.

*Culture and Creativity as a Driver of Regional Development*

## **CREATIVITY, PLACE IDENTITY, MUSIC TOURISM AND HERITAGE: THE CASE OF THE CULTURAL DISTRICT OF THE PROVINCE OF CREMONA**

**Ilaria Dioli, Università Cattolica Del Sacro Cuore, ITALY**

This paper offers a theoretical overview on cultural districts, through the evolution of the concept of industrial district (Marshall, Beccattini) to the idea of milieu to enhance cultural activities (Sacco, Santagata), to foster settlement and concentration of cultural facilities and to attract creative workers (Florida), tourists and investors. The creation of a cultural district implies not only mixed-use developments and crossed-fertilization actions but also the collaboration and the involvement of the local community.

In the second part, it presents the case of one of the six Fondazione Cariplo's Cultural Districts approved in July 2010 within a broader strategy of local development. The Cultural District of the province of Cremona is characterized by the theme of music because of its tradition which is well-know all over the world both in terms of construction of music instruments (violin making since 16th century with Amati, Guarnieri and most of all with Stradivari) and music execution. Since ever luthiery and music performance are deeply connected with the image and the brand of Cremona, along with other cultural practices of the city.

## **THE EFFECT OF TOP-DOWN POLICY INITIATIVES ON CLUSTER DYNAMICS**

**Beatrice D'Ippolito, The University of York, UNITED KINGDOM**

**Anne-Lorene Vernay, Grenoble Ecole de Management, FRANCE**

**Jonatan Pinkse, Grenoble Ecole de Management, FRANCE**

Scholars have written extensively about the cluster phenomenon and a growing body of literature specifically addresses how clusters evolve through time: clusters emerge, expand, and reach maturity. At the final stage they may either decline and disappear eventually or transform and rejuvenate themselves (BRENNER, 2001; MAGGIONI, 2006; VAN KLINK and DE LANGEN, 2001). Scholars have also attempted to explain why clusters evolve and two perspectives seem to dominate. The industry-technology view compares the cluster life cycle with the technology/industry life cycle (DALUM et al., 2005; MAGGIONI, 2006; SWANN, 1998) and claims that clusters express locally what happens at a broader industrial level. The second suggests that different clusters within the same industry can be at a different stage of the life cycle and that this depends on the characteristics of the cluster, such as number of companies and employees, knowledge diversity, and heterogeneity (MENZEL and FORNAHL, 2009), degree of cognitive isomorphism (POUDER and ST JOHN, 1996), or spatial myopia (MASKELL and MALMBERG, 2007).

Clusters have become a popular policy tool to increase the competitiveness of regions and stimulate job creation. Even though the extent to which policy measures can foster the creation of clusters is still widely debated, empirical evidence shows that policy can influence cluster development (BRENNER and SCHLUMP, 2011; RODRÍGUEZ-POSE, 2013), yet without shedding light on how policies can influence the evolution of a cluster. In order to fill this gap, we seek to unpack how top-down policy initiatives (i.e., exogenous change) can affect the direction of a cluster. More specifically, the paper questions how members of a cluster cope with change that has been initiated by external political pressure and how this could potentially influence the internal dynamics of the cluster.

To investigate these questions, we conducted an in-depth case study of a French energy cluster, which has been set up in 2005 as part of a government initiative to create so-called 'poles de compétitivité'. As a result, the main objectives and direction of the cluster are 3 decided upon by national governmental bodies, even though cluster members have some room for manoeuvre within such guidelines. The cluster is rather heterogeneous in its composition: it includes members that vary in (i) size – from very large multinationals to small start-ups; (ii) scope of their activities within the energy industry; and (iii) degree of maturity of their technology.

At the outset of 2013, the national government has set new objectives for French competitive clusters. Initiated in order to stimulate research collaboration and innovation, they are now asked to foster the development and commercialization of new products. The article discusses how the 2013 policy initiative has triggered a set of internal dynamics which are destabilizing the cluster by disintegrating the shared identity on which RandD projects used to be centered. It shows that different sub-identities are being created: on the one hand, there are members that are particularly attached to the original identity – the cluster should promote the development of collaborative research projects – and here we find research organizations and consultants. On the other hand, there are members eager to embrace the new identity – the cluster should help members commercialize their technology or service – and here we found mainly startups and SMEs looking for growth opportunities.

In addition, our findings show that the way the cluster will evolve is all but certain for three reasons. First, new political objectives also destabilize the cluster by putting current the power distribution into question. However, we could observe that core members, whose role is key for an effective coordination of partnerships and/or set up of new initiatives, resist change in fear of losing their position as anchor tenant in favor of upcoming rivals. This implicitly sets a constraint upon new members who, in turn, are presented with the challenge of having to find their own space within the cluster, and start exerting influence (SUIRE and VICENTE, 2014). Second, new policy objectives imply that members have to start using the competitive clusters differently. However, many members have difficulties envisioning the 4 cluster differently from what it currently is. This can find explanation in that most members only allocate personnel from their RandD department to represent them and participate to the activities. Finally, the cluster resembles clusters that



originate in top-down policy initiatives, that is, a significant proportion of the members are rather passive (FROMHOLD-EISEBITH and EISEBITH, 2005). This limits the amount of members the cluster can mobilize to propose services that are in line with governmental objectives.

To conclude, our paper shows that exogenous changes resulting from political forces can destabilize a cluster and influence the way it evolves. However, the direction in which the cluster will evolve will depend on the emergence of a change agent (MEYER-STAMER, 1998) that is able to overcome resistance and mobilize enough members to embrace a new vision for the cluster.

*EU Regional Policy and Practice*

## **PROFILING SECOND-TIER CITY REGIONS IN CENTRAL EASTERN EUROPE THROUGH FDI ANALYSIS**

**Teodora Dogaru, University of A Coruna, THE NETHERLANDS**

**Martijn Burger, Erasmus University Rotterdam, THE NETHERLANDS**

**Frank Van Oort, Utrecht University, THE NETHERLANDS**

**Bas Karreman, Erasmus University Rotterdam, THE NETHERLANDS**

In the wake of EU enlargement, capital city regions started following different development trajectories and grew at a faster pace than the other regions in CEE countries. Several studies pointed to differences with respect to embeddedness in international networks and industrial restructuring as the driving forces behind regional disparities in the CEE countries. Although most CEE regions experienced productivity growth in manufacturing industries, the CEE capital city regions are converging at a faster rate due to their networked, service oriented economies. The largest regional disparities in Central and Eastern European (CEE) countries are between capital and non-capital city regions.

Central Eastern European regions are part of more recent member states characterized by former communist regimes – such as regions in Poland, Czech Republic, Slovakia, Hungary, Romania or Bulgaria. These countries used to be centralized economies where the capital city was the most important location of decision and development. Besides some secondary city regions that focus on industrial specialization, university capacity or touristic centres, the rest of the regions in these countries largely remained agricultural-based economies. In order to become competitive, the non-capital city regions should aim at smart innovative regional and local policies based on long-term growth oriented agendas.

In this paper we approach this issue from two perspectives using FDI analysis for regional profiling and identification of competitive advantages.

We analyse the sectoral and functional division of labour in CEE regions within the convergence debate. By analysing the investment decisions of multinational corporations in 49 NUTS-2 regions across 6 European CEE countries (Poland, Czech Republic, Slovakia, Hungary, Romania, and Bulgaria), we show that capital city regions not only receive more Greenfield FDI but also attract a larger variety of investments in terms of sectors and functions. Capital cities are more likely to host higher-end sectors and functions, which provides an explanation for the existing regional disparities within CEE countries. These results highlight the importance of functional and sectoral divisions of labour in the view of regional profiling and contribute to the recent EU Cohesion Policy debate.

MNCs invest in these regions for various reasons, contributing to regional development exogenously. We find that the most important location factors for FDI are market accessibility, strategic assets, institutional quality and agglomeration, in the post-crisis era even more than before. Presently, second-tier city regions are not capable of offering all these factors simultaneously. For improving their opportunities and contribution to European cohesion and convergence, more substantial and directed investments are needed.

The results obtained show that second tier city regions play a secondary role in terms of functions and they can become more attractive on long term for foreign investments if they can provide better competitive advantages such as accessibility, strategic assets, institutional quality and agglomeration at the same time.

*Territorial Governance and Regional Leadership*

## **REGIONAL GOVERNANCE IN CROATIA IN TIMES OF CRISIS**

**Irena Dokic, The Institute Of Economics, Zagreb, CROATIA**

**Ivana Rašić Bakarić, The Institute of Economics, CROATIA**

**Marijana Sumpor, The Institute of Economics, CROATIA**

European regions have been very differently affected by the recent economic crisis, depending on the region's level of resilience to external shocks, sectoral structure and national and regional governments' responses. There are countries in which downturns lead to narrower interregional disparities while in some this can trigger regional divergence. Empirical studies indicate that there is a tendency for regional disparities to grow during recessions, and diminish in the period of economic growth (Dunford and Parron, 1994; Evans and MacCormic, 1994, Audas and Mackay, 1997). Also, a significant role plays leadership in enabling sustainable regional development (Soterauta, Horlings, and Liddle, 2012), and contributing to resilience in particular territories in times of crisis.

In this paper we investigate negative impacts of the global crisis that became evident throughout Croatia, coupled also with negative demographic trends, growing unemployment trends and high youth unemployment, especially in the least developed counties. With its complex administrative-territorial structure there are 556 units of self-government, including 20 counties, the city of Zagreb, 126 cities/towns as urban centres, while the remaining units are municipalities representing rural centres. However, even in such circumstances, it can be expected that certain regions have the ability to withstand such negative pressures. We might expect that adequate leadership might have a strong impact in such cases.

A combination of various aspects of the crisis is reflected in the Regional Development Index (RDI) values. The RDI guides policy makers in taking decisions on implementing specific development measures within the context of the current Regional Development Policy in Croatia. Also, key development indicators like GDP per capita, unemployment, and productivity provide proof of the social and economic difficulties faced in particular by the less developed regions (i.e. counties, NUTS III level) in Croatia. Though, the reduction of regional disparities represents one of EU as well as Croatian regional policy priorities, regional disparities persist within Croatia. As a result of the slow transition process, some areas are still coping with structural changes due to de-industrialization and lack adequate political leadership, as well as effective social, economic and industrial policy.

In this paper, we question if existing regional imbalances within Croatia have been enhanced by the current crisis going on since 2008, compared to period before the crisis? Also, the existence of resilient regions will be investigated and key aspects presented. In this context, political, economic, and social factors will be analysed in conjunction with cases of good practices of regional and local leadership in times of crisis. In the analysis, we will take into account regional differences in economic and social development of the counties. It will be based on data at NUTS II (two regions) and NUTS III (21 county) level. Changes in the regional variability of the regional composite development index, which is based on five indicators: personal income per capita; county budget revenues per capita; unemployment rate; change in number of population (change between the censuses) and educational structure of the population (educational attainment rate), will be analysed. The index is calculated as a weighted average deviation from the national average of the five indicators (unemployment rate with 30% weight, income per capita 25% and other three indicators 15% weight each). It is used for ranking and categorization of Croatian counties, towns and municipalities in comparison to their relative positions to the national average. The analysis will also include investigation of possible correlations between the development index and various independent variables like ruling political structure/party, changes of crime rate and changes of EU funds absorption rate at the county level.

The findings, results and recommendations contribute to improvements in Croatian regional economic policy, governance and leadership practice.

*Developing Rural and Peripheral Regions*

## **THE POTENTIAL FOR CREATING A PLACE BRAND AS A TOOL FOR RURAL DEVELOPMENT IN CHEFCHAOUEN, MOROCCO**

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Since the beginning of the 1990s, in line with the globalisation and regionalisation processes, place brands appear worldwide at different geographical scales (nations, regions, cities). Within an increased competitive economy, places have adopted marketing techniques to attract tourists, companies and skilled people and to find markets for their export products (Kotler and Gertner 2002). In general, place brands are initiated and financed by governments as tool for economic, socio-cultural and political development of places. They express an intention to manage places in a more business-like manner, as a new entrepreneurial style of local government and economic development (Kavaratzis 2005). Thus, they are not only a matter of economy, but also strongly linked to public goals and agencies (Bellini et al. 2010). If place brands are applied to regions, they generally aim at endogenous development and target key sectors, such as agriculture and/or tourism, by adding value to typical food products, particular landscapes or cultural heritage. Those features then are main components for differentiation.

We explore the potential for creating a place brand for local development in a rural area of Morocco, via a case study of the province Chefchaouen. The focus on Morocco is motivated by the ongoing regionalisation and decentralisation process, started in 1971 and reinforced in 2010 by an 'advanced regionalization plan'. The big challenge of Morocco is to close spatial disparities between strong demographic and socio-economic urban centres and underdeveloped rural, mainly agricultural areas. The advanced regionalization plan is supposed to lead to an integrative and sustainable development of the country as a whole. Particularly, territorial development shall be reached via the valorisation of specific place-based assets, the participation of local actors and the reinforcement of the attractiveness and competitiveness of the regions within a context of market liberalization. Local resources and heritage then constitute key concepts of endogenous development and a driving force for public-private cooperation. Herein, typical local food products (produits de terroir) play an important role, exposing the influence of the French approaches to territory-based development and regulation, as part of new agricultural and rural development policies (Plan Maroc Vert). It is also here that place branding finds its potential applicability.

The province Chefchaouen is situated in the North of the country, in the Rif Mountains, and belongs to the region Tanger-Tetouan. The province is mainly rural as 90% of its 435.000 habitants are living in non-urban neighbourhoods, countryside and remote villages. The capital of Chefchaouen is the city of the same name and unique urban commune with around 36.000 habitants. Living standards and infrastructure are highly contrasting between the urban area (the municipality of Chefchaouen) and the 27 rural communes - which are characterized by the culture and people living in the mountains, the Jbala.

Results from research demonstrate that Chefchaouen has on the one hand a high potential for developing a collective regional brand. Due to its numerous cultural, gastronomic and natural assets, it has become a popular tourist destination. In 2010, Chefchaouen has been recognized by the UNESCO as one of the emblematic communities for the Mediterranean Diet. Furthermore, some typical agricultural products from the province such as olive oil, goat cheese, dried fruits and honey are currently valorised within the national agricultural development plan. The commitment of local authorities and associations is high and some (cross-)sectoral cooperating projects have been started. On the other hand, a deeper analysis regarding important context-specific elements for place branding - as cooperation and partnerships, leadership and political unity - has revealed a number of barriers. First, existing cooperating initiatives usually depend on external financial support and come to flag if this backing stops. Second, local actors do not seem to have largely incorporated

benefits and principles of cooperation; even less if the motivation comes from public side. Third, there is neither consensus nor confidence in a particular instance that could play the role of a leader for collective branding. Fourth, the hierarchical administrative and regulatory structures in Morocco hinder unifying actors for building a place brand; political responsibilities are spatially and financially limited and often divergent.

Altogether, this shows that place brands - in order to be efficiently used as local development tool - cannot only build on visions, logos, or places' identity and assets. They must be understood and developed in an integrative, strategic manner, as they are embedded in complex geographical, relational and institutional systems, claiming for political guidance and an active commitment of various, interacting public and private stakeholder groups.

*Alternative Spaces in the Urban Region: Translocal Movements and Communities in a Time of Global Growth Agendas*

**DETECTING PEOPLES' AND LANDSCAPE IDENTIFY IN A CHANGING MOUNTAIN LANDSCAPE. AN EXAMPLE FROM THE NORTHERN ITALIAN APENNINES**

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**Elke Rogge, ILVO, Department of Agriculture and Society, BELGIUM**  
**Veerle Van Eetvelde, Ghent University, Department of Geography, BELGIUM**

Remote mountain areas in the Northern Italian Apennines were historically characterized by rural landscapes, covered by grasslands with herds of sheep and cows, chestnuts, small vineyards, mountain villages and criss-crossed with mercantile trails connecting the Ligurian Sea with the Po plain. Since 1950s, inhabitants of these mountain villages, mainly farmers and shepherds but also merchandisers or travelers, emigrated and abandoned the agricultural land which caused a spontaneous growth of secondary vegetation and transformed the valleys in marginal areas with shrub, woodland and desolated villages. More recently, young 'newcomers' arrive in those villages, consisting of a community of a few elderly people, and set up 'new' rural activities like environmental education, agricultural tourism, cheese production, etc. The current diversity of today's users of the landscape creates an interesting identity 'clash'. Original inhabitants identify themselves with the historical agricultural landscape of before the large abandonment; newcomers with the current landscape and even dear to look towards the future.

This paper aims to construct a theoretical framework on both the individual and collective landscape identity in a landscape that changed drastically through time. Therefore, we first want to detect how people identify themselves within a changing mountain landscape and discover to which landscape, the historical or the recent one, the main community refers to when it comes to identification. We want to understand why people still identify themselves with a historical and disappeared landscape.

Second, we want to describe when and how both the newer and historical landscape identity does evolve into a collective landscape identity, in analogy with the landscape changes. Furthermore, we want to detect smaller collective identities, referring to the current or even future landscape, formed by parallel communities. To found this framework, a large series of in-depth interviews are performed with different types of stakeholders. This information is combined with the analysis of landscape change patterns and processes (economic, political, social ...) causing a switch in the dominant identity from the historical to the actual landscape.

## **WHICH KNOWLEDGE FOR POLICY-MAKING? THE ROLE OF RESEARCH IN THE BRUSSELS WATER POLICY**

**Nicola Francesco Dotti, Vrije Universiteit Brussel, BELGIUM**

Regional Innovation Systems are known for their capacity to create a virtuous cycle of cooperation across knowledge centres, policymakers and economic actors. The so-called 'Triple Helix' aims to promote technological innovation and market-oriented competitiveness. Is research able to support also policymaking? In a local environment where knowledge is available, also policymakers are expected to benefit, mainly when highly technical policy issues are discussed.

The aim of this paper is to show under which conditions research can support policymakers enhancing policy changes, dealing with conflicting interests and contributing to agenda setting and problem-definition. Furthermore, the paper takes a local perspective where knowledge is an even more scarce resource, but face-to-face contacts may facilitate knowledge exchanges between researchers and policy-makers.

The selected case study is the water policy in the Brussels-Capital Region (BCR). The field of water policy is both highly political and technical. While water is a politicised topic due to the extremely high importance of this fundamental resource, this field requires advanced techniques and expertise. Specifically, within the water field the paper focuses on urban policies for flooding such as management of rainwater and storm water basins, soils' sealing, river and lake management, water quality and treatment in a highly urbanised area such as Brussels. Furthermore, in the (complex) Belgian framework, the governance is articulated across the regional government in charge of water competences, the nineteen municipalities that own the main water company (Vivaqua), and the EU 'water framework directive' and other EU Directives, which provide the main legal framework.

In this context, the paper focuses on the role played by Brussels' researchers to support policymakers, directly through cooperation or indirectly through an engagement in the civil society. Furthermore, the influence of research for policymaking depends also on disciplines on both sides (research and policymaking). The objective is to show the different channels through which knowledge flows towards the policymaking process, identifying under which conditions research can have a positive contribution. The paper is based on the reconstruction of the Brussels' water policy since the creation of the Brussels-Capital Region in 1989.

Findings show the different 'absorptive capacity' of policymakers depending on different disciplines available on water in Brussels highlighting what are the enabling and preventing factors for this knowledge transfer. Specifically, science and technology research is able to influence policymakers because these are the same skills available within policymakers; whereas social sciences and humanities were able to mobilize a significant political consensus without a real impact on policies.

### *Role of Institutions in Regional Development*

## **SOCIAL CURRENCY, ENTREPRENEURSHIP AND INSTITUTIONS - MICROECONOMETRIC EVIDENCE FROM REGIONAL PERSPECTIVE**

**Jun Du, Aston University, UNITED KINGDOM**

**Jing Cai, Southwest University of Finance and Economics, CHINA**

**Dayong Zhang, Southwest University of Finance and Economics, CHINA**

Fast-growing countries are the ones with greater shares of population exhibiting "spirit of capitalism" (Doepke and Zilibotti, 2013), and we will show that this is also the case at regional level in China. This paper investigates the behavior that individuals and households invest in and exploit "social currency" to gain trust and favors, and in particular to promote their entrepreneurial activities. We also examine how different regional and local institutional quality and environmental factors moderate the relationship between social currency and

entrepreneurial activities and business success. Social currency differs from social capital as it is dynamic, fluid and exchangeable. We advance the literature on entrepreneurship and regional economic development conceptually and methodologically by explaining how trust and networks are developed and maintained through social currency and proposing ways to quantify it. The empirical analysis draws on the Chinese Household Finance Survey collected by SWUFE across 28 provinces for 28,228 households in 2013 containing information of households' monetary gift giving and receiving behavior, individual characteristics, occupation and income. The findings bare important implications on regional development policies.

*Mega Events and Regional Development*

## **IS PUBLIC PARTICIPATION IN EVENT-LED REGENERATION A MYTH?: THE CASE OF LONDON 2012 OLYMPICS**

**Ozlem Edizel, Middlesex University, UNITED KINGDOM**

Multiple stakeholder perspectives are essential when analysing the outcomes of event-led regeneration. In order to understand the effectiveness of the event policies, it is important to know how different actors are involved and interact in planning and delivering the strategies. The involvement of local residents in decision-making is therefore increasingly significant. Residents should be able to benefit from living close to the mega-event site, not negatively affected by it. In the last decade or so, event organisers have started to put more emphasis on the social sustainability and the social outcomes of events has started to get more attention to avoid negative impacts in the long term and to ensure 'ownership' of the event.

Full integration of residents and other stakeholders in the decision-making period for bidding, planning, staging and assessing the event is acknowledged as a crucial element for having sustainable event-led regeneration projects. However, the degree of public participation in mega-event planning has long been a debate and whether it is possible to sustain a governance process where political communities can collectively be involved in their common dilemmas about the changes and developments in their neighbourhood has been an important question. Although some researchers mention the importance of good governance for sustainable event-led regeneration, it has not been discussed along with public participation.

Local community participation and perceptions on the London 2012 Olympic regeneration have been analysed using the data from focus group meetings and secondary survey data analysis. The focus group meetings with local residents living in the four Host Boroughs bordering the Olympic Park (Hackney, Newham, Tower Hamlets and Waltham Forest) gave the researcher the opportunity to have more realistic and in-depth results on what people think about the London 2012 related regeneration and their involvement in the decision-making process compared to questionnaire-based surveys. The data from focus groups are analysed together with the London 2012 Taking Part Survey data, which reached to a higher number of participants in the Host Boroughs. These two data sets are collected around the same time periods and targeted to understand similar issues; therefore they were easily integrated under relevant sections. Using a mixed method made it possible to have a profound understanding of the community approach.

Research demonstrates that although local residents were generally very excited and supportive about the Games coming to their neighborhood, they did not feel part of it and they were not involved enough in the decision-making process. By the top-down nature of event-led regeneration, resident consultation tends to be limited and not handled genuinely in most cases and against all efforts London 2012 has nor been much different. Communities, especially local people, are the core of social sustainability in event-led regeneration. The involvement of local communities both in decision-making and event related activities and training encourages the sense of local ownership, which contributes to a successful legacy for the event and community involvement in decision-making and engaging locals in different stages of the event are important for social sustainability of event-led regeneration.

## **EXPLORING MICRO-LEVEL DYNAMICS IN CITY-REGIONS: THE ROLE OF 'COUPLING' OF COMMUNITY-BASED INITIATIVES FOR ACCELERATING SUSTAINABILITY TRANSITIONS**

**Markus Egermann, Leibniz Institute of Ecological Urban and Regional Development, GERMANY**

**Florian Kern, Science and Technology Policy Research (SPRU), University of Sussex, UNITED KINGDOM**

**Niki Frantziskaki, Dutch Research Institute For Transitions, Erasmus University Rotterdam, THE NETHERLANDS**

**Kristin Reiß, Leibniz Institute of Ecological Urban and Regional Development, GERMANY**

Previous studies on sustainability transitions have paid little attention to spatial aspects. Informed by system theory and technological innovation studies the main theoretical concepts on transitions do not help to understand where transitions take place and why the scope and the dynamic of sustainability transitions differ considerably between regions (Egermann and Hutter 2014:2).

Also, recent literature on niche developments and micro-level dynamics in sustainability transitions focuses either on niche internal developments or on niche-regime interactions (e.g. Seyfang and Haxeltine 2012, van den Bosch and Rotmans 2008, Smith 2007) but has not addressed the implications of the embeddedness of micro-level dynamics in specific urban and regional contexts. For example, the interdependencies between different community-based sustainability initiatives (understood as niches) that are located in the same city-region have not been researched, yet.

First empirical observations from five city-regions (Dresden, Brighton, Genk, Stockholm and Budapest) show, that it is even not known which initiatives exist, on which objectives they pursue and how they interact, if they do at all. Even actors which could be considered as nodes in a fragmented initiative world, e.g. from the Transition Town Movement or the Local Agenda 21 office, can hardly draw a comprehensive picture on initiatives and the interactions between them. Hence, the potentials and risks which derive from the existence of multiple sustainability initiatives in the same city-region remain rather undiscovered.

Based on desk work, observing participation and semi-structured interviews with actors from community-based sustainability initiatives in the city-region of Dresden (Germany) the paper tries to trace interactions between these initiatives. The findings are reflected against results from four other city regions (Brighton, Budapest, Genk and Stockholm). The paper will discuss empirical findings along:

1. The different ways of interactions (virtual, physical and place-based)
2. The interactions of initiatives within the same domain (e.g. food) and between different domains (energy, food, mobility etc.)
3. The interaction of initiatives between different sectors (public, civil, economy, science)

Virtual interactions focus on relations in the digital world, i.e. within the World Wide Web (common websites, social media, blogs etc.). Physical interaction covers all activities that are based on face to face contacts between actors of initiatives (e.g. network meetings, common trainings). Place-based interaction includes all relations that are based on shared physical places (e.g. co-working spaces, temporary land use, guard houses etc.).

Assuming that transitions arise from a number of congregating innovations (Rotmans 2005:11) the main hypothesis behind this exercise is, that the purposeful 'coupling' of initiatives could serve as a possible mechanism to trigger new acceleration dynamics for a sustainability transition in city-regions. Hence, the objective is not to get a complete picture of all interactions between all initiatives, in the first place. Rather, the aim is to learn from empirical data how community-based sustainability initiatives use different ways of coupling for specific purposes (e.g. fund-raising, learning, coalition building) and to conclude in how far such a coupling of initiatives possibly could support or hinder an acceleration of a sustainability transition in a city-region.

With this we also build on the emerging 'politics of transitions' literature (Shove and Walker 2007; Meadowcroft 2009; Kern 2012; Smith and Raven 2012), which makes us suggesting that for local initiatives to

be able to contribute to the acceleration of sustainability transitions, actors need to build (political) coalitions and mobilise resources (e.g. people, investment), as well as demonstrating the legitimacy of alternative, more sustainable practices and configurations. Hence, the analysis will not only trace the interactions between initiatives but also tries to discover the interdependencies between initiatives and their city-regional, national and European governance contexts.

*Community Economic Development*

## **EVOLUTIONARY THINKING AND PUBLIC PARTICIPATION IN CAPABILITY-BASED LOCAL ECONOMIC DEVELOPMENT**

**Zoltan Elekes, University of Szeged, HUNGARY**

The presumptions on which canonical economic development relies received extensive critique on a number of accounts. In this presentation two of these accounts appear: Amartya Sen's capability approach and evolutionary thinking. Capability approach is arguing for the extension of the informational basis of public development decision-making. Consequently public participation has a central role in this sort of local development approach since it promotes human agency and a focus on the development process complementing the focus on end-states exercised by mainstream local economic development. The view of local economic development adopted in this research is in line with this reasoning.

Evolutionary theorising has spread in issues related to regional development with the evolutionary economic geography research program. This program relies on notions like path dependence, complex adaptive systems and Generalized Darwinism. In essence, it is interested in changes occurring in complex spatial population systems, like the set of firms in a region. So far the focus of this program has been on innovation and economic growth, both considered possible means of well-being in capability approach. In this presentation it is suggested that there is room for additional focuses besides means in this research program. The heterogeneity of actors in evolutionary change calls for public participation in the planning, implementation and monitoring of local economic development. The explicit focus on the process of change rather than an end-state is also in line with theorizing on complex systems.

The purpose of this presentation is to show opportunities for evolutionary thinking to contribute to capability-based local economic development. First, there are promising connections between the literature on evolutionary economic geography and public participation. Second, evolutionary thinking can contribute to capability approach through adding dynamism to it. Third, evidence-based policymaking does not have to be given up because of public participation, rather it benefits from the wider range of evidence included in a development decision under the pressure of a complexity and uncertainty.

This presentation is structured as follows. In the first part I emphasise the relevance of evolutionary economic geography for instrumental local economic development, arguing that the evolutionary nature of change in economic systems affects the development policy toolkit as well as the policymaker itself. In the second part I argue for the fruitfulness of including aspects of public participation in evolutionary thinking on capability-based local economic development. I conclude the presentation with preliminary results of an ongoing research based on qualitative document analysis of urban development plans of 23 major Hungarian cities.



## **THE MISSING DRIVER OF THE NEW ECONOMIC GEOGRAPHY: THE INFLUENCE OF RELATEDNESS ON INDONESIAN MANUFACTURING INDUSTRIES**

**Roberto Ercole, University of Huddersfield, UNITED KINGDOM**

It is not in doubt that the New Economic Geography (NEG hereafter), initiated by Krugman (1991a, 1991c), greatly influenced the agglomeration theories and brought new insights within the study of economic geography. A recent conceptualization, named Evolutionary Economic Geography (EEG hereafter), emerged as an alternative framework though it stills under development. EEG criticizes on numerous aspects the New Economic Geography with particular reference to its legacy of neoclassical approaches and the way to treat technological externalities as a secondary dynamic, and considering only Marshallian externalities without taking into account inter-industry knowledge spillovers.

Based on the lack of importance attributed by NEG to technological externalities and the increasing of knowledge-based economies around the world where the learning process plays an essential role for productivity and economic growth: Does NEG underestimate technological externalities as a crucial driver for locations, sectors and firms' growth? Does NEG lose an important building block (interindustry knowledge spillovers) within the puzzle of regional/urban development? This research attempts to address these questions investigating the role played by technological externalities on sectoral and firm's employment, value added and labour productivity in the light of the recent contribution by Frenken, van Oort, and Verburg (2007) within Indonesian locations using panel datasets from 2000 to 2009. This research employs a disaggregation of general variety based on Indonesian industrial classification (KBLI 2005) and technology intensity classification (OECD, 2011). The decomposition of general variety stems from the conceptualization that knowledge is more likely to spill over between related sectors rather than unrelated sectors.

Indonesia is one of the most dynamic countries in the South-East Asian characterized by a stable GDP growth between 4% and 6% and GDP per capita growth between 2% and 5% during 2000 and 2009. It is also characterized by a large and dense domestic market with almost a quarter of a billion of inhabitants, which more than a half lived in urban areas in 2011 (World Bank, 2014). It is relevant to note that the Indonesian industrial structure is characterized by the prevalent presence of medium-low and low technology intensity industries though high and medium-high technology intensity industries experienced higher growth in terms of employment and value added between 2000 and 2009. The increasing of importance of those industries within the country's economy accrued the role played by technological externalities as a driver of growth since the learning processes are more intense generating incremental and radical changes favouring the overall manufacturing growth.

1. Five-digit sector dataset is constructed by aggregation of firms within a location, which includes survive firms, start-ups, and firms that failed during 2000 and 2009. The firm's dataset refers to established enterprises that are present in all periods within the country during 2000 and 2009.
2. The data refer to the annual survey of large and medium manufacturing industries (firms with equal or more than 20 employees) that has been collected and employed with this research.

The present work employs several agglomeration externalities at the sectoral and firm-level focusing the attention to the role played by technological externalities, with particular emphasis on knowledge spillovers across linked sectors. To my knowledge, no similar studies have been conducted in Indonesia and most work has considered developed economies. Also, numerous scholars focuses their attention within cities since they argued that urban areas generate the most innovations given by their economic dense proximity. This research extends the investigation to broader geographic scales (Indonesian regencies), since the close economic proximity has become less relevant for knowledge transfer due to the recent technological progress. In addition, agglomeration externalities are often tested on aggregation (i.e. location and sector) omitting their micro-foundation nature losing information regarding single units. This paper also aims to addresses this issue testing agglomeration externalities at the firm-level.

Empirical evidence of this research supports the conceptualization that technological externalities are the preponderant causes for sectoral and firm expansion in Indonesia. Specialized clusters are beneficial for

sectors for all predicted variables, and sectors and firms take advantage in terms of value added and labour productivity to be in a location with higher degree of related variety with particular reference to cities. Whereas, competition play a negative role for employment and value added though it fosters labour productivity for sectors and firms. The purpose of this paper was also to assess the idiosyncratic economic role played by the type of varieties within and without intersectoral linkages. As emerged in the empirical analysis, when general variety is decomposed into related and unrelated varieties their different effects can be measured, which diverged in several cases.

The findings of this research can brings useful insights for Indonesian policymakers since they can pursue locations and country's economic growth through the identification and promotion of certain key regional sectors characterized by large interconnectedness. This can reduce the risks associated with the lock-in effect since knowledge can flow between linked economic activities with diverse but complementary know-how, and it can increase local resilience since knowledge spillovers generate incremental and radical innovations forming new unrelated and related branches within a location with positive implications of local stability and more balanced growth.

#### *Mega Events and Regional Development*

### **MEGA-EVENTS: REGENERATION AND REGIONAL DEVELOPMENT**

**Graeme Evans, School of Art and Design, UNITED KINGDOM**

The paper and presentation will provide an overview of the Mega-Events Research Network and the themes and topics evident through the series of workshops and conferences organised since 2011. This will be situated in terms of global trends in mega-events and their regional scope and impact. Themes will include impact and evaluation, regional development, culture and identity and area regeneration, as well as longitudinal impacts. Examples will be drawn from past and recent mega-events, unsuccessful bids and alternative trajectories, and future mega-events such as Milan's EXPO 2015, Rio Olympics and the growth of mega-event strategies in the global south.

This will lead on to a discussion of the role of mega events in regional studies and in regional development, identity and planning, and the future research required to better understand the scope and impact of these costly and controversial projects and how evidence can better inform investment and bidding decisions.

#### *Mapping Poverty, Inequality and Unemployment in Small Areas*

### **ESTIMATING THE GINI CONCENTRATION COEFFICIENT FOR THE INCOME DISTRIBUTION IN SMALL AREAS**

**Enrico Fabrizi, Universita Cattolica Del Sacro Cuore, ITALY**

**Carlo Trivisano, Università di Bologna, ITALY**

The Gini coefficient is a popular concentration measure often used in the analysis of economic inequality. Estimates of this index for small regions may be useful to properly represent inequalities within local communities. The literature on small area estimation for the Gini coefficient is limited. In this paper, we propose a method based on area-level models, thereby not assuming the availability of Census data at the micro-level. We propose a modified design-based estimator for the coefficient with reduced small sample bias and we consider a hierarchical Beta mixed regression model to combine survey data and auxiliary information. The methodology is illustrated by means of an example based on Italian data from the EU-SILC survey.

## **URBANIZING THE REGION. TRANSPORTATION CHOICES AND URBAN PUBLIC SPACES CHANGING THE SCALE OF THE METROPOLIS**

**Marco Facchinetti, Politecnico of Milano - DASTU, ITALY**

The size and structure of urban areas is changing: for years we thought that the cities were growing exponentially, increasing their size continuously. In many cases, this process did not stop. In many cities of the world, the phenomenon of increased urban areas is still growing. However, some urban areas, while continuing to increase in some ways its size in space, are triggering processes of transformation and urban restructuring of great importance, because they involve some aspects that this paper intends to analyze.

The growth and maturation of some metropolitan contexts has led, for a while now, to carefully observe how the same metropolitan contexts are in some cases far from being free from urban areas even within their widest spreading. Some areas of transformation, some new projects, in some ways also the same emphasis on the need to densify and create compact areas, have led in many cases to very high urbanity, where both the form and functions settled allow to recognize forms of urbanity typical of the most mature and well-established areas of the metropolis. These episodes of urbanity show two things: first that even the suburban and most rarefied areas need to refer to certain denser areas, full of functions and with strong urban features, secondly that in a metropolitan scale all of these areas with a strong urban connotation can define a new geography of hubs and significant points that, when connected, can become a strong structure mesh of the entire metropolitan area, which thus takes on scales and characteristics that are completely different from before.

And so once again we end up working on infrastructures, and, again, thanks to them, we can reconnect the high-urbanity areas, on which the metropolis is investing and that take inspiration from the size and impact of infrastructure investments such as those underway in London (Crossrail), in New York (the restructuring of both Grand Central and Penn Station and all the infrastructure projects that follow) or Tokyo (the new stations, especially the urban transformation processes that each station carries with it). All these cases offer something new to think about: the phenomena of urban growth are pushing every major city towards a regional dimension. Within each region, however, there are cases of strong urbanity, which do not necessarily occur near existing urban areas but are often born as common agglomeration areas and settings in the form of new centers. The construction of new large infrastructures that innerve this type of metropolitan region brings new incentives to the construction of such structures in station areas or hubs. In these projects, the design and shape of the public space have changed significantly, to the advantage of more complex structures, where open space and built space seem to interact more effectively.

Inside the nodes, the urbanity is assuming a different language. The lack of space, the emphasis on the technological image that infrastructures always have, the intention to maximize the development of selected areas and the need to keep together public and private development has pushed urban planning to embrace bigness as paradigm for the development of these areas. But above all, it has brought to a new concept of public space: it doesn't express itself anymore only in open spaces. "Public" functions and uses can be found at ground level, underground and up above on the first floors of the big buildings. Public functions are inside and outside and the attention to the design of public spaces extends to the "inside" of the buildings, where public uses and facilities find new spaces. TOD concentration brings urbanity inside the buildings, mixes up the inside and the outside, puts together also in the architectural language private and public. Bigness is giving to architecture the chance to represent itself, at a glance, with just one building the entire complexity of a city, or at least of a urban area. Eyes should stay open: this can be the birth of something new, extremely interesting in the continuous exchange between built up and open spaces or the beginning of the end of open and public spaces as we have been building for centuries. For sure, these new episodes are giving to people the chance to use public spaces in a new way: infrastructures and transportation policies are extending the possibility to travel at a cheap cost and faster to everybody, and they are opening up urban nodes to the use of everyone who travels along the new infrastructures. Metropolitan regions are creating in this way a new backbone of fast travelling and rich public urban areas. This is a lot, and it is something that can bring metropolitan development, in a era of stronger and faster urbanization, to a more democratic level, involving the rights of every citizen to use the city and to enjoy fast and cheap travels around it.

## **DIFFERENT PATTERNS OF CENTRALITIES AND REGIONAL MONETARY POLICY – A STUDY OF BRAZIL AND SPAIN CASES**

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This paper investigates the regional impact of monetary policy on different regions of Brazil and Spain by focusing on the role that the centrality plays in terms of mitigating or enhancing the effects of the monetary transmission mechanism, a focus which is normally overcome in the conventional monetary analysis.

The central hypothesis of this paper is that the effects of monetary policy coordinated and executed in a single mode to heterogeneous regions would affect differently some regions, reinforcing different patterns of centralities and, therefore, strengthening the segmentation between central and peripheral spaces.

There is a relative consensus about the existence of a relationship between centrality and liquidity preference. In the central regions, the most developed and less vulnerable economically, the liquidity preference of economic agents - especially the financial system - tends to be smaller.

On the other hand, in the peripheral regions - which are also more unstable and have the lowest levels of per capita income - the agents have worse conditions to offer collateral and reduced sources of internal or foreign funding. Therefore their institutional arrangements are still not well consolidated. Thus, the participation of financial agents tends to be smaller, especially regarding the credit supply, given the strong propensity for reversal of the expectations. Given the central role played by the regional development, we can infer that this would be an important element to explain why the impact of monetary policy would spread differently among the regions.

The main hypothesis of this paper is that the centrality plays an important role in explaining different effects of regional monetary policy in Brazil and Spain – two “bank based economies”. For explaining this question, after making a categorization about recent patterns of centralities, an empirical research was made analyzing the regional effects of monetary policy and the sources of asymmetry in the transmission of shocks.

In this study, it was found that monetary shocks are propagated more intensely in the peripheral states and autonomous communities, which are characterized by weaker economic structures, a greater dependence on the dynamics of the central regions, higher potential of instability and greater liquidity preference of banks and agents.

It was identified that one of the consequences of those impacts is the existence of spatially differentiated interest rates. Furthermore, the structural and financial characteristics of the regions play an important role in explaining the asymmetry in the transmission of monetary shocks.

Finally, it is important to emphasize that the main contribution of this paper is the consideration that the construction of space is an important element to understand the impacts of monetary policy and, in this sense, the centrality plays a important role to empower and strengthen these impacts, highlighting regional disparities.

## **DOES SOCIAL AND SOLIDARITY ECONOMY HELP FACING POST MODERN CHALLENGES IN EAST-CENTRAL EUROPEAN RURAL PERIPHERIES?**

**E Fekete, HUNGARY**

According to results of our recent and ongoing researches, answer on the question raised in the title is outlining in four steps:

1. Postmodern demands call new challenges and development opportunities in rural peripheries. Postmodern societies are often considered to be connected with strengthened needs for nature, culture, safety and participation. In a globalized world, these needs are supposed to offer favourable opportunities for the less developed areas in East-Central Europe, too. The environmental and social aspects of economies are gaining in importance and the information society provides assets to overcome distances. These processes are part of postmodernity and may lead to change the notion of 'underdevelopment' especially in rural peripheries.

2. Both the market and the state are weak or not interested to exploit the new opportunities of rural peripheries, but social and solidarity economy can play a role in that. The consequences of recent developments, including the increasing social and regional differences and persistent employment problems, show that the resources spent on development of peripheries are inadequate and unlikely correct to an effective and sustainable way of development. Worldwide expansion of social and solidarity economy and its local successes recognised from case studies prove that the lack of both business capital and public resources can be replaced in some cases by social capital, community work and social innovations. The spread of the social economy – thanks for the European Union's support – are observed in East-Central Europe, too.

3. Attitudes toward social and solidarity economy are controversial in rural peripheries. While rural peripheries have the potential to start a new way of development, they are in a dual cultural snare. On one hand, the rural policies stick to the paradigm of modernisation, but most of the rural communities do not have resources for that. On the other hand, local communities have resources to follow a postmodern way, but they are not ready to do that.

One conducted study has shown that there are both encouraging and discouraging factors regarding the chances of rural regions. The survey indicated that in the considered rural peripheries the attitudes among the rural population are closer related to postmodern values than to modern ones. 'Open' regions (with higher immigration and tourism), persons with a higher level of education and those who have experience outside their community i.e. persons/places who/which have/have been exposed to modernisation take the lead. We can say that 'open' regional milieus which are characterised by developed tourism and more permanent or temporary residents moved from urban regions (even abroad), a population with a higher level of formal education and some experience with living or travelling outside the region and women are more likely to play a role in social economic activities linked to postmodern demand for healthy food, fresh water, green energy, homely living and recreational places, personalised (social, cultural, communication) services.

Our findings point that: (1) it is highly likely that actors who have been exposed to modernisation will utilise resources to their own benefits in the postmodern competition (merged with cooperation) of rural peripheries, (2) closed regions where traditional values resemble closely to postmodern ones, but their residents do not have the necessary skills may preserve their peripheral existence despite an external cultural changeover that seemingly favours them, (3) female local leaders (who are more common in smaller villages than male mayors in Hungary) with their strong postmodern preferences are able to start social economy initiatives.

The questions arise whether competences needed for social economy can be acquired without going through modernisation and how postmodern demand may be extended in variety and rural space.

4. The state is able and tends to dominate the social economy sector.

Almost 25 years after the demolition of state-socialism, the Hungarian State is expanding economically, again. The government wants to handle unemployment problems within the public sector. They distrust the civic

sector and do not want too much decentralization. State aid public employees employed by local governments represent 30-40% of total employees in small rural villages. This policy does not only stabilize a situation leading to nowhere, but also inhibits the evolution of social economy because it makes impossible the functioning of civil courage as well as changing attitudes toward new ways of development.

In addition to appearance and recognition of new demands, simultaneous changes of the local value systems and competencies related to development as well as intentions of central government are needed.

*New Manufacturing, Creative Productions, Innovative Workplaces and Urban Space*

## **FROM MANAGED WORKSPACES TO CO-WORKING SPACES: THE CHANGING NATURE OF PUBLIC SECTOR SUPPORT IN THE UK AND CHALLENGES IN AN ERA OF DEREGULATION**

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This paper explores the changing nature of public sector support for small business workspace models in the UK, with a particular focus on London, which has seen a rapid growth of co-working spaces largely associated with the success of the East End's 'Tech City'. The paper starts with a descriptive account of the changing nature of small business workspace premises, from artist studios in the 1960s, the rise of managed workspaces for small businesses in the 1980s, and the more recent explosion of co-working spaces in London, particularly in the last five years. In each era, the extent and nature of public sector support has been different, and the way in which such spaces have been supported (or not) through the planning system has changed. The paper identifies four tools that the public sector in the UK has traditionally used to support the establishment or retention of such premises: protect employment land; require planning permission for a change of use; and support directly through public subsidy. In the early 2000s, London authorities also started to use the 'planning gain' mechanism to secure workspace in mixed-use redevelopment on employment land. However, it is argued that these tools are being undermined in an era of deregulation and austerity, and it is harder for the public sector to intervene positively.

Nevertheless, in the last few years the Mayor of London has displayed much enthusiasm for supporting the growth of co-working spaces: in particular, high-growth, high-tech microbusinesses. This paper assesses both the way the market has responded to changing working practices, and how the public sector is now looking to intervene. The author's involvement in the Greater London Authority's Open Workspace Providers Group and the Assembly's Economy Committee in 2014-15, has provided an insight into both the ways in which the Mayor of London is looking to support this sector in the future, the solutions proposed by Workspace Providers themselves. The paper assesses the likely success of the proposed interventions and solutions, in the context of deregulation. It also documents an emerging concern across all levels of London's government and amongst London's workspace providers, that the promotion of co-working models over other types of workspaces could be detrimental to the work of businesses that do not fall into the high-growth, high-tech category, those that require more space and equipment for their work, and thus display lower job densities. It is argued we need to move away from an approach of 'picking the winners' and support for high-tech clusters – which the market is providing for reasonably well on its own - towards a much more nuanced approach to supporting small businesses, acknowledging their different contributions to the economy and city life, the different types of premises they need, the types of businesses that are particularly vulnerable to displacement, and developing a robust city-wide strategy for supporting them.

**EFFECTS OF A BRAZIL-CHINA PREFERENTIAL TRADE AGREEMENT SCENARIO FOR MEAT AND MANUFACTURES USING THE PAEG GENERAL EQUILIBRIUM MODEL**

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This work investigates what would be the impact of a bilateral agreement between Brazil and China in the Brazilian regions? We apply a tariff reduction scenario of Chinese manufacturing and the Brazilian agricultural grains such as soybeans and maize as well as meat. The study hypothesis is that with the advent of a bilateral agreement between Brazil and China, it is expected that there are benefits to both countries as we observe an increasing demand for Brazilian agricultural products by China as well as there is an important competitiveness of Chinese manufactures in world trade. The Brazilian macro regions are investigated in detail as an improvement of the Global Trade Analysis Project Database using 'GTAPinGAMS' programming language. The model is called PAEG and has the international economics and general equilibrium theories as background. It is expected that less dynamic economic sectors lose productive factors which move to more dynamic sectors. The input-output literature indicates some important linkages in the meat industry, and the recent push by Chinese demand for Brazilian products is likely to benefit the whole economy. The Brazilian food industry and especially in the Center-West macro region would gain, as well as Chinese manufacturing sectors. There would be some multiplier effects spread all over the economy but the expected loss in Brazilian industries is confirmed in some macro regions. The scenarios constructed included specific agreements for soy, meat, grains, and one with the three simultaneously. The results exhibited more welfare for the complete scenario, though the meat scenario would benefit more economic sectors. Looking only for the general result, the complete scenario would lead to more concentration in the oilseed and soy sectors, draining productive factors from others. This is viewed as a not-so-good scenario due to this concentration. Anyways, the scenario for meat has more winners in the Brazilian macro regions, say, more sectors are benefited with the agreement, and the whole country still achieves gains. In this case, the Brazilian industrial sectors would have mixed effects, some better than others. The most industrialized macro region, the South-East where there are Sao Paulo, Rio de Janeiro and Minas Gerais, would gain with chemistry and textiles, which are usually a concern with Chinese products. The results evidenced benefits in general, which are arguments for diplomatic action towards this type of preferential trade agreements. It is recommended a meat agreement rather than a soy agreement, even though there is an expressive trade balance regarding this oilseed. The soy agreement would be a second best due to its draining factors characteristic which would worsen some Brazilian sectors.

*Role of Institutions in Regional Development*

**THE VALUES IN THE CONTEXT OF NATIONAL AND REGIONAL DEVELOPMENT OF UKRAINE**

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A mere implementation of the liberal market economy based on the Washington and post-Washington consensus principles without taking into account the whole complex of Ukrainian realities resulted in formation of Ukrainian political and economic system which neglected historical traditions and national mentality. To prevent the repetition of crises of 2004-2005, 2008-2009, and 2013-2014, the only alternative is the formation of a totally new economic model – the national, solidarity economy. Nationality and solidarity in relevant economic dimensions should be the basis for an alternative type of economic system in Ukraine.

Nationality is a set of peculiarities of each nation, due to its historical, geographic, economic, political and other conditions of life. Nationality is the identity of the people manifested in the national character. Nationality has something in common with ethnology as a science about life, customs, rituals and spiritual creativity of the people.

Speaking about ethnic traditions we should take into account socio-historical factors (socio-economic structure of Kievan Rus and Zaporizhzhya Sich, absence of well-developed social stratification among the Ukrainian

nation over the past 1000 years), mental factors (people's world-view: freedom of thought, individualism, honor, dignity, justice), high educational level and extensive informatization of modern economic life (social networks) etc.

Principles of solidarity have deep historical roots. The philosophical, scientific basis of solidarity was formulated in the works of H. Skovoroda, a founder of philosophy of heart. Auguste Comte, Emile Durkheim, Herbert Spenser and others considered various aspects of solidarity. Thus, the French sociologist Emile Durkheim formulated the doctrine of social solidarity and two its varieties - "mechanical solidarity" and "organic solidarity".

Solidarity is an essential component of successful implementation of transformation processes in the former socialist countries. The solidarity can be civil, social, political, economic, professional, class, educational, cultural, linguistic, ethnic, confessional, civilization, racial, gender, regional, existential etc. The subject of this analysis is, of course, an economic solidarity, which manifests itself at micro, macro, and the geo-economic levels. The micro level research dominates in the literature on the solidarity economy, revealing creation of self-managed enterprises of a family type, as well as cooperative, national, communal enterprises and development of social business. The basis of this solidarity is the process of common benefits production. Solidarity is revealed in the consolidated joint activities aimed at implementation of common goals and objectives based on coordinated acceptance of norms and rules of public consolidation, common moral meanings, norms and values. This type of solidarity manifests itself at the level of local communities. Implementation of macro- and geo-economic level principles is much more complicated. Solidarity principles at the macro (state) level allow for establishment of the necessary and sufficient conditions to realize the essential powers of an individual, including free access to resources for business development.

Fair judicial system, protection of property rights, elimination of corruption and so on contribute to stabilization of solidarity relations. An important component of solidarity is a social protection of economically vulnerable groups of people (the disabled, the elderly, orphans etc.). The principles of solidarity at geo-economic level were declared after the Second World War and referred mostly to the charity and trade issues between the countries. Three kinds of trade based on solidarity principles were developed in the post-war period. They include charity activities of religious organizations, aid to refugees and other victims of war, state support of developed countries (Decades of the United Nations Development, Lome conventions of the EU-ACP etc.). Provisions concerning fair trade, equivalent exchange, improved terms of trade between developed and developing countries etc. are still relevant nowadays.

However, in modern conditions the world community in the context of solidarity principles is focused on the development issues, including the implementation of the principles of sustainable economic development, the Millennium Development Goals, and coherent (interconnected) development towards protection of the global economic and political equilibrium.

*Innovation and Knowledge Economies*

## **NOT TOO CLOSE, NOT TOO FAR: TESTING THE GOLDBLOCKS PRINCIPLE OF NON-GEOGRAPHICAL DISTANCE IN COLLABORATION NETWORKS FOR INNOVATION**

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Over the past ten years, a growing literature in economic geography has acknowledged that distance does not only have a geographical dimension, but also comes in cognitive, organisational, social and institutional forms. A main idea in this literature is that collaboration for innovation requires a certain level of proximity in all non-geographical dimensions for successful knowledge transfer to occur. However, excessive proximity can also be harmful as it reduces the scope for learning. Hence, collaboration with partners for innovation should follow the Goldilocks principle of being not too close and not too far, but occurring at just the right distance. An increasing number of contributions have sought to test this principle using empirical data, but the indicators



used are often quite crude and based on register data using strong assumptions about the relationships between sectors, places and organisations. In this paper, we attempt to measure proximities more directly by asking firm managers about their perception of the distance across each of the dimensions to their most important partner. The data is based on matched data from two surveys of Norwegian firms, conducted in 2013, in which firms were asked about their innovation activities and about their most important partners in innovation processes. The data set covers 533 firms with more than ten employees across all industries and all regions of Norway. We examine the level of innovation in terms of new-to-firm and new-to-market product innovation for firms that collaborate with partners at different levels of distance in each dimension, compared to firms which do not collaborate with any partners. The results tend to confirm the basic proposition of the Goldilocks principle that a medium level of distance to partners outperforms collaboration at both lower and higher levels of distance. Firms with medium cognitive, social and institutional proximity to partners are significantly more likely to introduce new products, while a low level of geographical proximity is associated with the highest levels of innovation. Subsequently, we examine the relationship between geographical and non-geographical proximity dimensions, finding that the geographical proximity to partners is not significantly correlated with any of the non-geographical dimensions. However, there is a significant degree of interaction between geographical and non-geographical proximity, whereby firms with a low level of geographical proximity and higher levels of cognitive and institutional proximity are significantly more likely to innovate. This supports another important proposition in the literature of a compensation mechanism, whereby distance in one dimension can be compensated by proximity in at least one other dimension.

*Community Economic Development*

## **COMMUNITY-BASED ECONOMIC DEVELOPMENT - EXPERIENCES FROM HUNGARY**

**Balazs Gyorgy Forman, Corvinus University of Budapest, HUNGARY**

Community-based Economic Development adds the new chance for strongly fragmented Hungarian rural society. Since collapsed the former socialist agricultural cooperatives, in Hungarian villages, nobody organizes and manages a local economy and society. The results of this process are negative change of economic structure, long term unemployment and finally emigration and loss of population. The community-based economic development was built on local resources and partly substitutes foreign financial transfers. Experiences of 15 Hungarian settlements will be shown in this presentation.

*Economic Resilience of Firms and Territories A: Economic Determinants and Measurements*

## **TERRITORIAL CAPITAL AND THE RESILIENCE OF EUROPEAN REGIONS**

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**Giovanni Perucca, Politecnico di Milano, ITALY**

Starting in 2007-08, an economic crisis with no comparable precedent after WWII has affected most of the World, and Europe in particular.

Yet, despite the pervasiveness of the crisis, it has affected differently different European countries, with some countries losing a very large number of jobs (e.g. Spain), and others, such as Germany, being able to maintain employment levels. At the same time, for some countries the burden on public finances due to increasing interest rates has become unbearable, while others have been able to maintain public finances under control, also thanks to a lower starting debt.

The macroeconomic, country-level effects, have been very important, but also within countries the impact on the various regions has been far from uniform, with some regions, often the most urban, better able to resist the crisis with respect to the others.

Among the many factors which can have influenced the differential impact of the crisis in Europe, this paper looks at the regional endowment of structural territorial assets, those which have been labelled as “territorial capital” (OECD, 2001). Territorial capital comprehends all those assets, being material or immaterial, public or private, which represent the development potential of places. Included in the definition of territorial capital are assets such as private fixed capital stock, human capital, social capital, infrastructure, but also assets with more mixed materiality and rivalry, such as proprietary networks, cooperation networks, agglomeration and district economies, relational capital (Camagni, 2008).

Territorial capital enhances regional growth in ordinary times and, being structural, can be expected to also act as a factor of resilience in times of crisis, due to the fact that the crisis can erode it but only slowly.

To demonstrate this hypothesis, in the paper a database of territorial capital indicators for all regions of the European Union at Nuts3 level is exploited, and a typology of regions based on the quantity and quality of territorial capital is built.

The European regions are clustered in groups in which the endowment of territorial capital is similar in quantitative and qualitative terms, evidencing the existence of different traits across the continent which are not captured by country borders.

It appears that regions belonging to different clusters, i.e. being differently endowed with territorial capital, had different degrees of resilience, with some being able to maintain their income levels better than their country and others losing ground in absolute and relative terms.

The structure of regions is hence an important determinant of how they can afford periods of distress.

*Innovation and Knowledge Economies*

## **SPATIAL ASPECTS OF EDUCATION-JOB MATCHING AND JOB SELECTION IN ISRAEL**

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The economic literature dealing with the higher education-labour market nexus has defined “education-job match” as the extent to which the higher-education sector provides graduates with the adequate knowledge and skills to match employment needs. This study aims at examining the education-job match mechanism in the context of the core-periphery divide. The study further contributes to the existing body of knowledge by questioning the role of the innovative milieu as well as other regional and personal attributes in explaining education-job matching. “Innovative milieu” is defined as environment in which innovative companies maintain mutual RandD relationships in order to exchange knowledge.

Logistic regression models are used to predict the impact of various explanatory variables (individual attributes, study and work side characteristics, innovation milieu) on the probability of attaining education-job match. The field of study was found to be the strongest personal predictor of “education-job” attainment. Graduates who studied in universities and colleges in the Core were more likely to achieve education-job match than graduates who studied in higher education institutions located in the periphery. The structure of the regional economy and the “innovation milieu” in terms of jobs in the RandD and knowledge intensive sectors, offered regional wage rate in scientific and technological occupations and the level of regional innovation were found to play a significant role in education-job attainment.

## **EMBEDDING INDUSTRIAL SYMBIOTIC NETWORKS: CONCEPTUALIZATION AND RESEARCH APPROACHES**

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Industrial symbiosis is an emerging paradigm in the framework of industrial ecology, a study of energy and material flows through industrial systems. Industrial symbiosis as a concept utilised in scientific research came to the attention of scientists relatively recently, the first systematic efforts at its conceptualization and more systematic research started only two decades ago. These flows are complex as they are involving large number of industrial organizations following their own economic interests, exchanging a variety of materials with varied structure and involving energy coming from different sources. Hence, industrial symbiosis is the subject of increasingly multi-disciplinary research, ranging from the field of chemical engineering, logistics and supply-chain management, ecology, geography, management etc. The fact that industrial symbiosis is a process enabling win-win situation and synergies in terms of adding to the welfare of other partners and the (social and natural) environment in general further contributes to increasing interest in this research.

Most published research on industrial symbiotic systems has so far been focused on its technological, ecological and economic aspects. However, this does not imply that these systems are only technological systems. Like all technological systems it operates in a specific social setting, social milieu. They are shaped by specific social setting and are shaping this setting. The elementary activity in industrial symbiotic processes is exchange, which is – in spite of very important technological dimensions – a social process taking place among a multitude of collective social actors. Hence, social dimension is one of its key dimensions and for the purpose of this paper we define industrial symbiotic system as a social system.

This is the key to explanation why industrial symbiotic systems develop successfully in some social settings and fail in others, although their feasibility is confirmed by technological and economic research? In this paper we develop conceptual framework that allows us to explain this interesting phenomenon. We observe systems of innovations as social fields whose topology is shaped by three social microforces, i.e. institutions, networks and cognitive frames. Institutions exert their influence by limiting permissible scope of actions, encouraging some and discouraging others. Social networks position individual and collective actors in social space, limiting ties with specific nodes and encouraging others. Cognitive frames provide the necessary mental tool-kit, which allows interpreting as relevant strategies such as investing public and private resources in development of symbiotic. This explains why formation and functioning of industrial symbiotic are strongly context-specific processes. This implies that functioning and efficient industrial symbiotic system can be established if it is successfully embedded in social setting. Another implication is that industrial symbiotic system does not only involve exchange of materials and energy, but also symbolic exchange, i.e. knowledge and ideas.

*Creative Atmosphere in Cultural Industries: Clusters, Networks and Intersectoral Linkages*

## **CREATIVE ATMOSPHERE IN TOURISM: AN EXPLORATORY TAXONOMY OF INTERSECTORAL LINKAGES**

**Martha Mary Friel, ITALY**

**Alberto Bramanti, Bocconi University, ITALY**

Aim of the paper is to explore the multilevel relationships between creative industries and tourism.

The great debate on the economic and social development of creative industries, which involved policy, academic and business circles has often highlighted that the presence of creative clusters has great importance in terms of place branding, especially for cities, therefore contributing also in attracting tourist flows (Richards and Wilson, 2007; Ashworth and Kavaratzis 2010 et al).

Indeed, cultural and creative industries actively contribute in the creation / integration of the tourism product as in the case of design weeks, wine and food attractions or film locations and contribute to tourists' creative experience. This evidence became particularly true in the last two decades with the shift of tourism demand towards new practices of so-called "creative tourism", a tourism based on intangible skills and knowledge-based assets (Richards, 2011).

Moreover creative industries also provide the travel and tourism industry with products and intermediate services as in the case of design and fashion for the hotel industry or for publishing and ICT in the production of tourist facilities. Finally, the direct contact between tourist and local creative products can positively affect commodity transactions among countries acting as a stimulus for exports (Oh, 2005; Fisher and Luis, 2009; Pinna, 2010).

Linking tourism and the creative industries can therefore enhance local "creative atmosphere" attracting visitors as well as supporting the emergence of new businesses led by the need of new creative contents for tourism products and experiences.

From a policymaking point of view, the mapping and the analysis of these connections are fundamental to support creative industries and the expertise networks related to them, to qualify and innovate the tourist offer, to strengthen place branding and promotion strategies, and to identify and support the emergence of new business niches.

Through the discussion of a number of European case studies, the paper aims at identifying the conditions, in terms of tourist attractiveness, supply chains, and local policies which on the one hand allow creative industries to become a structural element of attractiveness for places; on the other hand ensure that creative industries are integrated into the supply chain of tourist destinations. The spatial dimension will also be addressed as a key issue. Finally, the paper will propose an exploratory taxonomy of the relationship between tourism and creative industries at the destination level, offering a number of insights in terms of policymaking.

#### *Role of Institutions in Regional Development*

### **NATIONAL COOPERATION FROM A SUBNATIONAL PERSPECTIVE IN LATIN AMERICA: THE CASE OF COLOMBIA**

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**Jose Niño-Amezquita, Regional Center for Productivity and Innovation of Boyacá Department, Colombia - CREPIB-, COLOMBIA**

Latin America is open for international commerce and investments, offering wide range options for new markets and their expansion. The region, in order to attract foreign investment, is promoting legal instruments as Preferential Trade Agreements (PTA's), Bilateral Investment Treaties (BIT's) and lately the reinforcement of Supranational Integration, process started decades ago. The last one, it is recognized that every new integration affects the social and economic performance of the country and its territories, especially in the case of developing areas.

In the same direction, despite the high level of economic integration of Colombia, its behavior and distribution has not been homogeneous within the country. However, it does not mean that Latin America integration will be just a benefit for the wealthy territories but could be a tool to develop stagnant territories without financial resources or technical tools; giving as result a joint venture efficient in the territorial resources as well useful to identify common problems out of territorial capability to answer.

The previous explanation is aligned with the theory of the New Economic Geography (NEG) and generates that subnational entities are facing the challenge of promoting its own territory as a profitable partner candidate under the new framework of territorial complementation and not necessarily a competition. To this end, this research determines, compares and analyses the stagnant partners for the department of Boyacá, Colombia,

within the two major supranational integrations. First, the Colombian historical attempt: The Andean Community of Nations –CAN-. Second, the ongoing integration in Latin America: The Pacific Alliance –AP- .

The previous choice is explained not just for a chronological explanation but also for the supranational integration structure; being the CAN a Latin American adaptation from a European concept and the AP a more flexible structure; close to an American perspective. For both cases the partners of Boyacá, Colombia are identified through five socioeconomic variables: Geographic characteristics, Extension, Population, GDP per capita and Strategic sector; giving as result potential partners interested to develop common projects to better answer territorial needs and improve their inhabitants quality of life.

#### *EU Cohesion Policy*

### **IMPLEMENTATION OF EU COHESION POLICY: THE CASE OF BULGARIA**

**Juliana Galabinova, New Bulgarian University, BULGARIA**

Bulgaria is a member of the European Union since 1 January 2007. After the accession, the country has the right to benefit from significant funds available under the activities of the EU Cohesion Policy. Financial resources from the European funds must serve the most important objective – Convergence, aimed at phasing out the imbalances in economic and social development within the Union and its NUTS 2 regions.

EU Cohesion policy is founded on the principle of mutual solidarity and supports disadvantaged regions. Bulgarian regional policy is stated (in the Constitution of the country, legal acts and a lot of strategic documents) also as a policy for socio-economic development with a specific focus on lagging territorial units.

For the needs of the EU Cohesion Policy and national regional policy Bulgaria has established six NUTS 2 regions – North West, North Central, North East, South West, South Central and South East, which are in accordance with the criteria of Regulation (EC) No 1059/2003. The analysis (prepared for our report) of the socio-economic development in these regions, however, allows us to determine the purpose of reducing interregional differences, set in the legislative and strategic documents, as unfulfilled. In 2000 between the six regions there are no fundamental differences in terms of GDP per capita compared to the EU average – with the exception of the South West with GDP 38% the other five regions are at a level between 22% and 30 %. In 2011 regional disparities are essential – GDP in the South West region reaches 78% of the EU average while in North West, which occupies the last place not only in Bulgaria but also in the entire European Union (together with the Romanian North-East) the indicator is 29%. The trends in the development of Bulgarian regions in the last thirteen years give us reason to conclude that the country has failed to realize:

- Constitutional commitment to balanced regional development,
- Regional Development Act aims to reduce inter-regional imbalances,
- Stated in numerous strategic and programming documents intentions to close the gap in the development of NUTS 2 regions,

All above mentioned supported financially by national and municipal budgets, as well as billions of euros from the European Union provided to our state from the pre-accession instruments and the Structural Funds. Differences in socio-economic development of Bulgarian regions are increasing, some of the most deprived regions - North West and North Central, fall further behind in their development, while South West has an extremely dynamic rates of social and economic development.

Our report analyses also the allocation of the seven operational programmes for the programming period 2007-13 ("Transport", "Environment", "Regional Development", "Human Resources", "Competitiveness", "Administrative capacity" and "Technical Assistance") by NUTS 2 regions. The most important conclusions of this analysis are as follows:

- The financial resources provided by European and national funds, are distributed extremely unequally within six Bulgarian NUTS 2 region. Most funds for projects (39.4% or 3.2 billion euro) gets the best economic developments Bulgarian region whose GDP in 2011 reached 78% of EU average – South West. The last place is for the most disadvantaged NUTS 2 region not only in Bulgaria, but also within the entire European Union - North West, which receives 7.52% of the total value of approved projects

for 2007-13. The other four regions have managed to attract between 7.89% (640 million. euro, North East) and 18.56% (1,5 billion euro, South Central).

- The absorption of European funds in Bulgaria is in contradiction with the basic principle of European Cohesion Policy - support for lagging regions and reduction of regional disparities by investing in cohesion. Bulgarian operational programmes for the period 2014-2020 follow the logic of the programmes from the previous period - the country has not developed regional operational programmes, which actually help lagging regions, but seven national programs. If the trends in the absorption of the operational programmes persist, it is expected ongoing priority investment in the South West region, which instead of convergence in the level of development between the six NUTS 2 regions will lead to even greater regional imbalances.

### *Mega Events and Regional Development*

## **EXPO VILLAGE MILAN 2015**

**Laura Galluzzo, Politecnico di Milano University, ITALY**

The research investigates models of temporary accommodation and particularly temporary housing solutions at mega-events such as expos, Olympics, major concerts, fairs, and cultural, political and religious events, with particular attention paid not only to visitors' accommodation but also to the staff working for the organization of the event itself. The disciplines of reference for the study are mainly interior and service designs.

The thesis also explores the urban dimension and the response of the city to the growing demand for temporary accommodation linked not only to large but also to small and medium-size events.

Specifically, the study is divided into two parts: the first is theoretical, offering the general frame of reference and an introduction to the theme of contemporary housing, with a special focus on temporary living spaces (as a main character of contemporary living). Within this we will find a classification of the different temporary housing typologies in order to then explain the dichotomy of home vs. house in the terms of occupation vs. adaptation. In other words we will look at the dialogue which is established between the necessities and needs of the inhabitants and the answers given by the space itself, through adaptations and variations of the interiors, in order to welcome and foster the expression of the occupants' identity. In particular, within the "home as occupation" part, we will look at studies in environmental psychology to describe different strategies employed in order to feel at home and express one's identity even within temporary living spaces. In the "house as adaptation" chapter we will instead look at transformations and alterations of interior spaces in terms of design for "degrees of freedom", to quote Ugo La Pietra, that allow the occupants to express their identity. Finally, in the conclusion of the theoretical part, we will introduce the concept of "interior legacy" to describe what interior spaces leave with us after their use, in terms of materials and remnants, but also of memories.

In the second part we will look at the practical implications of the research, the description of the design for the temporary living spaces of the Expo Village made available to the delegations and the staff of the event, Expo 2015, in the city of Milan. The output of the research is also made up of a series of guidelines for a hospitality system connected to the context of events.

The methodology adopted relies on one hand on the analysis of selected case studies, which include field observations (London 2012 Olympic Games) and the study of texts and data collections, while on the other hand it is based on the evaluation of interviews and questionnaires. The interviews were conducted with people who had participated in major events as staff and could share their opinions on the management of the hospitality sector in that specific context, while the questionnaires were filled out by those who will be taking part in the next expo (Milan 2015) as staff or delegates of the various participating countries. The views of beneficiaries and workers of the hospitality sector of a large-scale event will help to understand the expectations and desires of all users.

Another instrument of research was workshops through small forms of co-design, activities aimed at non-specialist audiences, the results of which may help to investigate the possible interpretations of the more general issue of temporary living and the characteristics of the interior spaces for the hospitality functions (for example, the workshop “Feel Like Home”, held during the event “Meet Me Tonight: Researchers’ Night”).

As mentioned before, the theme of the research is part of a broader context that includes temporary living, sociological, anthropological and environmental sociology researches on the relationship between the house and its inhabitants, but also the design of low cost hospitality and the role of events as an opportunity for the rebirth of the city, focusing on large events.

*Territorial Governance and Regional Leadership*

## **TRANSNATIONALS AND THE PERIPHERAL COUNTRIES: INSTITUTIONS AND GOVERNANCE**

**Claudia Andreoli Galvao, Universidade de Brasília, BRAZIL**

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From the beginning to mid-twentieth century, transnational companies were seen as international agents of exploitation and distortion of the internal market. With the intensification of the globalization process from the late seventies, the least developed countries have begun to appreciate the benefits of transnationals. With increasing trade liberalization transnational companies scattered around the world in markets that were previously closed to them.

Peripheral countries can benefit, for some time, from the advance of transnationals in their territories. This is due to the fragmentation of the production process globally where transnationals seek for the reduction of total costs. There are no doubts that, through this process, transnationals offer a positive momentum for peripheral economies. Transnationals, in general, offer higher wages than those who on average are offered by national companies. Producing in peripheral countries transnationals outsource their risks: using informal work and tax evasion and attacking the environment. The semi-skilled and unskilled labour can be used intensively in the peripheral countries due to the stabilization of technology and standardization with the routinization of tasks. Nevertheless, there are negative consequences on the development of this process. The main adverse effect is the expansion of the informal sector that grows at bigger steps than formal employment. Another significant negative effect is that this process of incorporation of peripheral countries in global networks is an uneven process, by which transnationals choose the countries of the semi-periphery, that are better equipped for the process of transnational production, leaving to abandon peripheral countries, deepening the gap between the semi-periphery of the periphery.

The World Commission on the Social Dimension of Globalization stated that global markets have grown rapidly without the parallel development of economic and social institutions necessary for their smooth and equitable functioning.

We are witnessing a transition from an international to a transnational system and have not yet developed the modes of cooperation and institutions necessary to govern an integrated world economy effectively.

In this way, the social and economic imbalances of the advance of transnationals in the less developed countries require a rethinking of the model of international and regional development. Institutional reforms are needed to overcome the negative consequences of the process of advance of transnationals in a globalized world. It is of fundamental importance to analyze the institutional framework that can strengthen the capacity of peripheral regions to confront the harmful consequences of transnationals in the less developed economies.

In this sense the objective of this work, which was made through a literature review, is the analysis of the process of governance of transnationals and of the role of institutions as regulators of this process. Analyses were also made on the absence or weakness of global regulatory bodies that usually serve the interests of global financial capital, transnationals and developed countries. We should ask if transnationals could be controlled by global regulatory bodies more present and effective. In this sense we have searched on the changes over time of national and international governance of transnationals. The final issue addressed is the

possibilities that national governments have to design policies to regulate transnationals in the context of globalization.

*Role of Institutions in Regional Development*

## **REGIONAL DEVELOPMENT IN THE EUROPEAN PERIPHERY: INDUSTRIAL THREATS AND OPPORTUNITIES IN THE MEDITERRANEAN COUNTRIES DURING THE CRISIS**

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**Marco Rangone, University of Padova, ITALY**

**Stefano Solari, University of Padova, ITALY**

Southern European countries (E, I, P, Gr) share a “semi-peripheral” model of capitalism which is characterised by a number of fundamental fragilities in the production system.

Those countries are now undergoing a deep process of de-industrialization which is due to both financialization and EU “internal devaluation” policies. Unfortunately, the absence of a coordinated European industrial policy makes the single national or regional policies difficult to enact or even to be conceived.

Aim of the paper is to analyse the effect of the recent crises on the Mediterranean regions adopting a capitalism variety approach. We describe how the traditional industrial clusters (industrial district) of the Mediterranean countries considered a key-industrial factor in the regional development until the end of ninety is not more an economic driver. On the contrary, it is by now very difficult for these industrial clusters to fit the new global context. A new business model is needed but strategic, financial and technological constraints are threatening a new production integration model. The lack of coordinated industrial policies is becoming a serious problem because individual firms are not able too overcome the crisis given only their own resources. This means that the regional development of the Mediterranean countries could be dramatically stopped by a lack of co-ordinated industrial policies. Particularly, those dedicated to the creation of financial, technological and social contexts that enable firms to face global markets.

*Innovation and Knowledge Economies*

## **LOOKING AT BOTH SIDES: HOW ACADEMIC RESEARCH GROUPS’ AND FIRMS’ CHARACTERISTICS AFFECT THE GEOGRAPHICAL DISTANCE OF UNIVERSITY-INDUSTRY LINKAGES**

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The main aim of this paper is to analyse how the characteristics of firms and research groups affect the geographical distance of the interactions among them. The role of university and academic research in fostering innovation is a growing subject in the literature. Many studies have focused on the importance of university as source of new knowledge, supporting firms’ innovation efforts and collaborating to solve innovative problems (Nelson, 1959; Klevorick et al., 1995; Cohen et al., 2002). Recent analysis of university-industry linkages have increased attention on the role of geographical proximity in collaboration between academic research and industrial RandD. Some of them empirically analysed the main factors that affect geographical distance of interaction (D’Este and Iammarino, 2010; Laursen et al., 2011, Bishop et al. 2011; D’Este et al., 2013; Muscio, 2013).

Previous studies show mixed evidences. Some of them have empirically demonstrated the benefits associated with the co-location of universities and firms. Proximity of firms and universities facilitates the interactive



learning process through frequent personal interactions and face-to-face contact, thereby favouring firms located near centres of scientific and technological expertise (Jaffe, 1989; Audretsch and Feldman, 1996; Mansfield and Lee, 1996; Abramovsky et al., 2007). Other studies show that firms usually go far to search for well-qualified universities that are able to solve their innovative problems. When firms need unique, complex and tacit knowledge, they will look for a university that is able to solve their problem, regardless of where that university is located (D'Este et al, 2013; Bishop et al, 2011; Muscio, 2013).

In this way, the analysis of how university-industry linkages are shaped on space requires a deeper examination, in order to catch the main factors that influence the geographical distance of interactions. The main factor that explains the importance of geographical proximity is the need of tacit knowledge required for innovation. However, there are several other forms of sharing tacit knowledge, which are configured through different types of proximity among economic agents. Based on this debate, this paper aims to analyse the main characteristics of firms and universities that affect the decision of the firm to interact with university and to which university the firm will interact, defining the locational pattern of the interactions between firms and universities.

To do that, it was used an original dataset about university-industry linkages in Brazil, gathered from CNPq Directory of Research Groups of the Lattes database. The database includes 4,337 interactions that involves 3,063 firms and 1,738 research groups from the scientific fields of Engineering and Agrarian Sciences in 2010 from all Brazilian regions. An econometric model was built with these data.

Main results show that among the characteristics of the research groups, the quality of the research performed by the group and the size of the research group positively both affect the distance of interactions. In this way, firms are willing to interact with more distant high-quality research groups to support their innovative efforts, to solve production and operational problems, and to foster the development of new products and processes. They are seeking high-quality research groups for collaborative projects because they believe that these research groups are more skilled in handling complex problems. The size of research group, also positively affect the geographical distance of the interactions, which indicates that research groups with more researchers tend to have more distant interactions, since they have a broader structure to meet not only local firms, but also firms localised in other regions.

Regarding the characteristics of firms, both absorptive capacity and firm's size positively affect the geographical distance of the interactions. Regarding the absorptive capacity, the positive coefficient shows that firms with higher absorptive capacity interact with more distant research groups, since these firms are more able to search for research groups that meet their demands for their innovative problems, regardless of geographical location. Furthermore, firm size positively influences geographical distance of university-industry linkages, which indicates that larger firms not only have better conditions to interact more frequently with universities, but also they are better able to interact with research groups at greater distances.

Based on these results, policy should be designed to strengthen the linkages between firms and high-performance research groups because these linkages can be important tools for fostering the innovative efforts of industry, especially when radical or cutting-edge innovations are involved. In these cases, geographical proximity can play an important role because it can provide face-to-face interactions, frequent contact, and the construct of trust and reciprocity, which facilitates the interchange of information and knowledge sharing. In addition, it is also important to support research development in mid- and low-performing universities, as these universities are able to address the specific needs of local producers and help to enhance their competitiveness.

## **ESTABLISHING A NETWORK OF GROWTH HUBS IN ENGLAND: AN EXEMPLAR IN AGILE POLICY IMPLEMENTATION?**

**Cathy Garner, Lancaster University, UNITED KINGDOM**

**Ellie Hamilton, Lancaster Management School, UNITED KINGDOM**

This paper explores the extent to which agile policy development and implementation is being explicitly enacted in the drive towards local devolution of the responsibility for economic development in England. The paper examines this through the lens of lessons emerging from the implementation of a network of business support and growth hubs in 15 centres across England. The paper argues that the unique implementation agent in the Wave 2 Growth Hubs programme, Lancaster University, has enabled an agile approach. We propose that this approach has not only ensured the rapid establishment of an operational network for business support, stretching from the North East to the South West of England but has played a significant role in mediating between locally established priorities and centrally-driven policy direction. The role played by Lancaster University, a leading research intensive institution, establishes a new mode of working for UK universities as anchor institutions in economic development.

The establishment of a network of growth hubs across England sits squarely in the UK Government's policy agenda of supporting and stimulating economic growth. It also plays to the broader policy intent that this will be driven by, and tailored to, the needs and opportunities of local areas. This devolution of responsibility was developed and initially delivered through contracts with the eight major UK cities (Wave 1 Cities). Following from that success the policy was rolled out to the next fourteen largest cities and their wider Local Economic Partnership (LEP) areas and a further six with the highest population growth (2001-2010).

Those smaller cities engaged in the Wave 2 City Deals had a variable level of existing infrastructure through which to support locally-based economic development and specifically to provide support to local businesses and therefore a deliberate programme of organizational support was put in place. The abolition of the Business Link advisor – network which was replaced by a helpline and web tools in 2011 left a gap for many of these cities and it is this gap that the Wave 2 Growth Hubs Programme (W2GH) was designed to fill. The programme is funded by £32m from the Regional Growth Fund secured by Lancaster University and subsequently allocated to 15 partnerships to develop growth hubs across England. This funding was agreed in December 2013 and allocated to the Hubs to commence their delivery. Twelve months later, fully operational hubs met to showcase their achievements and delivery and central government have adopted the approach. Central government intend to extend the network to cover the remaining LEP areas in England by the end of 2015.

We argue that in the complex and rapidly moving policy environment such as that represented by the devolution of powers and funding which is currently being enacted in the UK, there is an opportunity to move away from traditional top-down approaches to policy implementation. By adopting what is becoming known as a "policy 3.0" approach there could be the beginnings of a move towards an open-innovation approach where successful innovation breeds replication, and where success and scale-up ultimately give rise to retrospective, relevant and locally appropriate policy making. Key to that approach is the establishment and activation of a learning network which co-produces and shares good practice, tools and problem solving.

The paper explores how the W2GH programme was led in that open and co-production manner by the neutral intermediary – the university - and how this offered the opportunity for a new dialogue across stakeholders through network activation and animation. Questions remain as to whether this approach can be sustained without neutral intermediation as the wider policy infrastructure lags behind both our technological capacity and expressed desire for increased inclusiveness.

The authors however contend that the W2GH programme is a leading example of large-scale implementation of participatory policymaking and that the lessons learnt have implications for wider policy making and implementation. These lessons are explored and recommendations for other rapid and localised policy implementation are drawn and discussed.

## **RESIDENTIAL SEGREGATION OF THE AGED POPULATION IN MEXICO CITY: APPLICATION OF SPATIAL INDICATORS**

**Carlos Garrocho, El Colegio de Mexiquense, MEXICO**

The population group aged 65 and over will be the fastest growing of Mexico in the near future: its magnitude will quadruple by 2050 reaching 30 million people. That is, an increase of 22 million people in just four decades, which is similar to the sum of the total population (in 2010) of Chile (17.1 M) and Uruguay (3.3 M) and about twice the population of Portugal (10.8 M), Belgium (10.4 M) and the Czech Republic (10.2 M). In large Mexican cities the proportion of elderly people will be close to 30% and in some intra-metropolitan areas will be even greater. The aged population is concentrated in cities and in some intra-metropolitan areas, suggesting the presence of residential segregation of population over 65 years old.

Residential segregation of aged population is associated, among other factors, to the dynamism of intra-urban spaces. Usually young people have different aspirations and preferences than their parents and therefore make choose different residential location, which can cause them to live in different and even distant neighborhoods. This spatial separation between generations in large Mexican cities makes more difficult and expensive to care for the elderly. In Mexico the support of the family (not of the public institutions) is essential to provide protection and support in the daily lives of older adults.

In Mexico, residential segregation of the elderly has been linked to social isolation and loneliness, which have devastating effects on the quality of life of the aging population. This is most acute in large cities such as Mexico City.

However, Mexico has not analyzed the segregation of older adults with genuinely spatial indicators. The few studies reported in the literature are based on non-spatial indicators such as the indexes of dissimilarity, isolation and interaction. These indicators do not consider the spatial localization of the groups under study and therefore have serious problems as segregation indicators. In this paper, however, genuinely spatial indicators are used (e.g. indexes of global and local Moran's autocorrelation), which allow not only measure the segregation of the population, but to identify the areas of greatest segregation in one of the largest cities of the world: Mexico City.

The results indicate that segregation of the aged population in Mexico City is intense in some parts of the intra-metropolitan space. So, it is necessary to design policies that balance the benefits and costs of segregation of the elderly population and make the city more livable for this group, which are the new urban beings in Mexico in the XXI century.

## **ISLAND OF BLISS? UNIVERSITY TECHNOLOGY COMMERCIALIZATION PRACTICES IN THE SWISS INNOVATION SYSTEM**

**Christiane Gebhardt, Malik Management Institute, SWITZERLAND**

Switzerland has made impressive progress in transforming itself from a small state into a global player in science and innovation. During the last few years the Swiss innovation system maintained its high level of performance despite the lack of major federal innovation policy programmes, the global financial crisis and limited access to European funding. An outstanding feature of the innovation system is the fact that industry drives Switzerland's research, while the federal government provides funds for education and basic research at highly competitive research centers such as the federal research universities ETH and EPFL. Universities provide the platform for high quality research, commercially successful incubators and start-ups. Successful models of technology transfer and technology commercialization developed through these clusters continue to drive the Swiss economy, placing it among the leading innovators worldwide. The author discusses

technology transfer as an extended concept of diffusiveness and permeability inherent in the Swiss innovation system, which provides the context for the TTO model operated by the federal universities. Using a systems analysis within complexity and system theory, technology commercialization and the role of universities in Swiss ecosystems are also reviewed. The systemic approach is a starting point for discussion of the systemic risks, resilience and the future course of innovation policy, as well as the relevance of a governance of innovation for innovation itself. The study focuses on interaction modes and system rules to identify system behaviour and failures. Data for the study were obtained from focus groups and interviews with Swiss innovation policy experts.

*Economic Resilience of Firms and Territories A: Economic Determinants and Measurements*

## **REGIONAL ECONOMIC RESILIENCE. THE EXPERIENCE OF THE ITALIAN LOCAL LABOR SYSTEMS**

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**Alessandra Faggian, The Ohio State University, UNITED STATES**

**Isabella Santini, Sapienza University di Roma, UNITED STATES**

Since the recent economic crisis that affected first the USA and then Europe, the concept of resilience has gained popularity. Urban and regional scientists follow suit, highlighting the importance of “urban” and “regional” resilience. It is clear that different regions show a different ability to react to economic crises and one crucial question is: why? In other words, what are the factors explaining a high level of regional “resilience”? Our paper addresses this issue.

After defining the concept of resilience and its application to the regional context, the paper presents a preliminary evaluation of regional economic resilience in the case of the Italian regions. In doing so, we follow the approach by Martin (2012) and Martin and Sunley (2013) who identify three different dimensions to regional economic resilience: a) Resistance, i.e. the degree of sensitivity or depth of reaction of a regional economy to a recessionary shock; b) Recovery, i.e. the speed and magnitude of the recovery; c) Reorientation and Renewal, i.e. the ability of a region to adapt in response to the shock and renew its growth path.

The analysis is conducted at the local labour systems (LLS) geographical level and focuses, at this stage, only on the first two dimensions of resilience, i.e. resistance and recovery. The recessionary shock (2009-2010) is defined following the Italian National Statistical Institute (ISTAT) approach for which a recession implies a decrease in GDP for three consecutive trimesters. The pre-recessionary period is 2007-2008 and the recovery period 2011 (as a new recession started again in Italy at the end of 2011).

The results clearly point at very different levels of resilience for the Italian LLS. In an effort to identify what factors foster higher regional resilience we propose an analysis of the local employment growth paths and determinants in Italian local labour markets for the period 2001-2011. In the modeling process we employ a set of explanatory variables which include indexes of specialization, diversification and concentration as proposed by Mameli, Faggian, McCann (2008).

## **DYNAMICS AND FACTORS OF INTERREGIONAL INCOME INEQUALITY ACROSS THE SUBJECTS OF THE RUSSIAN FEDERATION (1995 – 2012 YEARS)**

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Methods and results of comparative statistical analysis of levels, dynamics and factors of inter regional differences and inequalities in income per capita, income sources and others indicators of well-being have been presented in the paper.

The 79 Subjects of Russian Federation (SRF) have been the objects of studying. Statistical comparative analysis has been based on average per year regional data published by ROSSTAT. This official information let us to create “time – space” database for 79 SRF. This DB includes, for each of the 79 regions, a wide range of average annual indicators, such as GDP per capita, population, economic activities, unemployment, income per capita and its distribution by five sources: 1) business (enterprise) activity; 2) wages (salaries); 3) social transfers; 4) property; 5) other income’s sources. Database includes information for the period 1995 - 2012 years.

Three social-economic aspects of inter regional differentiation have been considered. The first one has been the comparative analysis of income per capita regional dynamics. The second one has been the consideration of inter regional differences in income sources and their dynamics during the time. Finally, the relationship between indicators of income and employment, unemployment and GDP per capita has been examined.

In the study classical methods of statistical analysis has been applied, as well as CINI decomposition by five income sources. Special attention has been paid to the construction of the Lorenz curve for the distribution of the Total Income and its five components by regions of the Russian Federation.

Finally, R - “ratio index” and IAP – “index of accumulated potential” has been proposed for comparing of regional dynamics. They both have been based on the geometry of the Lorenz curve, constructed for visualization interregional distribution volume indicators. The trajectories of these indexes have been calculated and compared for all regions of Russia, ranged by per capita income in 2010 and 2012 years.

## **A CRISIS OF IDENTITY: REVEALING THE INTERPLAY BETWEEN PHYSICAL AND ONLINE NETWORKS OF REGIONAL GROWTH**

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**Danny Soetanto, Lancaster University Management School, UNITED KINGDOM**

This paper explores the online representation of regional growth networks in the UK known as Growth Hubs. More specifically, the authors investigate the emergence of 15 Growth Hubs formed through Lancaster University’s Wave 2 Growth Hub programme. This £32m Regional Growth Funded programme allocated funding to some of the UK’s fastest growing cities to facilitate local economic growth and innovation. Each Growth Hub devised a delivery panel and model, with varying support packages tailored to the characteristics of their local industries and markets. All of the Growth Hubs were created in partnership with Local Authorities, Local Enterprise Partnerships, Universities and Chambers of Commerce, with new partners being brought in as their delivery evolved. The W2GH community now includes at least 17 Local Enterprise Partnerships, 42 Higher Education Institutions and over 200 local and national business support and innovation organisations, alongside the Department for Business, Innovation and Skills, the Cabinet Office and the Department for Communities and Local Government.

Using data collected from the Wave 2 Growth Hub programme, this paper aims to reduce the lack of understanding on the dynamic process of regional growth actors and the influence exerted both in their physical and virtual existence. To investigate the changing role and importance of regional growth actors, we

started our analysis by capturing the development of their roles online. Through the use of social network analysis and a webometrics methodology (supported by web-based crawling applications) we attempt to reveal how the linking patterns of the Wave 2 Growth Hub websites constitute an emergent online network. The presence of a website was inscribed into one of the elements of the funding, focused on the development of a 'one-stop shop' or portal through which businesses could access information about both regional and national support and resources. The identity of the Growth Hub, manifested through these websites is complex, was inscribed through a negotiated process (in the physical world) between local stakeholders (drawing on their Growth Hub delivery plans) and government directives on simplifying business support nationally.

In the analysis, we used a facility in the web crawling software to produce 'sociograms' (network images). This enabled us to perform a comparative analysis of the core stakeholders in the physical networks of the Growth Hub (observed and documented through the W2GH programme) and the core actors in the virtual networks. These findings reveal the impact of the physical network and the opportunity to establish stronger ties with peripheral actors. We argue that the landscape of online support networks can collectively be seen as an expansion of the physical networks, and at the same time, of the dynamics of the organisation and associated stakeholders. More specifically, that the this online network is afforded 'the ability to generate politically relevant information and move it by the most effective means to the place where it will have the most impact, at the most critical time' (Bennett, 2008:96). Thus, it has the propensity to impact upon ongoing political discussions on the prominence and impact of local growth networks on business support.

*Urbanisation and Cities*

## **PROCESSES OF URBAN TRANSFORMATION IN MILAN: THE CASE OF LAMBRATE**

**Valentina Gingardi, Gran Sasso Science Institute, ITALY**

Discussing the development trajectories of cities, one cannot avoid dealing with the issues of urban renewal and urban "regeneration" of the territory. In particular, the redevelopments of urban peripheries – frontiers between the core city and the metropolitan area – have taken a growing importance and for several years have been at the center of European policies. The Italian cities represent a relevant case study for the spatial, economical and social consistency of the urban periphery, often characterized by an incomplete design and an inadequate functional layout. The paper investigates the processes of urban transformation within the east area of Milan, the prescriptive system which regulates them and the resulting imbalances that are produced. The aim is to identify the expected results on urban quality and well-being. Through the case study of Lambrate, a district on the outskirts of Milan and an infrastructural hub, the paper outlines the actions and positions of both public and private stakeholders. Assessing that the overall evaluation of the final results on Lambrate's well being may be stated only when the whole settlement will be complete, the research emphasizes the importance of approaching the topic of urban transformation considering both spatial and temporal implications. A proposal to view this transformation at the metropolitan scale is recommended, as is stressing the importance of a common debate among suburban districts and external municipalities, trying to outline a coherent and sustainable development trajectory of the territory.

The context of analysis is Lambrate, a neighbourhood on the outskirts of Milan and an infrastructural hub. The district is facing deep regeneration processes in recent years (2000-2014), promoted by public and private stakeholders and implemented with different regulatory instruments. Even though many scholars are investigating the processes of change and urban development in Milan's metropolitan area as well as social and housing issues of urban peripheries, rarely researchers analyze systematically urban transformations at the local scale. This research analyses the processes of urban transformation – both completed and in progress – that are going on in the district. As often happens in these contexts, different actors interact simultaneously within one specific area. An analysis of the urban transformation's process is needed in order to understand and evaluate the emerging effects from different actions and to calibrate the public intervention. In the city of Milan we can find processes of urban transformation ungoverned in terms of spatial and temporal synergies. The observation of the on-going process of transformation and the interaction between actors allow us to put forward some working hypotheses. Firstly, we can face an uncertain and unclear conceptualization of the

projects. Secondly – as a consequence of the first proposition – the research finds a substantial viscosity and a shift in time from the original expectations, both in the design and in the implementation of projects, with frequent reviews of each work and of the overall schedule of the process. At the same time a prominence for private urban transformation is underlined, at the expenses of public or semi-public processes of regeneration. Starting from the analysis of the different local units, the temporal and spatial synergies among them, it's possible to investigate the ways in which these territories interact, how they will change over time and how they influence the urban agenda.

*Europe 2020 Strategy and the Role of the Regions*

## **MULTI-LEVEL GOVERNANCE AND EUROPEAN FUNDING (ERDF) FOR BUSINESS SUPPORT: PROMOTING ENTREPRENEURSHIP TO SUPPORT SOCIAL INCLUSION IN THE LIVERPOOL CITY-REGION**

**Benito Giordano, University of Liverpool, UNITED KINGDOM**

In recent years, a plethora of policy and funding initiatives has been developed to try to encourage entrepreneurship and the creation and growth of small firms. In particular, at the European level, considerable amounts of ERDF have been spent on business support. The success of such initiatives, however, has been mixed, especially in Europe's less developed regions. This is an interesting moment, therefore, to consider the links between multi-level governance, European funding (ERDF) and attempts to encourage entrepreneurship to support social inclusion.

This paper explores the ways in which the shift in governance in England from the regional to the local level, with the creation of Local Enterprise Partnerships (LEPs), has helped (or not) to tackle social inclusion in the Liverpool city-region. In particular, the focus is on ERDF-funded business support projects to encourage entrepreneurship and business support in the most deprived areas of the city-region. The paper illustrates the ways in which the shifts in multi-level governance within the Liverpool city-region, involving the management of ERDF, have ushered in a new phase of partnership working and co-ordination centred around the LEP. The impact, however, of ERDF business support funding on supporting (social) entrepreneurship and small firm creation remains mixed.

This research for this paper is part of a European comparative project comparing different approaches to using European funding to tackle social inclusion in several case studies. The Liverpool city-region case focuses on the economic benefits of tackling social inclusion through developing entrepreneurship, including social enterprises, to try to help transform communities most in need of help. A 'mixed-method' approach was used to carry out the research in Liverpool including a series of semi-structured interviews with key stakeholders (from the LEP, entrepreneurs, local politicians and officials; local small firms and business intermediaries) and an analysis of ERDF business support project returns.

In terms of results, the focus on encouraging entrepreneurship to support social inclusion in deprived areas in the Liverpool city-region has brought about some benefits. Significantly, partnership working and governance arrangements have arguably improved at the city-regional level. Importantly, however, the impact on new firm creation remains rather mixed. In short, the research suggests that ERDF funding for business support plays an important role at the local level, especially with domestic funding being cut significantly. However, it does not provide all the answers. The fragility of the economic fortunes of localities such as the Liverpool city-region remains, especially in light of continuing austerity measures across Europe. This research highlights the importance of exploring the ways in which ERDF is used to promote business support across Europe. Moreover, there are important lessons for other places to learn from about how to implement (or not) policies to promote entrepreneurship in order to try to tackle social inclusion.

## **INNOVATION AND FACTORS OF THE REGIONAL DEVELOPMENTAL PERFORMANCE**

**Tea Golob, SLOVENIA**

**Victor Cepoi, School of Advanced Social Studie, SLOVENIA**

The paper addresses processes of innovations, which are seen as a vehicle for developmental performances on a regional, national and transnational level. The economic crisis confirmed that in order to deal with the challenges that it has brought, it has to be enhanced by the innovative performance in all areas of social life. The argument is that innovation is as a social and collaborative achievement. It can be viewed as the basis for the achievement of competitiveness by firms, regions or nations. Due to the changing and more fluid structural settings, a relationship between actors and social environments indicates various techniques of adaptation and adjustments of the social context, which enable actors controlling new unpredictable social areas. Innovations can be seen as processes triggered from such actions.

In this paper, the consideration of determinants of innovations is at the forefront. The focus is on factors that influence particular social environments to become a trigger to innovations to emerge and contribute to the existence of an innovative society. In order to explore the influence of the macro settings on innovation process, the integrated theory of strategic social fields (Fligstein and McAdam 2012) is taken into account. It allows approaching the interplay between actors and social environments as social arenas or local orders, where interactions between more and less powerful collective groups take place in accordance to rules and shared meanings. Theoretical considerations are empirically tested by using a fuzzy-set methodology, which enables significant communication between theoretical concepts and empirical data. Also, fuzzy-set analysis can handle the vagueness systematically that some concepts have and allow significant communication between theoretical concepts and empirical data.

The determinants of innovations are mainly considered on a macro level referring to national social fields, which are seen as a framework of many other strategic fields interacting beyond boundaries of a nation state. The segmentation of national social spaces indicates a variety of institutional and cultural features that affect the dynamics of innovation process in the particular strategic social fields. The factors considered to be important in encouraging innovations within strategic action fields imply on different types of social, cultural and economic resources, which define national social settings and also indicate the ability of innovation performance. The analysis shows that necessary conditions for innovations to emerge are the general level of development, the level of investment in research and development, while also post-material values have to be taken into account. The sufficient conditions express the complex solution for the presence of the innovative outcome. The analysis shows that the general level of development, regulatory efficiency, social resources, and the economic performance of the particular country combined together form the sufficient conditions.

## **THE ROLE OF SCIENCE AND TECHNOLOGY FOR THE REGIONAL STRUCTURES IN BRAZIL: A PANEL DATA MODEL FROM 2000 TO 2010**

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In the literature of regional economy and innovation exists a narrow relationship between the dynamics of Science and Technology (SandT) infrastructure and economies of agglomeration. For some authors this interaction promotes the search of new knowledge by firms. The concentrations of firms enable the promotion and improve the scientific process, as well as innovative. The concept of agglomeration economies covers different types of externalities that can explain the spatial concentration of production, even as the geographic dependence between the innovators and the strong presence of universities and research institutions, which are strongly correlated according some studies.



Actually, the increased competition and the speed of technological change enabled by a space-time compression afforded by advances in information and communication technologies (ICT), have represented growing challenge for firms. Indeed, rapid changes in technology mean that firms are improving their processes and launching new products and process in the market. In this sense the role of geographical space is an important factor to facilitate and improve the diffusion of science and technology, and therefore, increase the innovation and competition of firms clustered in a specific region.

In these terms, the scientific structures are also characterized by the influence of universities and research institutions (public and private), which are crucial in generating capacity of new technological knowledge economy. These factors have positive impacts on innovation too, and it is an important determinant of the spatial distribution of research activities. It is also observed that the indirect effect of university research, which attracts research and development (RandD) industry, increases the productivity of the industry.

Therefore, this study aims to analyze the dynamics of SandT and regional infrastructure, represented by the construction of a technological indicator for Brazilian states. In this paper the indicator was built through the Principal Component Analysis (PCA), and can be considered a proxy of scientific and technological effort. For the construction of this indicator the variables, which can capture all the capacity of public and private effort, were included. This effort is associated, in some way, with scientific and technologic structure like spending on R and D, number of researchers and scientific production by Brazilian state.

Apart from the construction of indicator that was used as dependent variable, other important variables were considered in the panel data model, mainly those which are related to scientific framework that measures the influence of the concentration of employees in different activities, externalities of specialization and diversification and regional differentials (represented by dummy variables). The results after the estimation provide some subsidies to understand the effects of diversification and specialization externalities, taking into account regional disparities, the time span and the spatial dimension of the analysis. Thus, the analysis and understanding of the factors related to SandT structures help us to identify the effects of externalities, the role of regional innovation systems and the issues of regional disparities in the innovation process.

Also, it is worth mentioning that the empirical results of this study allow to corroborate the hypothesis that in Brazil there is a diverse reflection of an unequal innovative dynamics. We note that the behavior of SandT indicator confirms the idea that the ability of state government in investments in the area must converge with regional development policies and investments toward a more consolidated SandT infrastructure, especially in relation to qualified labor. Moreover, it is important to note that the observed results in this paper are converged with most empirical studies.

*New Manufacturing Trends in Developed Regions*

## **REGIONAL DEVELOPMENT OF THE FASHION AND APPAREL INDUSTRY IN THE UK: NEW TRENDS**

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**David Barnes, Westminster Business School, University of Westminster, UNITED KINGDOM**

The apparel industry in the UK experienced a long-term decline with loss of jobs to cheaper labour locations in South East Asia (mainly China) and Eastern Europe (Pickles and Smith, 2011). However there are some accounts of re-shoring (Economist 2013) suggesting that this may be relevant to the UK when one considers its effects on the economic recovery and development of the regions. The limited data on industries 'returning home', however, are insufficient to come to definite conclusions about the scale, scope and underlying reasons for this return, if indeed it is happening. This empirical paper uses employment trend data (NOMIS) as well as interviews with industry participants to understand developments in the UK fashion and apparel industry, including all its parts: retailing, wholesaling, sale agents' activities, design as well as manufacturing. The differences in industry patterns typical of different regions are identified with discussion on some signs of recovery in London and East Midlands. The case of London (London urban region) was analysed more closely. Explanations are drawn highlighting the interplay between the continuous advantages of delocalisation and

the changing characteristics of British fashion and apparel industry. The paper assesses that the later are related to the:

1. Development of fast fashion and associated demands for higher agility of production networks and 'lean' retailing (Abernathy et al., 2006; Pickles et al., 2006; Bair and Gereffi, 2003).
2. Development of high fashion brands which gain international markets demanding "Made in GB" products.
3. Development of higher-end small and medium size designer brands closely related to the long term investments in fashion design education and institutional support for fashion design a cultural industry.

The relatively good state of London's fashion and apparel industry is explained by the persistency of agglomeration factors related to the mutual proximity of consumer, retailers, designers, related institutions and manufacturers, the latter supported by relatively cheap and highly flexible immigrant and ethnic minority labour. The paper argues that social polarisation, which is a characteristic of major metropolitan regions, is produced and reproduced by asymmetry of power in demand-driven production networks, where profit-oriented retailers and brands utilise major advantages of flexible specialisation, provided by London firms. The paper makes a point that cultural differences and associated values concerning work, profit, balance between 'use-value' and 'sign value' of the product, etc., create cognitive distance between industry stakeholders and prevent the integration of production network, despite industrial and institutional attempts to do so.

*EU Regional Policy and Practice*

## **CENTRAL AND EASTERN EUROPEAN COUNTRIES AT THE CROSSROADS: IN SEARCH OF A NEW DEVELOPMENT PARADIGM**

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The Central and Eastern European Countries (CEECs) have completed 25 years of post-socialist transformation and (most of them) 10 years of EU membership. In general, these two processes appeared to be successful. However, the financial crisis revealed a very differentiated resilience to the external economic disturbances. Moreover, the post-crisis type of development, in which technology and innovations plays a growing role, have posed new challenges for the CEECs. If these countries want to shift from low-cost competitiveness to achieving a competitive advantage (in Porter's term), they need to change their economic and regional policies.

The paper will summarise the results of the FP7 GRINCOH project that has been coordinated by EUROREG in 2012-2015 and which in a comprehensive way analysed the socio-economic patterns of CEECs' development and formulated wide policy recommendations.

*Culture and Creativity as a Driver of Regional Development*

## **FIRM SURVIVAL OF THE UK VIDEO-GAME INDUSTRY IN 2009 – 2014. AN ORGANISATIONAL ECOLOGY AND POPULATION ANALYSIS PERSPECTIVE**

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Ignazio Cabras, Northumbria University, UNITED KINGDOM  
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The video-game industry is considered part of the broader creative entertainment industries, such as Film, Broadcasting and Music. In recent years, the industry experienced a significant growth during the last decade, with a global annual turnover estimated to be \$75.5bn in 2014 and expected to grow to \$86bn in 2016.

Videogames are developed and supplied in a variety of forms and platforms, with console-based games representing the largest share of the market (43%), followed by games supported and played on PCs (30%). Mobile and tablet-based gaming represent the most rapidly growing market segment, supported by online markets such as Google Play and Apple's App Store.

In the UK alone, the industry generated revenues for £2.33bn in 2013. The country's long tradition in entertainment and software development has significantly influenced the industry. Between 1999 and 2014, the UK video-game industry grew by an average of 6.6% on annual basis. Following the 2008 financial crisis, the internal market experienced significant negative growth rates. However, the trend reversed in 2013 with the industry registering a 3.6% growth, mainly driven by the increase of digital distribution channels and fostered by the entry of many small development studios and independent developers in the market.

The study presented in this paper explores and analyses the effects of density, size and age of firms to the population of organisations within the UK video-games industry. In particular, the authors aim to examine the effects related to the liability of newness and smallness in relation to foundation and mortality rates of the companies operating in the industry. Using data collected from videogame companies between 2009 and 2014, the authors develop a longitudinal analysis, followed by a cross-sectional evaluation of the contribution of social capital in shaping the industry. The outcomes of this exercise provide interesting insights and help to understand how companies may cope with wide range of issues and challenges, such as the difficulties to find experienced professional figures and the general skill shortage that affect the industry.

In addition, differences and similarities among companies are explored at sub-regional levels in order to identify and map the presence of possible industrial clusters and to evaluate the impact social capital in the formation of these clusters. Findings are discussed in the light of strategic actions and government policies that can help companies to survive and better adapt to future evaluative patterns in the industry.

*Innovation in 'ordinary' regions and 'boring' sectors*

## **COPING WITH PERIPHERALITY. EXTERNAL KNOWLEDGE ACQUISITION AND INNOVATION ACTIVITIES OF BUSINESSES IN PERIPHERAL SETTINGS**

**Martin Graffenberger, GERMANY**

Preliminary remark:

The contribution described below will be based on the conceptual account of a first year PhD project and will explore the proposed research lines from a theoretical perspective. Empirical results originating from this research cannot yet be presented.

**Abstract.** Business innovations are widely regarded as a crucial element for entrepreneurial renewal and regional socio-economic development and their stimulation has become a central focus of policy efforts. However, it can be observed that, due to the anticipation of spill-over effects, these policy efforts often target agglomerated regions and highly dynamic industries. An equivalent spatial and sectoral bias can be identified within the regional innovation literature.

Processes of learning and knowledge creation are essential drivers of innovation activities and base on interactive links between complementary actors. These links, which aim at mobilising external expertise, can be intra- and inter-organisational in nature and range from local/regional to extra-regional scales. Models that conceptualise such spatial configurations of knowledge acquisition and exchange suggest, that a balance between closeness and distance is most conducive for activating learning and fostering innovation. However, these models have mostly been developed within the context of localities with dense local actor bases, implying that actors are able to access both local and extra-local knowledge resources. They do not refer to peripheral or weakly structured localities characterised by fragmentation, organisational thinness and, hence, only limited scope for local buzz. Therefore, it can be hypothesised that knowledge acquisition from extra-local resources is even more significant for innovation actors that are located in peripheral settings. This argument

is underpinned by the notion that extra-local interrelations can act as potential substitutes for the benefits of co-location.

Against this background, only little is known on whether firms in peripheral regions compensate for a rudimentary developed local actor base, and if so, how their compensation strategies look like and how they differ between certain types of firms. A more detailed understanding on the significance of trans-local knowledge sources, as opposed to local sources, will contribute to further conceptualise innovation processes that occur outside actor-dense contexts. Furthermore, only little is known on how certain dimensions of these knowledge flows relate to innovation processes on the micro-level. As innovations are knowledge driven processes, it can be assumed that the relevance of both the specific knowledge needs and the spatial range of knowledge flows alter throughout their individual stages. Exploring these dynamics with respect to their spatial dimension, will add to the conceptual understanding on how business innovation processes within peripheral or weakly structured contexts evolve. Closely related to the significance that can be ascribed to extra-local channels of knowledge acquisition, is the question of how actors from peripheral contexts initiate such channels in the first place. The modes and mechanisms (e.g. trade fair participation) adopted by businesses to activate and develop external linkages remain largely unaddressed, by taking for granted that firms can readily gain access to external knowledge resources. These often neglected, yet fundamental, processes deserve further investigation.

Eastern Germany and Estonia will form the regional focus of the project. In order to explore the (static) knowledge exchange configurations of businesses, a quantitatively-oriented business survey will be conducted. Qualitative interviews with business representatives will be the basis for investigating both, the dynamics of knowledge flows within specific innovation processes and the mechanisms firms adopt for establishing channels to external knowledge sources and aim at gathering data for conducting in-depth, firm-level case studies.

*Have Cluster-based Economic and Regeneration Policies Lost their 'Buzz'? Where are we Heading...and where should we be Heading with Regard to Cluster Research and Policy?*

## **ALL PLANNING, NO STRATEGY: EXPLAINING CLUSTER POLICY DECISIONS OF REGIONAL ECONOMIC DEVELOPMENT ORGANIZATIONS**

**Timothy Green, Clemson University, UNITED STATES**

The widespread adoption of cluster-based economic development strategies by regional economic development organizations in the United States has generated excitement and derision in equal measure. Several decades after the concept first appeared in its present form, cluster enthusiasts still point to the concept's potential for encouraging locally-focused development around agglomeration economies. Critics argue that the concept fails to introduce new ideas in to practice, and that it serves merely to cloak traditional industry targeting efforts in more sophisticated language. Detailed empirical research on the policy efforts that follow cluster analysis is still relatively thin in the US, particularly when compared alongside more voluminous work on agglomeration economies. The research presented in this paper adds to our understanding of how the cluster concept is used by regional economic development officials, and asks what value if any it adds to economic development practice?

Through a set of four case studies of decisions in two different regional economic development organizations, this paper presents a detailed description of how cluster analysis and the cluster concept informs organizational action. The approach here rejects the rational comprehensive model that dominates much of economic development planning literature due to that literature's multiple unrealistic assumptions about the environment in which economic development policy evolves. This paper relies instead on a conception of the policy process that assumes neither agreement nor cooperation as a precursor to planning, and the idea that plans inform rather than control decisions. By constructing each case from interviews with key informants and reviews of relevant studies, plans, and progress reports, the research works backward from each decision to identify how and where the cluster concept and cluster analysis played a role.

The study finds that cluster analysis and the cluster concept do inform major economic development policy decisions in important ways. However, the outputs of a traditional cluster identification analysis were never sufficient to suggest concrete policy proposals. Instead, such analysis served as the beginning of an extended, multi-year process that involved further research on specific clusters and outreach to specific cluster firms. The final decisions were affected more by information and relationships that arose during that process than by formal research. The eventual decisions all embodied characteristics of the cluster concept to some degree. In particular, the concept helped organizations identify sets of firms that were potential collaborators, understand connections between local forms and those in nearby regions, and prioritize limited organizational resources. IN addition, the research showed that operational definitions of clusters evolved over time, though in ways that remained essentially true to the cluster concept. In sum, the research shows that cluster-based economic development planning approaches can usefully inform economic development practice, but that analytical techniques to “identify” clusters contribute only a small part of that value at present.

*Cities of the Mind: Subjective Wellbeing in Urban Regions*

## **RELATIVE INCOME AND SUBJECTIVE WELLBEING: RURAL VERSUS URBAN DISTINCTIONS IN INTRA-NATIONAL AND INTER-NATIONAL COMPARISONS**

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**Robert MacCulloch, University of Auckland, NEW ZEALAND**

**Marc Reinhardt, University of Auckland, NEW ZEALAND**

Considerable work, based on the Easterlin Paradox, substantiates that both absolute income and inter-personal income comparisons matter for individuals’ life satisfaction. Most studies show that the inter-personal comparisons which matter most are those set in relation to similar intra-national individuals. One recent contribution, however, shows also that inter-national income comparisons matter for life satisfaction. Using European and World Values Survey data, we confirm the basic intra-national predictions of the Easterlin Paradox. Individuals’ life satisfaction (subjective wellbeing) rises as their personal income rises. However, their life satisfaction falls as the incomes of similar individuals (according to age, sex and education) within their own country rise. The coefficients on these two effects are approximately equal, in line with Easterlin’s findings. Thus, *ceteris paribus*, an overall rise in a country’s income that affects each individual by the same percentage leaves overall subjective wellbeing broadly unchanged.

In addition, however, we extend the recent work on inter-national income comparisons, confirming the importance of inter-national income comparisons in determining people’s subjective wellbeing. This result changes the interpretation regarding the effect of a distribution-neutral increase in national income on wellbeing. A country that raises its per capita income faster than others will experience a rise in wellbeing, while a country that lags behind will suffer in terms of its citizens’ wellbeing.

A separate body of literature shows that there may be material differences between levels of urban and rural life satisfaction even after controlling for other variables. In developed countries, rural life satisfaction, *ceteris paribus*, tends to be higher than that in cities. We formulate and test the hypothesis that these spatial differences are in part a result of differing emphases on intra-national and/or inter-national income comparisons according to whether individuals live in rural or urban settings. This extension takes both the rural-urban life satisfaction literature and the Easterlin-based literature in new directions, potentially resolving some of the outstanding questions attached to the findings of each branch of the literature.

**PUBLIC LEADERS SHAPING REGIONS? ANALYZING PRACTICES, RELATIONS AND DISCOURSES OF PUBLIC LEADERS IN PERIPHERALIZING REGIONS OF ESTONIA AND THE CZECH REPUBLIC**

**Martiene Grootens, University of Tartu, ESTONIA**

Most studies on leadership of place have been done in a Western European context and do not consider the specificities of the Central or Eastern European context and their institutions. The rapid institutional changes from planned Soviet societies to radical neoliberal thinking (whose policies even further increase the already existing disparities within Central and Eastern European countries), and also elements of contingency from the socialist past make this region an interesting in generating a more complete picture of leadership experiences around Europe. Moreover, the often institutionally thin environments of these regions create also a very different environment for the role of leadership than in the more institutional thick regions of Europe. Furthermore the great emphasis that has been placed on successful cases does not help to understand leadership in regional development processes and merely result in a confirmation of what is assumed to be the successful regional development.

Therefore in this paper I will go beyond identifying the “stars” of regional development and analyze the role of public leaders, embedded in (various) institutional environments, and in their (co)shaping of “peripheral” regions. Hereby I will move away from a normative way of ranking leadership experiences and regional performance, but closely analyze the ways peripherality is (co)produced or reproduced by local actors. In this way rather than being seen as powerless and economically marginal, these regions (and especially their actors) can be seen as co-producers in the process of peripheralization, a process to which both (actors in) the core regions as (actors in) the peripheries are contributing. Regions are in this sense relationally constructed by the practices, relations and discourses of multiple actors on multiple scales. Regions can then be seen as both relationally and territorially constructed by emphasizing that as well the relations inside and beyond the regions, as well as the territorial and political matter, depending on the specific circumstances of the region (Hudson 2007).

I will especially look at the role of public leaders, who are themselves very much defined as leaders by this territorial notion. The public leaders, embedded in their institutional environments will be analyzed using the institutionalization model by Paasi (1986), which focuses on the territorial, symbolic and institutional shaping of regions and also considers their established role. Although it is not assumed the public leader shapes the regions on his/her own, this research will also very much take a multi-actor and multi-scalar approach and hereby try to grasp the role of public leaders in the complex process of regional institutionalization. By following the public leader relationally through time and space and using slow qualitative methods I will unravel the agency of the public leader in a process of peripheralizing regions. Hereby I do not intend to ignore the more structural, institutional (and sometimes territorial) environment in which this actor is embedded, but also look at the agency of this actor to be very much structured in this institutional environment.

**QUADRUPLE HELIX AND THE BIOECONOMY**

**Ida Grundel, Karlstad University, SWEDEN**

How can we meet new external challenges such as climate change, globalization and economic crisis? Today governments from local, regional, national and supranational level face these new challenges. Further several actors points to the necessity of an optimal use of renewable biological resources due to increased competition for limited natural resources. In this context the bioeconomy has emerged as a new concept, more and more often used by planners, politicians and scientists, thereby creating a new meta-discourse (Püzl et al. 2014) of the transformation of society by the use of renewable energy sources. At the European level this is reflected in the European Union strategy Europe 2020 referring to smart specialization but also in the

European strategy *Innovating for Sustainable Growth: A Bioeconomy for Europe* from 2012. A shift to a sustainable development in the future requires new innovations and new knowledge which can be reached by including investments in other sectors than just research and the manufacturing industry such as for example the design and creative sector, service- and social innovation, new business models and more practice-based innovation. This paper hereby aims to contribute to the discussion of the transformation of society into a bio-based economy by the contribution of a fourth helix in regional innovation systems. It aims to discuss further notions of the meaning of quadruple helix by focusing on a fourth helix, its characteristics and its role in innovation policy and knowledge production on the regional level.

Earlier innovation systems such as the triple helix have mainly focused on cooperation between the academia (colleges, universities), the public sector (government) and the industry (Westlund 2006; Arnkil et al. 2010). Innovation is here seen as knowledge contained by talented individuals and/or research groups (Arnkil et al. 2010). Lindberg (2010) among others refers to the concept 'quattro helix', or quadruple helix as a new form of innovation system providing further collaboration between different actors on the regional level. One part of this development is the critique of triple helix due to its functions and its organization, whereas the advocates in favor of developing a quadruple helix model argue that marginalized groups could be favored by better access to different governmental and academic resources. This process can in turn be seen as favored by intermediate civil society institutions (Lindberg et al. 2012; Lindberg et al. 2014). However the concept of a fourth helix has no clear definition, in some definitions it is only seen as a complement to the triple helix model, represented by intermediate organizations. It is thereby closely related to the triple helix model if represented by these kinds of organizations (Arnkil et al. 2010). Another critique against triple helix is the model being too narrow-minded while normally relating to the clustering of industries in specific regions, tending to sustain masculine perceptions related to entrepreneurship and innovation due to male dominated settings of industries (Pettersson 2007). The recent academic debate withholds further stakeholders to be included in innovation policy mainly the civil society that can be exemplified as citizens, users, consumers and different forms of non-governmental organizations such as environmental organizations, women-organizations and so on.

The paper also has an empirical exemplified by possible actors of a fourth helix in a bio-based economy in Region Värmland in Sweden, thereby trying to contribute to the development and understanding of the concept of a possible quadruple helix.

*Innovation and Knowledge Economies*

## **INNOVATION AND SPILLOVERS IN THE EU REGIONS: A SPATIAL ECONOMETRIC ANALYSIS OF KNOWLEDGE PRODUCTION**

**Gianni Guastella, Università Cattolica Del Sacro Cuore, ITALY**

**Camilla Egalini, Università Cattolica Del Sacro Cuore, ITALY**

**Francesco Timpano, Università Cattolica Del Sacro Cuore, ITALY**

Recent analysis on the economics of innovation and technological change at the territorial level bring to light the existence of knowledge flows induced by the geographical proximity, better known as "Localized Knowledge Spillovers" (LKS). LKS are commonly acknowledged at the hearth of spatial clustering of (innovative) firms, which might benefit from the rapid exchange of knowledge and information with other firms in the geographical area. RandD made by a firm or a university not only causes innovation directly, but also contributes to the diffusion of knowledge in other firms through the spillover effect. What remains still uncertain is the policies payoff. Doubts mainly arise from the unattainability of the basic socio-political-economic circumstances of some regions to create innovation effects. These stem from possible too large distance from the relevant sources of knowledge such as universities or large firms in the high-tech sectors, for allowing knowledge to flow in some regions to the requirement of a minimum (threshold) amount of knowledge allowing firms to absorb knowledge created elsewhere. These circumstances may considerably affect the effectiveness of RandD policies. This paper intends contribute to the literature and to the EU policy debate by answering to the need to better understand the determinants of innovation and by analysing the factors' contributions in innovation dynamics across European regions. We explore the input output

relationship in innovation at the regional level using panel data spatial econometric methods. Extant literature has considered the longitudinal dimension of innovative input and output data to a limited extent only, failing to account for unobserved regional heterogeneity in the estimation. On the opposite, many studies focused on the spatial dimension of innovation. We seek to combine the longitudinal and the spatial dimensions of knowledge creation in a unique framework, attempting to better explore the effective contribution of research to innovation. The indicators used in this analysis include in fact main variables to measure both public and private RandD investments as well as the human capital, also controlling for a number of other influential factors in the estimation. The selected data concern 21 EU countries plus Norway and the analysis is conducted at the NUTS II level in a 6 years period of time (2003-2008). Results confirm the evidence of the previous empirical literature on the production of knowledge, suggesting however that the estimates relative to the contribution of research investments to innovation is mitigated when regional heterogeneity is considered in the estimation.

*International Policy Transfer and Lesson-drawing Regional and Urban Policy*

## **POLICY LEARNING AND TRANSFER AS A KEY ADDED VALUE OF EU URBAN AGENDA: THE SPANISH PERSPECTIVE**

**Aaron Gutierrez, Rovira i Virgili University - Department of Geography, SPAIN**

One of the most significant qualitative values of the EU Urban Policies is their implementation in diverse territorial contexts –such as 27 Member States (28 for 2014-2020 period). It implies implementing local development programmes not only in different urban realities and confronting diverse challenges, but especially in a wide range of contrasts in terms of national tradition in urban policies and planning. In some EU Member States, the introduction of the methodology proposed by programmes as URBAN Community Initiative (1994-2006) constituted an important innovation as they had no previous experience of any similar programmes. For this reason, beyond the intrinsic value of the actions undertaken within this programmes, for these States EU Urban Agenda have signified a way for introducing new approaches for urban regeneration policies. Moreover, European Commission has assumed the added value of this policy learning process for Member States and consequently has supported the consolidation of networks of knowledge exchanges and innovation in urban policies as URBACT programme or EUKN.

Spain supposes a pertinent example of this process of diffusion of practices and policy transfer. After various satisfactory experiences related to area-based urban regeneration programmes financed by the European Union –mainly URBAN Community Initiative- a growing number of local and regional Spanish authorities decided to continue this path and implemented their own urban regeneration programmes. In this context emerged in Spain new urban policies explicitly oriented to deprived neighbourhoods. These new programmes have allowed the intervention on many deprived historical city centres and neighbourhoods with concentration of social housing and socioeconomic decline. The main change in comparison with previous programmes was the incorporation of the integrated approach as a clear key issue and, consequently, the necessary socioeconomic perspective of urban regeneration policies and practices.

The paper presents the results of research project on the evolution of area-based urban regeneration policies in Spain during the last decade. It is analyzed how European programmes had influenced into the consolidation of practices and models as: assumption of integrated approach of urban regeneration (putting socioeconomic development in a central role rather than previous projects focused on urban renewal); citizen participation and community involvement as key tools for improve the intervention; the promotion of innovative practices; the additionality of local, regional and national funds for a programmed medium term area-based strategy. The evidences of the study are based on semi-structured interviews with local programmes managers.

Finally, it is also explored the impacts of actual context of reduction of public resources and financial capacity of local and regional administrations on these urban policies. It is also presented the future perspectives for these programmes in a context where social exclusion, poverty growth and declining of deprived neighbourhoods have becoming strategic challenges for both national and local political agendas.



**EUROPEAN SEMI-PERIPHERY UNDER ENVIRONMENTAL PRESSURE: THE CASE OF PUBLIC BUS TRANSPORTATION AND PRIVATE BUS-MAKERS IN POLAND**

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Environmental policy has become a new important factor shaping the motor vehicle market in Europe in recent decades. Its impact is far greater in the domain of public transportation than in the case of individual mobility (passenger cars) so far. To make things more difficult for the bus producers, the environmental requirements differ among countries, regions and even towns in a single country. There are also significant differences between bus and coach manufacturing and passenger car markets. The former is characterized by the low-volume production, fragmented national and local markets as well as relatively higher labour costs. In addition, there is public procurement law binding town governments, which are the main buyers of city buses. It is especially interesting to examine the situation of the bus producers and markets in this changing regulatory context in the eastern semi-periphery of the European Union.

The authors aim at revealing the response to the new environmental standards of the local bus markets on the one hand and the city-bus manufacturers in Poland on the other. First, a comparative analysis of the environmental policy of various Polish towns and cities is carried out. A different role of environmental criteria in new city-bus purchases of individual cities is shown. The hypothesis of the hierarchical diffusion in the purchase of the hybrid and electric buses – from the major cities to medium-sized and small towns – has been tested. Second, the differences in the strategies and capabilities of domestic and foreign bus-makers located in Poland are analysed. The strong competition from the brand-name West European producers and the volatile domestic markets resulted in the collapse of the two major former state-owned bus-makers in Poland. At the same time, new producers have arisen including foreign investors, for example Volvo, MAN and Scania, as well as newly-established indigenous manufacturers, Solaris in particular. Two of them, Volvo and Solaris, belong to the European leaders in the manufacturing of hybrid and fully electric buses now. The factors behind their current success and strategies, with special emphasis on flexibility, design competences, cost and quality issues, are discussed. The role of their strong presence in the major markets for environmentally-friendly buses – Germany and Scandinavia – is emphasized.

**UNIVERSITIES AND SCIENCE PARKS IN LOCAL ECONOMIC DEVELOPMENT – THE CASE OF SZEGED**

**János Gyurkovics, University of Szeged, HUNGARY**

The increasing importance of knowledge in the economic processes has placed knowledge-creating institutions in the focus of economic development strategies. Among these institutions, special attention is paid to universities because they can ensure qualified workforce and provide the basis of new knowledge and innovation which are necessary for the long-term competitiveness of a company. Moreover, these factors could be the main drivers of the development of a territory. This is particularly important for lagging regions with universities because these regions can build upon universities to connect their economy to the processes of knowledge-based economy. The tools of economic development initiatives have also broadened with university-based development tools which contain science parks as a subtype. Although, the missing professional consensus and the many unsuccessful examples justify that science parks are not an easy-to-adapt development tools. However, in many developed and developing regions science parks have become a fundamental part of development policy.

Szeged is the third largest city in Hungary with approximately 160.000 inhabitants. It is the central city of the Southern Great Plain region, which is one of the most underdeveloped rural regions in the EU. However the city itself has a quite strong competitiveness value and innovation index in Hungarian terms. Although the University of Szeged contributes to the city's good innovation index, especially in knowledge creation, it is slightly embedded in the local economy. Another important fact in connection with the area is the forthcoming ELI investment. The Extreme Light Infrastructure (ELI) is a European wide project consisting of three facilities and one of them will be established in Szeged (the ELI-ALPS). In this research center, basic and applied researches will be conducted with the use of laser technology to study the reaction between light and matter in a very high level. Due to the high scientific potential and international attention, local decision makers have decided to establish a science park connected to the ELI to exploit its benefits.

In my presentation, I sketch some issues regarding science parks in relatively underdeveloped regions with universities. I try to identify which factors should be taken into consideration in general, in connection with the establishment and operation of science parks in these regions, in order to intensify the local economic impacts of their universities. Because a widely accepted development method for science parks does not exist, my goal is to propose a theoretical framework then to make suggestions in connection with the science park development in Szeged. I have prepared my framework on the basis of the academic literature of science parks and universities. According to the literature I have specified five main criteria: links with universities, location, physical infrastructure, management and services, image of the park then I have made my suggestions along these. The main message arises from these suggestions is that the science park of Szeged should be built on the knowledge base of the university instead of the ELI, however the park should exploit the ELI's presence to create an internationally known and attractive image. At the same time, it should be noted that developments beyond the science park, such as improvement of business and other services of the wider area or establishment of an inspiring environment to keep higher educated people in the area, are also necessary.

*Tourism and Regional Development*

## **WORKING TOWARDS RESILIENCE: IS COLLECTIVE AGENCY THE KEY? EVIDENCE FROM TWO SWISS MOUNTAIN TOURISM COMMUNITIES**

**Tina Haisch, Bern University, SWITZERLAND**

This study conceptualizes resilience from an evolutionary perspective by including human agency. While already some studies exist which theoretically describe the ability of regional economies to adapt to change and to transform, there is still a need to further elaborate the meaning and the potential added value of the concept of economic resilience to explain the development of regions and communities mainly in the long-run perspective.

Regional resilience is conceptualized as rising through collective agency, based on shared perceptions and learning.

While individual perceptions are mainly dependent on the personal concerns, in how far someone is exposed to or affected by a shock, past experiences and the access to information and knowledge, collective agency in turn depends more on shared perceptions, and participation. The power to decide or the "autonomy" of a community, which is also highly determined by the degree of decentralization within a nation state, is crucial for local actors such as government bodies to react or to facilitate these processes. Learning is seen as resulting through the interplay of perception and collective processes and develops over time.

A case study of two Swiss alpine tourism communities (Grindelwald and Guttannen) is employed in order to investigate these processes in a more-embracing way by reducing the sheer size of the research objective compared to e.g. a city region. Swiss tourism communities have been undergoing major restructuring processes during the past decades, including a shift from an agricultural to a service-based economy and in recent years to what Pine and Gilmore (1998) call a more experience-based economy. As such, they face a strong pressure to position themselves in an increasingly global market while at the same time they are highly dependent on their local natural environment. Since the world economic crises in 2008, the Swiss currency got

relatively stronger compared to the Euro or the Dollar, leading to severe struggles of the export-oriented economy, including tourism and related sectors like e.g. the construction industry. Besides short-term adaptation strategies of individual actors or groups of actors, it is the community as a whole who has to develop long-term adaptability through collective human agency on the base of shared perceptions and learning processes. The interview and document analysis shows that the art of communication creates participation (or exclusion) that in turn facilitates (or hinders) emergent social processes that lead to long-term adaptability. Furthermore, organizational capabilities, institutions and an adequate resource allocation facilitate collective agency. The study contrast and complements the macro-economic perspective often employed in current research on resilience in economic geography.

*The Bioeconomy: Knowledge Dynamics and Regional Development Policy*

## **A CHALLENGING PATH FROM A TRADITIONAL INDUSTRIAL DISTRICT TOWARDS A MODERN BIOECONOMY COMMUNITY – A LONGITUDINAL CASE STUDY OF FORSSA REGION IN FINLAND**

**Matti K. Hakala, Häme University of Applied Sciences (HAMK), FINLAND**

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Our presentation concentrates on the challenges, when an old industrial district is now committed to transform into a modern bioeconomy community. The inherent path dependency suggests a longitudinal study, with a brief historical introduction from the very beginning. The current great challenge is to take the next steps into more global business and transition of the whole community into bioeconomy era.

The origin of Forssa was a cotton spinning mill established in 1847 beside minor rapids in a remote country village in the “middle of nowhere” in Southern Finland. The business was from the very beginning rather global, the cotton raw material was imported from southern Russia or from USA and the end products were delivered mainly to St. Petersburg, Russia. The town of Forssa was founded much later, when the textile company was grown to one of the biggest in the Nordic countries in its field. Actually that one company run the whole community in the early decades, establishing nurseries and schools and, shops, providing social and medical care etc.

The textile company actually created a sort of a business ecosystem, which was rather successful nearly 150 years. But it appeared to be very vulnerable, when the world trade was liberalized and the globalization really started in 1980's. Also one other company, a big construction firm, had started in the district, but it experienced the same downfall, and the town of Forssa faced a deep recession by the end of the 20th century.

This is rather a typical story in districts dominated by one industrial company. Although several new enterprises (food, metal, ICT) had emerged as a result of that “creative destruction”, the development has been rather stagnant and the whole region is suffering from depopulation, although the location is very favourable in the middle of the three strongest urban areas in Finland.

Something new was desperately needed. And what was found was more or less serendipitous. In 1996, the first solid waste disposal site in Finland meeting the new EU regulations, was opened in Forssa. The site needed an operator, and a waste management company owned by 17 nearby municipalities was established. And the city authorities were wise enough to plan a larger industrial area around the dump site. This, on the other hand, attracted one private recycling company to move its business in the area and start to actively invest in bioprocessing of waste, too. The municipal waste management company was simultaneously allowed to found separate private daughter companies, specialized e. g. in the treatment of disposed cooling appliances or electrical and electronic scrap.

Already now the eco-industrial Envitech area of Forssa is one of the most comprehensive concentrations of environmental expertise in Europe. The site provides environmental management solutions in recycling, waste handling, bioenergy production and in the utilization of waste derived raw materials, in the sense of industrial

symbiosis as well. It can be regarded as an innovation ecosystem in the field of bioeconomy. However, this ecosystem is not anymore dominated by a single enterprise. Bioeconomy innovations especially are characterised by the combination of knowledge across different industries, actors and activities, leading to branching processes that create new product opportunities and move cluster actors into new market niches.

Looking back, the solid waste disposal site can now be regarded as an origin of this ecosystem. It can also be called a strange attractor, because there is no a priori reason for even imagining it to produce innovations. The development of this ecosystem has been mainly industry driven, but the close co-operation with the authorities of Forssa city, the regional development agency (FSKK), a regional University of Applied Sciences (HAMK) and the MTT Agrifood research centre has been the key enabling factor, too.

This is a nice example of public-private partnership, in a classical Triple Helix sense, and knowledge dynamics has been an important factor. Nowadays the Forssa region has an ambitious vision and strategy named "Bright Green Forssa Region". Realizing that requires a much more focused and systemic approach. In addition to traditional public-private parties, the inhabitants and the whole society should be included, too. This means the adoption of the Quadruple Helix principle and a socio-economic thinking in transition. In the business sector, the challenge is to enter into the global markets, exploiting the locally developed know-how and showcases. All this requires e. g. much wider networks, multi-scalar interactions or systematic intensifying of knowledge dynamics. The region is also rather small with limited resources. Local expertise and competencies are not sufficient any more.

#### *Tourism and Regional Development*

### **PRODUCING FOOD TOURISM IN THE NORTH: STRATEGIES FOR DEVELOPING SYNERGIES BETWEEN FOOD AND TOURISM IN FOUR COASTAL DESTINATIONS IN DENMARK**

**Henrik Halkier, Aalborg University, DENMARK**  
**Laura James, Stockholm University, SWEDEN**

In many tourist destination food is primarily sourced through international supply chains while local suppliers and culinary traditions play a limited role. In contrast to this, some tourist regions - e.g. Tuscany - food is a well-established part of the visitor experience to the extent that it is possible to talk about 'food tourism' as travel informed by "the desire to experience a particular type of food or the produce of a specific region" (Hall and Sharples, 2003: 10). Although in most European regions cross-sectoral relations are either limited or not systematically exploited, connecting tourism and food has developed a powerful appeal to public policy-makers in rural destinations (James and Halkier, 2014). Offering regional products and culinary traditions to visitors has the dual value of adding a new component to the image of the tourist destination while at the same time creating additional economic activity in and around the destination (e.g. Presenza and Del Chiappa, 2013; Everett and Slocum, 2013; Telfer and Hashimoto, 2013).

As in other areas of public policy, translating ideas into successful action on the ground is, a challenging endeavour (James and Halkier, 2014). In order to create synergies between local food and tourism development in rural destinations, specific products or culinary practices must be produced in order to be packaged for tourist consumption, provision must be organised so that experiences are accessible to visitors to the destination, their attraction must be communicated to existing and potential visitors, and they must of course be in demand by tourists in order to be economically viable from a long-term perspective.

In order to realize food/tourism synergies, governance institutions and their strategies need to be aligned between the two sectors, and this paper probes the extent to which this has happened by comparing the governance set-ups and the strategies adopted by policymakers, DMOs and sectoral organisations in four coastal/rural tourist destinations in Denmark. All four destinations have been promoting themselves as 'foody places', and the paper is based on in-depth interviews with an extensive series of policy-makers and key private actors in the food and tourism sectors in the case-study destinations as well as analysis of existing policy documents. The paper draws upon traditions in institutionalist policy studies, specifically a typology of food tourism development strategies, emphasising the difference between the main intended locus of chance

(food and/or tourism organisations) and the type of change aimed for (quantitative/qualitative) (James and Halkier, forthcoming). The paper identifies key differences and similarities in the approaches adopted to create additional value through food tourism, and discuss the origins of differences in the meeting between uniform national regulations and regional/local strategies for economic development.

*New Manufacturing, Creative Productions, Innovative Workplaces and Urban Space*

## **MADE IN BROOKLYN: NEW MANUFACTURING AND THE REDEVELOPMENT OF THE BROOKLYN WATERFRONT**

**Richard Hanley, New York City College of Technology (City University of New York), UNITED STATES**

From the late eighteenth century to well into the twentieth century, Brooklyn, one of New York City's five counties, or boroughs, was a hive of manufacturing, warehousing, and shipping. Its waterfront neighborhoods, along active shipping docks, housed manufacturing facilities as well as the warehouses that stored the raw materials coming in and the finished products going out. Adjacent were blocks of tenements, housing the workers who provided the manpower (and in those times it was predominately manpower) that kept all that commerce in motion.

All of that activity came to a halt beginning in the 1960s as the invention and almost universal adoption of the shipping container first made warehousing obsolete, then manufacturing declined, and finally the docks disappeared as shipping left New York City. The Borough of Manhattan recovered relatively quickly from this loss, but the Borough of Brooklyn, especially its waterfront, suffered from this abandonment for almost half a century.

The renaissance of the Brooklyn waterfront began slowly, first with artists moving into abandoned warehouses that offered no electricity, heat, or other amenities, but that did offer space and light and little or no rent. This rediscovery, first spearheaded by artists, was followed by artisans who found good space in old industrial buildings for the establishment of small-scale furniture making and other micro-manufacturing enterprises. The artists and artisans made the waterfront hospitable and they were followed by developers, who saw the waterfront not as a locus for manufacture but for higher economic returns on investment through residential development. But manufacturing has, nevertheless, returned to the Brooklyn waterfront, creating a tension between the development of a new working waterfront and the development of a locus for high-end residential and recreational uses of this contested space.

While this contest of uses along the Brooklyn waterfront provides the context for this presentation, the focus is on the new places for, and the new kinds of, manufacturing that have come to the Brooklyn waterfront. The presentation will look at four such places—the Brooklyn Navy Yard; Industry City; The Brooklyn Army Terminal; and the Made in NY Media Center—and examine what and how things are made in those places and how those places are reshaping not only the Brooklyn waterfront but the entire city of New York.

The original model of industrialization was the assembly line, but new technologies have changed that—as have new manufacturers, who are now likely to be technologically savvy entrepreneurs, interested in working collaboratively, using sustainable methods, and working close to where they live. The re-imagining of the industrial park that is the Brooklyn Navy Yard (BNY) is illustrative of this point. BNY has been gutting and rehabbing and re-purposing many of the century-old buildings on its 300-acre site. One of these, a shipbuilding site, has been transformed into what BNY calls its Green Manufacturing Center that houses the New Lab, “a collaborative design and fabrication laboratory” that occupies 160,000 square feet. Each of the other sites that will be discussed offers or will soon offer similar kinds of facilities in the FabLab mode.

On a human level, these facilities are creating opportunities for working-class Brooklyn residents to have opportunities that have been absent for decades. The challenges that these changes present is how to keep current residents in working class neighborhoods now that the nearby opportunities are making living in those neighborhoods increasingly expensive.

The presentation will (1) present a context for the new manufacturing along the Brooklyn waterfront, (2) focus on four loci of new manufacturing, and (3) explain in each case what the facility had been formerly—what is going on there now—and what effects those activities are having on the social, economic, environmental, and cultural lives of the people of the Borough of Brooklyn.

*The Bioeconomy: Knowledge Dynamics and Regional Development Policy*

## **UNPACKING INVESTOR DECISIONS IN UPSCALING OF BIOREFINING TECHNOLOGIES**

**Teis Hansen, CIRCLE, Lund University, SWEDEN**  
**Lars Coenen, CIRCLE, Lund University, SWEDEN**

A central issue in the transition to a low carbon society is the increasing use of bio-based materials. A key factor in the realisation of a bio-based transition is the development of biorefinery systems that are well-integrated into existing infrastructures. Various studies have pointed out that biorefining is of particular relevance and interest to the pulp and paper industry in its strategic efforts to seek new, alternative ways to extract and appropriate greater value from biomass. However, this transition is hampered by lack of competencies, the high capital intensity of the industry and difficulties in establishing strategic partnerships with actors from related industries.

As a result of these barriers, upscaling of already developed biorefining technologies is a key challenge. By this, we refer to the application of biorefining technologies, which have been developed and tested in demonstration projects, into commercially operating plants. This requires actors that are willing to undertake significant investment at a relatively early stage. In this paper, we aim to better understand investment decisions in upscaling of biorefining technologies. With a focus on the Nordic countries, we specifically direct our attention to retrofitting of existing production facilities in the pulp and paper industry, and assess how these decisions are conditioned by, on the one hand, different organisational routines and, on the other hand, different investment logics.

*Urbanisation and Cities*

## **MEGAREGIONS: GLOBALIZATION'S NEW URBAN FORM?**

**John Harrison, Loughborough University, UNITED KINGDOM**  
**Michael Hoyler, Loughborough University, UNITED KINGDOM**

Megaregions have emerged to become one of the most powerful, persuasive, and dominant spatial imaginaries for explaining globalization's new urban form. Nevertheless, we argue that the rhetoric and can-do bravado surrounding megaregions has raced too far ahead of the sustained theoretical and rigorous empirical work needed to support some of the assertions, assumptions, claims and investments made in the belief that megaregions do constitute globalization's new urban form. Reflecting on the foundations, frailties and futures of megaregional research, we endeavour to demonstrate the need to move megaregional debate forward from questions of definition, identification and delimitation to questions of agency (who or what is constructing megaregions), process (how are megaregions being constructed) and specific interests (why are megaregions being constructed); something which, we argue, requires a more political and more historical – as well as economic – perspective on megaregions.

**Burcin Hatipoglu, Bogazici University, TURKEY**

In the last years nongovernmental organizations (NGO) have emerged as powerful institutions for promoting societal change. They have taken roles and responsibilities that traditionally belonged to governmental agencies and states. The social and environmental challenges that we face today are so complex that a single entity is not enough to solve it all. In this new environment, partnerships have become wide-spread mechanisms for coping with these challenging global issues. This paper aims to explore the quality of life improvements made by NGO partnerships.

It is argued that even when partners have different motives for engagement it is possible to create shared value. However in the literature little has been studied on how NGO partnerships create value or how the collaboration processes add to value. Austin and Seitanidi (2012, p.3) define collaborative value as “the transitory and enduring benefits relative to the costs that are generated due to the interaction of the collaborators and that accrue to organizations, individuals, and society”.

Value for the society can be created in a multiple ways. Achieving a better quality of life (QoL) has become a desirable aspect of modern life. QoL is said to affect the sense of well-being in various life domains such as material, emotional, community and health and safety (Kim, Uysal, and Sirgy, 2013). UNESCO believes better QoL starts with better education. According to the Principle 8 of Rio Declaration the responsibility of achieving sustainable development and higher QoL resides mainly with the states. However in many developing nations states can perform far below expectations. Turkey, that is the 17th largest economy in the world, lacks behind most of OECD countries in the better life index (OECD, 2014).

In order to understand the role of NGOs in the advancement of QoL this research examines NGO collaborations with multiple partners rather than focusing only on the NGO-business partnerships. An empirical study of the six selected partnerships of an NGO that is working in the area of education in Turkey will be presented.

Educational Volunteers Foundation of Turkey (TEGV) is the most widespread NGO in Turkey in the area of education (TEGV, 2014). It was founded in 1995 with the aim of "supporting the primary education provided by the government" by a group of industrialists, managers and academics. Since then they have helped over 2 million children in Turkey with their education. The NGO operates a total of 90 activity locations in the country and they have formed partnerships with local and international corporations, the government and other local and international nonprofit organizations. Recently TEGV started a Wellbeing Education Project in collaboration with a local food chain (KIPA-Tesco). Another partnership of TEGV is with universities for the community service practices of students. Since 2006 the Council of Higher Education (YOK) in Turkey has included a community service course in the teacher education curriculum of universities. As a result of TEGV's partnership with universities future teachers learn to develop voluntary projects that have long term impact on the society.

This study aims to explore the quality of life improvements made by TEGV in the area of education. The perspective of value creation suggested by Austin and Seitanidi (2012 a) , and Austin and Seitanidi (2012 b) is used in studying the topic. A case study approach is used to detail the motivations and values behind the partnerships and explore the improvements made to quality of life of the citizens. The qualitative study uses a series of semi-structured interviews with officials of the partnerships. Besides the interviews publicly available documents are utilized to supplement the study. The results of study are expected to give insights into how NGO partnerships are implemented in practice and what are the tangible and intangible assets of the NGO that contribute successful partnerships The research is also expected to guide academics and practitioners to evaluate NGO partnerships for their increasing role in value creation.

**REGIONAL GROWTH TRAJECTORIES AND RESILIENCE: A EUROPEAN ANALYSIS**

**Adrian Healy, Cardiff University, UNITED KINGDOM**

**Gillian Bristow, Cardiff University, UNITED KINGDOM**

**Don Webber, University of the West of England, UNITED KINGDOM**

There is growing interest in understanding the spatial characteristics of long-term economic growth and performance. This reflects the increasing evidence that even regions with similar structural characteristics can experience highly diverse growth patterns (OECD, 2009). This diversity in regional growth trajectories has arguably been intensified during the recent economic crisis in Europe which has highlighted that regional economies do not always perform in a manner that is synchronised with national economic cycles (Sensier et al, 2015). This chimes with developing thinking in evolutionary economic geography (EEG) which asserts that regional growth trajectories are highly path-dependent and thus contingent upon context.

The economic crisis has also intensified interest in the notion of regional economic resilience – the capacity of regional economies to withstand and recover from economic shocks and to adapt their development paths accordingly (Fingleton et al, 2012; Martin, 2012; Bristow and Healy, 2014). Early studies of the effects of the crisis in Europe indicated that a critical determinant of which regions were resilient to the crisis was their initial strengths and weaknesses i.e. those regions which were weaker or suffering relatively poor economic performance going in to the crisis were typically most severely affected by it, and were also more likely to suffer damaging long-term effects (Davies et al, 2010; Davies, 2011). This is supported by the wider literature on regional or community resilience in the face of natural disasters. A common finding in this literature is that regions with higher incomes or wages (independent of human capital) tend to recover more quickly from economic shocks (see Hill et al, 2011).

To date, however, these analyses have been subject to some limitations notably around their analysis of regional growth trajectories and methods for operationalising resilience. The purpose of this paper is to apply a new approach for the analysis of the relationship between regional growth trajectories going into a crisis and regional economic resilience. We do this by first applying a novel approach to analysing and grouping regions according to the similarity of their growth trajectories (as Nagin, 2001), and then testing this against a new means of categorising regions according to their economic resilience to the crisis (Sensier et al, 2015). We reflect upon the implications of this for both our understanding of the appropriate characterisation of regions into groups for European policy and our understanding of regional economic resilience.

**CROSS-SECTOR PARTNERSHIPS AND SOCIAL INNOVATIONS FOR SECONDARY SCHOOL VOCATIONAL EDUCATION: EXPERIENCES FROM TWO INDUSTRIAL TOWNS IN SWEDEN AND NORWAY**

**Brita Hermelin, Stockholm University, SWEDEN**

**Grete Rusten, Bergen University, NORWAY**

The conceptual understanding of social innovation is the novel solution to a social problem or it may alternatively be understood as social alliances that rather than serving the interest of private individuals, benefits the society as a whole. These mentioned understandings of social innovations tend to focus on non-commercial interests. A different perspective includes the CSR and corporate citizenship strategies in the business community in which strategies challenges the borderline between non-profit and profit interests.

Social innovations involve the aspects of creation of common goods, features of immateriality with the importance of contextual factors and place. This paper focuses on social innovation related to secondary schools. This concerns how cross-sector partnerships through which locally based companies become involved in the education and vocational training. The cooperation agreement as we find in our study is developed on the basis of mutual benefit, different qualification and roles along with joint interests to develop relevant high



quality vocational training programs. The empirical evidence demonstrates the strategic interdependencies between commercial and non-commercial interests. The case studies are based on examples from two manufacturing based towns in respectively Sweden and Norway. These two smaller settlements are found in sparsely populated regions with presence of large global engineering companies. The results of the study concern project performance and the way these training initiatives contribute to social and economic sustainable solutions that benefit regional development.

*Cross-Border (Research)/Regions*

## **UNDERSTANDING THE CONTRIBUTION OF GOVERNANCE INSTITUTIONS TOWARDS SHAPING ECONOMIC GEOGRAPHY OF PLACE: A LOCAL AND NATIONAL PERSPECTIVE**

**Paul Hildreth, SURF - Salford University, UNITED KINGDOM**

An examination of the contribution that governance institutions might make to the realisation of economic and social potential of sub-national places. This study will not just address the role of sub-national governance institutions in their geographical context. It will also consider 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 claims that 'the place-based approach is the new paradigm of regional policy', modern place-based approaches will be important to the framework for study. Contrasts will be made with other institutional perspectives. The study will be given practical context through a detailed institutional case study focused around the Mersey Dee Alliance economic area crossing the national boundaries of England and Wales.

*Labour Markets and Migration*

## **NETWORKING REGIONALISED INNOVATIVE LABOUR MARKETS**

**Ulrich Hilpert, Friedrich-Schiller-University Jena, GERMANY**

Innovative and creative labour is increasingly recognised as having a key role in regional economic development. The more advanced the processes of innovation-led entrepreneurship are, the more important become highly skilled scientific, engineering, professional and university trained personnel. Similar to the process of regionalisation that resulted in the building the Islands of Innovation (EC 1994), such highly-skilled individuals are concentrated in particular regions and locations. There are two tendencies that can be identified immediately: (i) the existing concentration in Europe and the US of innovative labour in a limited number of locations (as elsewhere in the world) and (ii) the tendency, on both continents for further concentration at these Islands of Innovation.

Both patterns have clear consequences for the availability of skills in question. For example, those regions that are able to attract and retain highly skilled labour will be able to continue successful development. Other regions may have to face the problem that either labour moves out towards the Islands of Innovation or that attracting the most creative scientific personnel is very difficult. The recruitment and the relationships of these professionals to the region are also fundamental to collaborative networking with partners elsewhere in Europe or the US.

The paper will therefore deal with the two processes:

- the regionalisation of innovative labour markets and
- the migration of such labour to Islands of Innovation

We will discuss both the role of innovative labour markets for advanced regional development and the migration of researchers and engineers to these regions or locations. In doing so, we will take into consideration the extent to which these regionalised labour markets function within global or continental labour markets through recruitment; this means to what extent is such innovative labour recruited by firms

and universities in the US from Europe and vice versa. Existing studies indicate a clear continental picture; there is only a low percentage of recruitment taking place across the continents. They also indicate, to a certain extent, that European integration is taking place in these regionalised innovative labour markets. In addition, other studies show that once the highly skilled have been migrated between Islands of Innovation they frequently return to the innovative location from whence they started. These processes of migration to and from the innovative labour markets of the Islands of Innovation are the basis for both knowledge fusion from different origins and the building of collaborative networks. Thus, recruitment by firms located at these Islands of innovation contributes to the formation of networks of regionalised innovative labour markets, a process that could be understood as an important contribution to innovative networks across regions and continents. Moreover, many such networks have sectorally specific patterns. This paper therefore highlights how mobility operates in a variety of national, regional and sectoral contexts, and explores the drivers of those patterns.

*Innovation in 'ordinary' regions and 'boring' sectors*

## **INNOVATION AND EXPORT PERFORMANCE IN DANISH PERIPHERIES – A LONGITUDINAL PERSPECTIVE**

**Anne-Mette Hjalager, University of Southern Denmark, DENMARK**

Business innovativeness in peripheries compared to urban areas is addressed in many studies, and quite consistently it is shown that urban enterprises tend to be more advanced in terms of innovation propensity and collaboration density. This study, based on the Community Innovation Survey (CIS) data 2008-2012, suggests a similar conclusion for Denmark. The spatial of four groups: 1) Urban agglomerations, 2) Urban areas in peripheral zones, 3) Rural areas in the vicinity of urban agglomerations, and 4) Rural areas in the periphery. Enterprises in zones 1 and 3 are higher innovation performers and seek more advanced and varied forms of collaboration to support innovation than enterprises in zones 2 and 4. Distances and population density seems to be essential factors, not matter of improved digital infrastructures.

In a longitudinal setup, the study follows the economic performance in turnover and exports in the years 2008-2012. A positive correlation is found between innovative engagements and financial success factors. This indicates that innovation pays off. However, the economic crisis has led to a backlash for both innovators and non-innovators and in all four spatial groups, and it is not until 2011 and 2012 that the enterprises regain the momentum in turnover and export. Rural innovators are quite successful in the financial recovery process.

More detailed studies of enterprises in the four groups underline the regional structural and developmental differences, and a remarkable permanence of trajectories in innovation behavior.

Enterprises in the rural periphery are, as mentioned above, less innovative, but are definitely not passive in this respect. Evidence from this study supports those efforts that aim at a continual innovative development of business activities in rural areas, but challenged.

Rural enterprises seek to engage in process innovations and in developments of new sales channels, but they remain low on the efforts to develop in services. Large rural enterprises are almost on level with urban enterprises in innovation activity. Danish rural areas in the periphery have a tradition for agriculture and manufacturing, but these preconditions and particularities are not found to coincide positively with innovation. Enterprises in the rural periphery have a lower collaboration propensity. They tend to give priority to collaboration with suppliers, consultants and technology service bodies rather than for example customers, universities, and public authorities.

The assessed newness of the product and services is examined, and enterprises in the rural periphery are in the low part of the scale, and they target their innovations mainly to existing markets. The positive result is that export markets are strongly exploited by enterprises in the rural periphery and that their recovery after the crisis is particularly rapid compared to enterprises in urban locations.

Enterprises in the rural areas in the vicinity of urban agglomerations are, in terms of innovation activity, quite distinctly different from the population of enterprises in rural areas in the periphery. In particular, they are active in the development of new products and in the launching new production processes. To a considerable extent, they consider their products as new to the market.

It is likely that some growth oriented enterprises have relocated from more space constrained locations in urban agglomerations. The data suggests that they are able to consolidate collaborative relations, for examples with partners in urban areas.

Enterprises in the vicinity of urban agglomerations are very export oriented, and in this respect they recover hastily after the crisis. This accounts for both those who are innovation active and those who are not.

Enterprises in urban areas in the periphery show an only marginally higher inclination to innovate than enterprises in the rural periphery. They are highest on innovative activities within the domains of process and organizational innovations.

Just like rural enterprises in the periphery these enterprises tend to prefer collaborative innovation alliances with suppliers and consultants, while universities, public authorities and customers are less frequent innovation collaborators than seen in and closer to the urban agglomerations. The ambitions with the innovative activity are relatively low, particularly among small enterprises and in the service sector.

The development of turnover and export is stagnating in this cohort of enterprises, and there is nothing to indicate that an innovative activity has led to an expanding development. On the total of the study, enterprises in urban areas in the periphery seem to develop fairly conservatively, possibly seeking a stability rather than innovation.

Enterprises in urban agglomerations are characterized by a higher level of innovative activity. They cultivate external innovation collaborations quite significantly more, comprising partners among public authorities, universities, and not the least actors in other countries. In particular, enterprises seek to be innovative in “soft” and “modern” areas, such as services, organizational forms and marketing. Remarkably, urban agglomerations seem to attract and foster a population of innovative small companies.

On the other hand, urban enterprises are quite considerably less active on the export markets than enterprises in other areas in the country. From 2008 to 2012 they have increased turnover and exports, but enterprises without innovative activities have progressed faster financially than innovative enterprises. It has taken longer time for enterprises in urban agglomerations to regain lost markets than enterprises in other locations.

The analysis suggests that enterprises in city agglomerations enjoy better conditions and motivations for innovations. Nevertheless, there are barriers for them in terms of pulling together the full potential. Barriers may consist of additional costs for labour and premises.

*Europe 2020 Strategy and the Role of the Regions*

## **LOCAL AND REGIONAL PARTNERS CONTRIBUTING TO EUROPE 2020**

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**Sabine Zillmer, Spatial Foresight, GERMANY**

**Kai Böhme, Spatial Foresight, LUXEMBOURG**

Implementing the Europe 2020 Strategy is complex and requires cooperation among regions and within regions. This paper breaks with the ‘command-chain’ view of the Europe 2020 Strategy’s perspective, and focuses on what happens ‘on the ground’. The paper scrutinises how actions and processes at local and regional levels and their interactions between levels and sectors contribute to achieving Europe 2020 objectives.

The paper is based on a study about multi-level governance in support of Europe 2020, recently conducted for the European Commission Services. Eight in-depth case studies and a large number of meetings and discussions with local and regional stakeholders formed the backbone of this study.

For implementing the Europe 2020 Strategy and making it real, a lot of action is necessary on the ground, i.e. at regional and local level. Given the complexity of challenges to be tackled it requires the cooperation of stakeholders from different levels of governance and different sectors, as well as cooperation between public, private and civil society stakeholders.

Multi-level governance describes collective decision-making processes where authority and influence are shared between stakeholders operating at multiple levels of governance. In other words, it describes decision-making processes that engage various independent but interdependent stakeholders. Multi-level governance does not assign exclusive decision-making competences or establishes a stable hierarchy of authority.

The study shows that local development needs and the necessity to comply with legal requirement are key drivers for local and regional stakeholders to engage in multi-level governance processes. The involved stakeholders depend on the policy at stake and the governance context. As a rule of thumb, those stakeholders who's decision making power or political / societal influence are needed to solve the issue at stake should be involved. Also stakeholders from the private and third sector should be considered. At the same time there is a trade-off between the number of stakeholders involved and the governance's effectiveness. Therefore, from the very beginning, a careful mapping must be undertaken in order to determine the most influential stakeholders in the field. Facilitating cooperation of a considerably number of stakeholders needs communication routines and cooperation practices supporting agreement. This can range from awareness raising techniques to create a common understanding or even consensus among stakeholders, via shared visions, objectives or strategic plans to contractual agreements. The crucial factor is the ability to create ownership and commitment among the involve stakeholders.

Extent, means and methods of cooperation between these stakeholders' vary from case to case. Different governance structures are defined to deliver the Europe 2020 Strategy's objective. This gives the opportunity to discuss, exchange and learn between stakeholders across Europe on the different approaches taken and the efficiency of the approaches.

Different meetings with local and regionals partners across Europe illustrated that exchanging governance approaches is an eye-opener putting their own cooperation, coordination and stakeholder involvement regarding the implementation of actions for Europe 2020 into perspective. Often the discussions have been indicated as lesson on the empowerment of the capacity to more efficient contribution to the Europe 2020 Strategy.

*Economic Resilience of Firms and Territories A: Economic Determinants and Measurements*

## **WHY DO SOME PLACES NOT BOUNCE BACK? A STUDY ON LOCAL ECONOMIC DEVELOPMENT AND RESILIENCE**

**Charlotte Hoole, University of Sheffield, UNITED KINGDOM**

This study aims to understand the 'resilience' of places in the context of the challenges they face and the resources and capacities that exist within them. The research takes place in Doncaster, a town indicative of the new peripheries challenging and displacing former industrial cores throughout the world.

When the coalition government came into power in 2010, they came with some 'big ideas' about empowering the local. The premise behind this approach is for local areas taking back control of their economies, recognising that local contexts determine the most suitable approaches. Local Enterprise Partnerships were set up in 2011 and make up the current statutory bodies responsible for driving economic growth and job creation in local areas. However, given the economic challenge following the 2008 crash in which the deflation of the welfare state and fiscal budgets pose new restrictions, there is a recurring problem concerning the capacity of

local institutions to drive economic growth and deliver efficient public services with financial constraints and limited resources.

Policy, as well as a lot of local and regional economic development literature, speaks about this challenge in relation to 'resilience'. Attached with sentiments of 'localism' and in response to austerity, to put simply, it describes the ability of a place to 'bounce back' following a crisis. However, imbued with discourse and political agendas, the notion has taken on different meanings and various interpretations in which there remains to be found any firm conclusions over what makes a resilient region.

The methodological approach aims to increase the explanatory power of the research in response to traditional studies which have primarily given focus to quantitative measures. This is achieved by combining statistical and spatial analysis with collaborative ethnography to provide a methodologically robust approach founded upon a more reflexive epistemology. The first stage of research involves identifying and measuring socio-spatial inequalities within Doncaster to provide contextual information, before looking at the discourse embedded within theoretical debates and the language of policy in relation to 'problem definition' of and 'strategy implementation' for local economic development. Interviews and focus groups are then deployed with policy officials and resident representatives in Doncaster to uncover local knowledge and explore what delivering economic development and performing 'resilience' means for local places and local people.

Despite the contested nature of 'resilience', this study attempts to determine the value of a resilience agenda as a guiding idea for taking seriously the challenges of urban society. Embraced by the policy world and accepted as a notion to bring about change, this study recognises that only by taking on 'resilience' can it be opened up to a critical debate and attempts be made to transform the way that it is applied to places. Taken in its most ominous form and as a framework for everything that's gone wrong, the notion of 'resilience' needs to be critiqued and exposed. However, take away the rhetoric and perhaps some of its principles could be put to good use; 'resilience' more accordingly being about understanding the ability of a place to cope or respond to the challenges it faces. This could lead to more realism and less confusion. In order to move thinking forward, 'resilience' needs to take on a new direction in reconnecting it with the local with more commitment shown towards bringing about social as well as economic change. This study thus aims to address the gap between national and local narratives and understand the more tangible drivers and barriers for growing local economies.

*Tourism and Regional Development*

## **SUSTAINABLE DEVELOPMENT AMONG ECOTOURISM ENTREPRENEURS: OPERATING IN A BIOSPHERE RESERVE**

**Fredrik Hopstadius, Karlstad University, SWEDEN**

**Cecilia Möller, Karlstad University, SWEDEN**

This paper presents work in progress of a qualitative empirical study focusing on the societal question of how to achieve real sustainable development. The study is part of a PhD-project in human geography. Biosphere reserves are meant to function as learning sites for sustainable development. The study takes place at Lake Vänern Archipelago with Kinnekulle Biosphere Reserve in Sweden. The locality bases its sustainable development agenda on four basic values of borderless cooperation, sustainable social design, knowledge of the biosphere and successful sustainable economic development. The study focuses on ecotourism entrepreneurs in the biosphere reserve and aims to enhance the understanding of place-specific processes in sustainable development by analysing collective objectives, bottom-up approaches, motivation and interactions. How do the ecotourism entrepreneurs work toward sustainable development? What effect does the biosphere context have? What can learning processes and entrepreneurship in a tourism setting and a biosphere context tell us about sustainable development? The study theoretically relates to learning processes and sustainable entrepreneurship. It is important to understand and discuss the place specific processes of how real sustainable development is achieved in order to increase knowledge in understanding of theoretical and practical applications of sustainable development. Tourism is a branch of industry that is largely unsustainable but with apparent indication towards sustainable development within certain subfields.

Research on sustainable development in tourism gives valuable contribution seeing that the consumption and production occur at the same time and place. This notion of simultaneous production and consumption becomes very interesting in the growing field of ecotourism. This specific type of tourism seeks to generate sustainable development through environmental preservation while simultaneously contributing to socioeconomic development. The importance of and advocacy for learning and development in biosphere reserves together with ecotourism's simultaneous production and consumption provide a good entry point for analysing sustainable development. The ecotourism entrepreneurs sell a product whose quality is linked to their sustainable development efforts. The tourists that consume the tourism product are present at the locality, and can partake in the coproduction of sustainable development together with the entrepreneurs and the receiving region. The method used for collecting material is qualitative interviews and group interviews. The conference presentation will discuss preliminary findings from the on-going study that is undertaken during spring and autumn 2015. The focus on ecotourism entrepreneurs in the Lake Vänern Archipelago with Kinnekulle Biosphere Reserve could lead to insight in the conditions necessary for creating sustainable development and contribute do the research fields of sustainable development, biosphere reserves and ecotourism.

*Innovation in 'ordinary' regions and 'boring' sectors*

## **LOCAL PHARMACEUTICAL PRODUCTION IN EAST AFRICA: CHALLENGES AND OPPORTUNITIES**

**Rory Horner, University of Manchester, UNITED KINGDOM**

With import dependence and a growing disease burden, local pharmaceutical production has become a major policy focus on the African continent over the last decade. The East African Community, in particular, has led these initiatives with the formation of a regional pharmaceutical manufacturing plan in 2012, and some policy movement towards regulatory harmonization. At the same time, local pharmaceutical production has been written off by some skeptics, who have questioned its viability given the technological requirements and economies of scale often involved in the sector.

This paper draws on primary interviews with pharmaceutical firms (local and Indian) and policymakers in Kenya, Uganda and Tanzania to explore the challenges associated with the creation of local manufacturing in East Africa. Local pharmaceutical production is not oriented towards inventing or manufacturing products that are new to the world, instead being geared towards production of relatively standard, generic products. Aspects of imitation are involved in the products produced and technological processes.

Many hurdles do still remain with this regional development challenge being far from straightforward. To date, while considerable political will is present at the East African Community level, this is still to be manifest at the national level. For example, regional harmonization is still yet to be manifest, while some question who will benefit from such harmonization. Meanwhile, local firms still face substantial competition from India, the most successful "innovator" in relation to establishing a pharmaceutical industry in a developing country context, yet not associated with introducing products new to the world. Many importing, Indian companies are largely sceptical of the prospects of local pharmaceutical manufacturing.

This paper thus focuses on a sector often associated with the knowledge economy – pharmaceuticals, yet in a very different empirical context to most studies in economic geography and related disciplines. In this East African context, the key questions related to pharmaceuticals are considerably distinct from those that have been focused on in much work in economic geography and regional development on the sector in the global North. A Northern understanding of, and focus on, innovation may overlook the key challenges involved in this pharmaceutical production. Local pharmaceutical production in East Africa requires considerable institutional innovation in the form of regulatory harmonization and public-private coordination in a developing country context.

## **MANUFACTURING SMART REGIONAL GROWTH: THE ROLE OF THE MULTI-NATIONAL MANUFACTURING FIRM IN EU REGIONAL POLICY SETTINGS IN PLANNING FOR REGIONAL ECONOMIC GROWTH**

**Sarah Howe, RMIT University, AUSTRALIA**

The paper will provide an overview of the shift in emphasis in EU Regional Policy away from an approach during the 1960s and 70s that concentrated on redistributing wealth from wealthier regions to poor regions through traditional infrastructure led economic and social projects to a new approach over the past two decades that has increasingly embraced the concept of 'regional economic competitiveness.' This approach has been characterised by business innovation and climate change initiatives and increasingly social inclusion goals have been perceived of as intrinsically linked to economic goals.

This new policy imperative is explicit in the most recent EU Regional Policy 'Smart Specialisation' approach that details an even greater focus on integrating regional and innovation policy agendas to assist regions to boost regional innovation to achieve economic growth. The new approach encourages regions to focus in on their strengths based on an analysis of regional assets and technology as well as analysis of potential partners in other regions and between businesses, public entities and knowledge institutions. The establishment of networks and linkages within a region between public and private actors is emphasized in the new policy direction.

As EU Regional Policy has moved from a traditional regional policy model that targeted sectors in particular territories to a cross-sectoral approach at the level of place, the focus is now about encouraging the emergence of a variety of partners at the regional level and the elevation of sub national government in policy co-ordination. The role of the central government in designing and delivering major regional development interventions is declining as regional policy systems are open to a broader range of participants. Regional Policy is now increasingly formulated and implemented much more so by place based regional governance policy processes.

The new policy emphasis has moved away from policies that have sought to attract inward investment from large (often multinational) firms to a new policy emphasis upon self-reliance, endogenous growth and the encouragement of new small firms emerging. However, it is of interest this paper to investigate the extent to which large multinational manufacturing firms are still being engaged, or seen as important in this new policy context, as drivers for economic growth within regions.

The paper will review existing empirical evidence within strategic management literature of multinational firms adapting management strategy as a result of involvement in physical networks at the level of place, for instance in redirecting global value chain decisions on the basis of the new place based governance arrangements that have been established by EU Regional Policy. Further, it will provide an overview of the existing public policy research that has explored the extent to which large established multinational manufacturing firms have been encouraged to contribute to the diversification of a regions sectoral structure within the new place based governance structures. Finally, it will explore the extent to which multi-national manufacturing firms are participating in the newly constituted place based networks and whether there role has extended to providing 'horizontal' cross sectoral place based assistance to other firms within a region.

## **HOW SPECIAL ARE RURAL AREAS? THE SOCIO-ECONOMIC IMPLICATION OF LOCATION FOR RURAL DEVELOPMENT**

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Despite widespread socio-economic, physical and ecological on-going changes, rural areas remain characterized by relative abundance of natural capital, which may include economic, human, physical, social, cultural and environmental and the endogenous development potentials of the area. In spite of these potentials, rural areas are still characterized by underdevelopment, remoteness and relatively high cost of movement. Consequently, rural areas are home to most of the world's poor. Compared with urban areas, which enjoy proximity to customers and producers, credit, high technology, etc., rural areas may have comparative advantage only in primary activities based on immobile natural resources and closely related activities. This paper is based on secondary information: official documents and reports produced by the Government of Nigeria, international organizations and different research institutes and extensive literature. Therefore, the paper looks at the nature of rural areas and based on location theories, examines possible implications for the economic use of space. The paper further examines the hitherto neglected spatial dimension of and problems of rural development. The paper concludes that for policy and effective implementation of rural development, a clear definition of what constitutes rurality, the spatial dimension and unambiguous understanding of the heterogeneous and relative location of rural area is very necessary. In addition, there is need to look beyond agriculture in the search for rural development. In this respect, we should look at non- farm activities, entrepreneurship and endogenous factors, as well as place-based (territorial) approach as against sector base (agricultural) approach in the search for the development of rural areas.

## **ASSESSMENT OF THE ECONOMIC EFFICIENCY OF SOLUTIONS SHAPING THE RETENTION CAPACITY OF THE RIVER CATCHMENT IN THE POZNAN METROPOLITAN AREA**

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The achievement of intended objectives can be made through the implementation of many various solutions, sometimes very different in terms of their scope of applied work or selected technology. At this point decision-makers are required to consider all possible solutions which on the one hand take into consideration the sequence of all actions geared to achieving a desired effect, and on the other those which indicate a final option being the best possible solution to be implemented. The proposed solution should guarantee that all the assumed results will be achieved in such a way as to ensure that solution's implementation efficiency. Here efficiency is understood to refer to the effects expressed by both the overall net benefits to society and cost-effectiveness values defined by the relation of the effects and factor inputs necessary to achieve them. It follows that the implementation of the solution should occur in the most efficient manner. According to the Pareto principle, the solution as such and its implementation are optimal only if it is impossible to make any one element better off without making at least one element of the planned action worse off.

A category which enables to measure an impact of planned activities focused on achieving assumed objectives is the economic efficiency. It is commonly used as a way for evaluating all actions undertaken in various areas, and at the same time for determining their functioning. For this reason economic efficiency is perceived as a method applied in the decision making process aimed at showing a difference between resources and ends, and to verify in advance the potential output of actions.



Bearing in mind the above-mentioned approach, it is argued that the economic efficiency should be applied to a wide range of actions aimed at reinforcing the economic well-being of regions. This also refers in particular to the area of water resources management in Poland, where such a complex approach to the assessment of projects envisaged to improve the management of water resources have been used only slightly.

The European water policy takes into consideration the principles of Integrated Water Resources Management (IWRM). This concept implies that hydrographical catchment constitutes the primary area for all planning and decision-making activities. The evidence based on the preliminary research carried out by the authors in the Poznań Metropolitan Area shows quite weak capacities of the natural retention of catchments, which results among other things in local flooding, and this is one of the main problems concerning water and local flood risk management. The purpose of the paper is to investigate what solutions can be implemented that in terms of economic efficiency will enhance the retention capacity of the river catchment.

An increase of the retention capacity in a river catchment can be achieved through the implementation of both technical measures as well as non-technical procedures. The paper examines the cost-effectiveness of technical and non-technical solutions which can be implemented in the Poznan Metropolitan Area to comply with the provisions of IWRM. By using the indicator of the dynamic generation cost, it will be argued that the most optimal solutions (the least costly to society) can be non-technical solutions as well, i.e. agricultural works. At the same time, these solutions ensure achieving a comparable effect to those which would be achieved as a result of the e.g. reservoir construction.

The results will come from desk research as well as an empirical analysis. The research has practical implications for policy-makers and can be a valuable case-study also for other regions.

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*EU Regional Policy and Practice*

## **DIVERGENCE IN COMPETITIVENESS IN EUROZONE**

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This working paper shall present the results of a research conducted by the two authors at the Department of Economics of the University of Athens on cluster identification at the Eurozone level and the problems appearing in clusters during the post-crisis period, examining their change from 2007 to 2011.

It first briefly raises few points from the extended literature on clusters and industrial districts that are relevant to the analysis. Based on this literature and the broader literature from economy geographic and local economic development studies, the use of location quotients is suggested to show cluster concentration.

Then it uses publicly available data from the European Cluster Observatory that has predefined the distinct industrial groups composing each cluster. After their short description by the use of descriptive statistics, emphasizing the significant differences in wages between northern and southern Eurozone states across all clusters, it uses data from employment in clusters for the years 2007 and 2011 to calculate location quotients, which are then projected into maps. Location quotients are calculated at the Eurozone level, for Eurozone member-states only, where the higher in geographical scale unit is the Eurozone and the lower is the member-state of the Eurozone. A similar analysis followed by Porter in a previous publication made in *Regional Studies* (Porter, 2003) is brought from the Federal state to the supra-national level.

Furthermore, the change in employment from 2007 to 2011 is projected in another series of maps. The study and presentation of results take into account various limitations in data, e.g. the lack of data availability for some years and some states.

The results emphasize two main points. Firstly, the dramatic fall in levels of location quotients primarily for France and then for Italy, across a range of goods produced in manufacturing clusters. Given the literature on clusters, this emphasizes a strong competitiveness loss in both these two Eurozone economies. This is especially important for Third Italy, where the industrial district example was fostered and emerged. Secondly, the results highlight the significant re-positioning of the German clusters in the Eurozone, emphasizing the rise in German competitiveness in the early post-crisis years.

These findings point towards the divergence in competitiveness within the key large economies of Eurozone as a whole, and the possible creation of an internal dualism in the Eurozone economy that is likely to lead to the breaking of Franco-German axis in terms of production and competitiveness.

By taking into account the above-mentioned limitations, additional findings are discussed at state level, such as those on Greece's competitive position kept in clusters related to agriculture. Several conclusions are reached on the economies of the Eurozone.

The working paper will summarize and provide only those maps that are useful for reaching the more important conclusions out of the research, aiming at their more extensive discussion. Conclusions are reached from a more general perspective for the Eurozone economy.

*Innovation and Knowledge Economies*

## **RELATED VARIETY AND GROWTH IN ITALY**

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**Luciana Lazeretti, University of Florence, ITALY**

In the recent literature on economic development is growing the attention on the role of diversity (Cooke, 2012; Boschma and Frenken 2009) rather than to specialization as one of the performance determinants of clusters, districts and metropolitan areas.

It is however necessary to emphasize the fact that, if the companies of the area are too similar each other, knowledge spillovers tend to produce mostly incremental innovations designed to improve products or processes already in the portfolio of production.

The concept of proximity used in the 'related variety' approach, (Frenken et al., 2007) that undoubtedly plays a key role, proximity, analyzed not only from a geographical point of view but according to many aspects; we can therefore distinguish, following the division made by Boschma (2005), five dimensions of proximity: cognitive, organizational, social, institutional and geographical. The first four dimensions appear to be disconnected from the physical proximity, because they express a relational proximity that is related to the interaction between actors (Amin and Cohendet, 2003).

According to this aspect it is interesting to refer to the theories of Jacobs (1969) that explain how urban environments, rich in terms of variety, have a strong ability to generate innovation and growth; this is also confirmed in the writings of Glaeser et al. (1992).

It is in this context, that we focus on the fact that is not "diversity" itself that explains economic and innovative development of local systems but the presence of "related variety" (Frenken et al., 2007), a concept that places emphasis on contiguous and complementary knowledge that can be found in a given territory, district or cluster.

In this strand of research more importance is given to the idea that in order to develop the learning capacity and the exchange between companies, belonging to different sectors it is necessary to have a fair level of

"variety" such that companies are not too different from each other, since in this case would not have the opportunity to learn from each other, due to lack of a common "language", and not even too similar because in that case they would not have almost anything to trade and learn from each other.

Thus, the methods used in the "related variety approach" lead to focus attention on the search for similarities in technological knowledge possessed by the various local units regardless of the sector they belong to.

The most interesting results, with regard to both growth, innovation and learning, are highlighted when enterprises of the local system have a variety that allow the exchange and cross-connections even at the level of the technological knowledge bases.

The most interesting studies in this area analyze, on the basis of data disaggregated by type of product at the enterprise level, the presence of correlations "close" and "distant" to assess the impact on growth and competitiveness. This perspective has been applied in recent years for several countries including initially to the Netherlands (Frenken et al. 2007) and Great Britain (Boschma and Wenting, 2007), Italy (Boschma and Iammarino, 2009), Germany (Brachert et al. 2011) and Spain (Boschma et al. 2012). As suggested by Neffke (2010).

The aim of the present research is to investigate, for the Italian case, the role and importance of Related variety to foster economic growth. The Related Variety approach received increasing attention in the literature, as it tried to identify the key drivers for economic development at regional and national level, focusing on the need to have some degree of cognitive proximity at local level to foster innovation and economic development.

We will try to answer to the following question:

- What is the role and impact of related variety in the economic growth in Italy?

An econometric analysis has been performed using of the indices that allowed us to measure the diversity within the analyzed industrial areas.

The indicators used to measure the "related variety" are calculated using the database constructed starting from ISTAT data disaggregated at the provincial level and to 4-digits ATECO code level, in order to measure the "Entropy index" and the "Variety index". It has been built an ad hoc database using data supplied by ISTAT collected in the censuses of 1991, 2001 and 2011 for a longitudinal analysis over two decades.

Indicators of variety have been broken down into "unrelated variety" and "related variety" according to the rules adopted in Frenken et al. (2007) and Boschma and Iammarino (2009).

Results underline that variety has a positive impact on the growth, and related variety matters even more. In fact, the provinces with a higher level of RV present a higher employment growth.

#### *Role of Institutions in Regional Development*

### **BARRIERS TO RENEWAL OF SYNTHETIC-KNOWLEDGE CLUSTERS. THE BOAT BUILDING INDUSTRY IN ARENDAL, NORWAY**

**Arne Isaksen, University of Agder, NORWAY**

An increasing body of work examines the long-term evolution of clusters. These studies often focus on growing clusters or clusters, such as old industrial clusters, that manage to renew themselves. This paper rather attempts to explain why an industrial district type of cluster in southern Norway is about to disappear.

More precisely the paper will analyse the decline and merely disappearance of the boat building cluster in the Arendal region in Norway. Actors in this region pioneered building of leisure boats in glass fibre in Norway, and to some extent on an international scale, from the 1960s. The boatbuilding cluster was quite dynamic with

regard to product development until the 1990s. But in spite of internationally well-renowned boats, and also several initiatives from public authorities and the boat builders' organisation to revitalise the industry, the cluster deteriorated from the 1990s resulting in closure of most of the firms or relocating of firms to other countries. The region, however, houses a global leader of life boat production, while few other related activities have appeared.

Although the focus is on the recent decline of the Arendal boat building cluster, following the evolutionary economic geography way of thinking much of the explanation of the current situation of the cluster lays in its past, and, thus, the research question is: What explains the growth and decline of the Arendal boatbuilding cluster? The paper intends to develop an analytical framework for performing a theoretically informed analysis of the development of the boatbuilding cluster. A second research question is then: How can the analytical framework contribute to the understanding of cluster decline more generally?

Following Grabher, cluster decline is often conceptualized as three interrelated types of lock-in: (i) functional lock-in when close and stable ties between regional firms reduce boundary-spanning functions; (ii) cognitive lock-in when long-standing personal ties result in groupthink interpretations that determine which phenomena are perceived and which are ignored and (iii) political lock-in when strong relations between the political support system and industry lead to reinforced support to already strong regional industries. Such lock-ins make firms unable or slow to respond to the rise of new competitors and technologies elsewhere.

The three types of lock-ins mainly point at the fact that strong ties between cluster members can hinder the inflow of new ideas and knowledge. This paper intends to supplement and revise this theoretical approach by highlighting possible causal factors at three different levels. As the cluster mainly consists of small firms that is owned and led by the entrepreneurs themselves or their children, the norms and values that influence the entrepreneurs' opinion of how boat building should take place is seen as important. The concept of convention and the 'worlds of production approach' (from Storper and Salais) are employed to conceptualise the entrepreneurs' norms and action. The next level in the analytical framework is the firm; more precisely how learning and innovation take place in firms. Firms in different worlds of production are seen to innovate in different ways. The paper employs the knowledge base approach to characterise important aspects of firms' innovation processes in each world of production. The last level in the analytical framework includes discussing the regional innovation strategies that may trigger learning and innovation processes in each world of production.

Employing this analytical framework other interpretations of the decline of the cluster prevail than those stemming from the lock-in approach. A preliminary analysis finds that the Arendal boat building cluster has met problems because the firms have been deeply rooted in the so called interpersonal world of production of building high quality boats by use of craft skills, while the regional policy initiatives have not backed up on this type of production. It might be the case that the high quality boats and customer focus by the Arendal boat builders have limited growth opportunities when competitors are mainly found in the so-called industrial world of mass production. Still a main problem may be that the policy initiatives, as well as the regional innovation system have not backed up the type of production that has dominated in the Arendal boat building cluster.

*Innovation and Knowledge Economies*

## **GREENING OF THE SALMON INDUSTRY – THE NORWEGIAN CASE**

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**Arnt Fløysand, University of Bergen, NORWAY**

The salmon farming sector in Norway are part of an innovation system turning the country into the world's largest producer of Atlantic salmon (65% of global production in 2010). The production capacity has doubled since 2005, now producing 1,2 million tons per year (2013) (includes trout) and salmon farming has become the 3rd largest export industry in the country with a first-hand value of 4.7 billion EUR and approx. 25 000 jobs (including suppliers). Nevertheless, there are widespread concerns in regarding negative environmental effects

caused by the industry (such as emissions of nutrients, chemicals and medicines), as well as the potential spread of infectious diseases and marine parasites from farmed fish to wild fish stocks (Taranger et al., 2011, Fløysand et al.2010). Accordingly, the industry has been heavily criticized not only by environmental activists, but also by national and international governmental bodies and (an increasing number of) critical consumers (Barton and Fløysand, 2010). These sustainable considerations make us discuss barriers and drivers for a path renewal of the Salmon Farming Innovation System in Norway. The contemporary panorama in the system is significantly different from the early origins in the 1980s – the period of ‘rural development’ – also different from the 1990s period of economic expansion – ‘the economic imperative’ (Aarset and Jakobsen 2008). Over the past 40-45 years, the Norwegian aquaculture sector has evolved from experimental production to a major global industry. Regulatory frameworks and civil society awareness and mobilization have struggled to ‘catch up’ with the dynamism of the Salmon Farming Innovation System, however the gap has reduced and the future of the industry within the contemporary context of ‘glocal’ sustainability is now under the microscope. In the paper we argue that a path renewal requires a paradigmatic shift from a “ global food demand and economic perspective” towards “a local development demand and health perspective’.

#### *Public-private Collaborations and Regional Development*

### **CHANGING PATHS: THE ROLE OF PUBLIC-PRIVATE COLLABORATION IN THE ENERGY SECTOR IN THE EAST OF ENGLAND**

**Laura James, University of Stockholm, SWEDEN**

Path dependency is a central concept in evolutionary economic geography and regional studies, beginning from the contention that ‘history matters’ in economic development as nonergodic processes – irreversible changes and non-repeatability of initial conditions – are ‘locked in’ through a variety of self-reinforcing mechanisms (Martin, 2010). These mechanisms include increasing returns, sunk costs, learning effects and network effects, and many have a local dimension. While path dependent processes may lead to virtuous circles of regional development, they may also lead to so-called ‘lock in’ of technological regimes and institutions when self-reinforcing processes eventually prevent region adapting exogenous changes. In recent years, however, attention has turned to other possible outcomes and processes including path creation, path branching and path plasticity. Drawing inspiration from historical sociology and political science (e.g. Streek and Thelen, 2005; Mahoney and Thelen, 2010) processes such as layering, drift, conversion and recombination have been identified as means by which regional institutions might help renew and reorient development paths. In this paper the role of public private collaboration in these processes is explored in relation to the development of the energy sector in the East of England. Drawing on in depth interviews with local authorities, development agencies and sectoral organisations and firms, together with analysis of policy documents, the paper examines how public-private initiatives have attempted to renew the regional development path of the energy sector – heavily focussed on North Sea gas extraction – to take advantage of new opportunities in decommissioning offshore platforms, nuclear and renewable energy. The paper highlights the specific roles that such collaborations play at a local level in supply chain development and skills, while also acknowledging the crucial role played by wider institutional frameworks and the coupling of the regional economy to global energy markets.

#### *Role of Institutions in Regional Development*

### **NEW FORM OF DIALOGUE BETWEEN GOVERNMENT AND SOCIAL PARTNERS**

**Andris Jaunsleinis, Latvian Association of Local and Regional Governments, LATVIA**

**Maris Pukis, Latvian Association of Local and Regional Governments, LATVIA**

European approach to consultations between central government and social partners traditionally is dialogue between employers, employees and government. Such consultations have influence on macro economic policy, including agreements about wages, taxes and different conditions of social policy.

In European Union such consultations are organised in the EU scale through consultative body - Economics and Social Commission with representatives from all member countries.

In Latvia during last years arise new form of social and economic dialogue, including local governments, scientists and representatives of NGO-s in different forms of consultations about macro economic issues.

Aim of this paper is to analyze Latvian experience and to show its preferences and weak points compare to traditional forms of social dialogue.

Method applied is analysis of opportunities to represent groups interests in described for of dialogue. Research is based on experience of one of members of dialogue - association of local and regional governments to influence on process through established dialogue.

New form of dialogue arised on the basis of three previously developed procedures:

- a) Introduction of traditional dialogue, including Cabinet of Ministers, Latvian Association of Free Trade Unions (LAFTU) and Latvian Confederation of Employers (LCE) in the beginning of 1990-ies,
- b) Development of annual negotiations system between Cabinet of Ministers and Latvian Association of Local and Regional Governments (LALRG),
- c) Development of coordination among different NGO-s by establishing Alliance of NGO-s.

Substantial role to introduction of new system plays experience of self-governments to negotiate with central government and parliament. Latvia have one of the most developed local-central governments negotiations system. It can be characterised by several features:

1. Common association for all local and regional governments, established on the basis of voluntary participation.
2. Developed procedures of annual consultations with all sectoral ministries and the most important central government agencies.
3. Including according the law the protocol about fiscal and legislative issues (Annual protocol about agreements and disagreements between Cabinet of Ministers and LALRG) in the budget package sending by Cabinet of Ministers to Parliament. Such protocol gives clear picture about central and local governments positions to every parliamentarian and to mass media.

Catalisator for introduction of the new form of dialogue was world economic crisis, which has maximal influence to Latvia during 2008-2011. Durig those years there was introduct practice to organise such consultations in the meetings of the Reform Management Group (RMG). Agreement, if it was achieved in the RMG, was basis for decision of the Cabinet of Ministers.

Meetings of the RMG take place in average once during two months. Members of RMG were:

- a) Prime MInister and the Minister of Finance;
- b) two representatives from the LALRG;
- c) two representatives from LAFTU;
- d) two representatives from LCE;
- e) two representatives from Latvian Chamber of Trade and Commerce (LCTC).

Afterwords representatives from Latvian Academy of Science and representatives from universities were sometimes invited by LALRG.

During crisis each member of the RMG presented opinions about necessary structural reforms, about changes in tax policy and about cutting of central and local government expenditures. Decisions of the RMG were basis for working out National Development Plan (for 7 years from 2014 to 2020) and for working out Partnership Agreement with European Commission about 7 years budget.

Particularly, during three years Latvia manage national zero-budget programming by the wide participation of partners from RMG. Namely close cooperation given opportunity to provide such experiment.

LALRG introduce practice of previous consultations with main social partners before meetings of RMG. In many cases that leads to better results.

It is very important to include representatives from scientists and universities in the discussion about main macroeconomic and new legislation issues. Compare to traditional social dialogue voice of local governments is principal for achievement of balance between different groups, taking into account local and regional priorities.

Presently on the basis of crisis time experience new institution - National Development Council is established and starts to work. That gives good forum for local governments and social partners influence on future reforms.

*Sustainability - Climate Change, Environment and Energy*

## **CREATING DEMAND FOR ACCESSIBLE, EDIBLE URBAN LANDSCAPES: A COMMUNITY-ASSET BASED APPROACH TO FEEDING THE GREEN CITY THROUGH LAND-BASED WELL-BEING INITIATIVES IN LIVERPOOL**

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There is increasing amounts of literature, policy and enterprise rhetoric about the need for food producing lands in urban areas. How much this supply is a response to demand on the ground, and how much it is answering strategic level objectives is up for discussion in this paper. The Liverpool city region is currently on trend in its urban agricultural interest with objectives to shift resources to supplying as much of its own fresh food locally. This movement has attracted the attention of a wide range of professional sectors including planning, public health, and enterprise development.

However, UK national political agendas are forcing local politicians to deliver more economic growth from the same or less resource, and it is increasingly difficult for stakeholders to defend the potentiality of land which, with the right investment, may deliver substantial hard and soft landscape outputs and outcomes through creative and risk aware edible urban design schemes. What we often see in its place is risk averse, low maintenance monoculture planting in the city, with minimal benefits to the most challenging agendas of climate change (flood risk, urban cooling, species diversity); and public health and wellbeing (access to nature, education, physical exercise, quality of life, safety). This, in spite, of a regional expertise in advancing and evidencing the advocacy argument for green infrastructure in the North West region of the UK, where the Liverpool city region sits.

In short, green infrastructure is a critical delivery mechanism of well-being and sustainability in a modern city. The multi-benefits associated with access to green space are evidenced and advocated in literature from planning to public health. Inclusions of green infrastructure objectives are still largely included in strategic scale spatial planning in the UK, with well-established theory and practice on sustainable land management. However, less attention has been paid to the qualities of small scale sites of green infrastructure delivery, many of which have the potential to deliver accessible, edible urban landscapes, as well as multiple deliverables and benefits for other key neighbourhood services highlighted by the preventative model of health being championed by the Liverpool Clinical Commissioning Group (NHS).

This paper will introduce a broader perspective on the nature and heterogeneity of activity at the local level, drawing on a piece of research conducted in the Liverpool city region of the UK which extensively maps community-scale green infrastructure groups; those engaged in food growing, but also those focused on arts and culture, health and wellbeing or nature conservation and green skills. The importance of this 'community-scale green infrastructure' on the wider green infrastructure agenda will be highlighted; and a special focus of the critical factors that make these groups resilient will be explored.

Conclusions will show that small scale, community led urban growing projects are flourishing, despite limited resources and oftentimes a high turnover of participants from local neighbourhoods. However, the research also reveals differences in the capacity of small groups and community organisations to build consensus, enhance networks, and access funding and skills needed to sustain delivery. By offering a better understanding of the factors and forces which affect the resilience of these groups, we have the potential to deliver the objectives of the green city more effectively and with greater local relevance; to enhance the cost-effectiveness of sustainability and health and well-being agendas; and ultimately to envision and engineer accessible, edible urban landscapes for everyone to enjoy.

*Urbanisation and Cities*

## **DEMAND ORIENTED CITY DEVELOPMENT FRAMEWORK: FINDING THE SOLUTION TO FORDISM URBAN SPACE OF GUANGZHOU CITY**

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Although the great achievement of urban development in China in recent decades have been noticed, Severe pollution, heavy traffic, overcrowded public transition system and noisy manufacture industry have also become the tags of major cities in China. This paper tries to explore a new urban developing path based on the analysis to these shortcomings of the “old” urbanization path of Guangzhou city in the past decades started from 1978 and the comparativeness to the experiences of cities in developed countries in different historical periods. The paper lend itself to economic terms including demand and supply, to argue that the problems above are mainly rooted deeply from the prevailing government investment leading urbanization which is so called supply oriented modal. In the past decades, production or investment are the center of urban economy and the investors and entrepreneurs were placed in the center of the consideration of urban planning. Then the paper suggests a demand oriented urbanization framework. The city’s functions should meet the demand of households and other relative people to the city, to improve the quality of life , and the convenience and fun of the activities in the city. By accurately identify and satisfy the demand or need of people relative to the city, the urban planning and investments can be more effective and meaningful, thus the livability of the city will be increased.

*Have Cluster-based Economic and Regeneration Policies Lost their ‘Buzz’? Where are we Heading...and where should we be Heading with Regard to Cluster Research and Policy?*

## **FROM CORPORATION TO CLUSTER: THE DYNAMIC CAPABILITY PERSPECTIVE OF TRANSFORMATION**

**Tom Johnstad, Gjøevik University College, NORWAY**

The Raufoss industry in eastern part of Norway is a case that has transformed totally from an integrated company in 1996, its year of centennial anniversary, into 45 companies ten years later. The split up was a result of several mismanagements. Today – 20 years later this is one of the most advanced and dynamic clusters in Norway. How was this possible? What have been the driving forces in this transformation? – Explanations of this change will be searched in a new expanding theoretical perspective.

The dynamic capabilities (DC) approach (Helfat et al., 2007; Teece, 2011/2009; Teece, Pisano, and Shuen, 1997), is a perspective that has its roots in different traditions. It integrates and develops further the resource base view (Barney, 2011; Penrose, 1959/2009), which is an alternative view to Porter’s market-positioning view on strategy (M. Porter, 1980; M. Porter, 1985), and the evolutionary theory of change (Nelson and Winter, 1982). It has an enterprise focus, but links that to its environment. This makes it different from traditional approach in studying innovation change in enterprises though focuses essentially on internal aspects in the firm (Goffin and Mitchell, 2010; Tidd et al., 2005).



Dynamic capability is seen as ‘the firm’s ability to integrate, build, and reconfigure internal and external competences to address changing environments’ (Teece et al., 1997). It is also referred to as ‘the capacity of an organization to purposefully create, extend, or modify its resource base’ (Helfat et al., 2007). The dynamic capability framework builds on the basic assumption that core competencies should be used to modify short-term competitiveness which again should be used to build long-term competitive advantage.

Teece and others introduced first the 3P’s – position, processes and path (Teece et al., 1997). The position is the accessible resources or assets in and outside the enterprise. The path is the historical path of development and possible new paths in the future. The processes are the dynamic capability that transforms position or assets into new paths of development.

Teece has developed the dynamic part of the 3P’s, the processes, further with the following three concepts – sense, seizing and transformation (Teece, 2011/2009). The sensing of threats and opportunities is a cognitive concept related to strategic management, which on the basis of accessible internal organizational capabilities and external assets tries to seize and form new options. These options may include reconfiguration of assets and structures to transform the business (model) and performance, and that way create a new path and better ‘fit’. The final result is also influenced by evolutionary forces directly and indirectly. On the other hand, the result makes feedbacks on the enterprise and its environment.

The DC approach has been developed further in recent years towards a more explicit integration of the relational view. This relational capability can be viewed as a type of dynamic capability with the capacity to purposefully create, extend, or modify the firm’s resource base, augmented to include the resources of its alliance partner” according to Helfat and other (Helfat et al., 2007):66). – This link to the cluster and network views on organizational development.

These perspectives will be used in trying to understand and explain the transformation that has happened at Raufoss.

*Social Justice, Housing and Civil Society*

## **THE PERFORMANCE OF URBAN REGIONS AND ECONOMIC INEQUALITY**

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Cities are nowadays considered to be the engines of national economies. According to Glaeser, more than half of humanity lives in cities and every month 5 million people move from the countryside to a city somewhere in the developing world. He also calls cities “our species' greatest invention” because proximity makes people more inventive and more productive for example.

However, does this triumph of the city not have a downside? In the Netherlands for example policy discussions currently focus on interregional economic inequality because several Dutch urban regions are flourishing while others, mostly non-urban regions, are experiencing a population decline having negative economic repercussions. At the same time, recently the topic of economic inequality has gained an enormous amount of attention internationally due to the work of Piketty.

Because the impression exists that differences between urban and non-urban regions have grown, in the present study the two themes, ‘the economic importance of cities’ and ‘economic inequality’, are brought together. We therefore want to test the hypothesis that spatial economic inequality in Europe has increased over time as a result of the increased importance of cities. In order to test this several questions are addressed:

- 1 Has the economic importance of cities for the regions in which they are located increased over time?
- 2 Is the importance and the change in importance of cities equal in several EU countries?
- 3 Can an increase in economic inequality over time due to an increase in the importance of cities within and between the studied EU countries be observed?

4 Is the level of economic inequality within a country related to the urbanisation pattern (monocentric vs. polycentric) of that country?

The empirical approach is based on shift-share analysis and econometric estimation techniques using region data on the NUTS3 level for the period 1980-2011 from Cambridge Econometrics. This spatial level is chosen because it is argued to represent functional urban areas. In a first step, in the shift-share analysis the difference between regional and European productivity levels are decomposed into a sector structure part, a sector localisation part and a regional part. Regional economic performance (the dependent variable) is measured by the difference between regional and European productivity and the importance of urbanity (cities) by the difference between regional and European job density. In addition to this explanatory variable, several control variables such as (1) sector structure, (2) sector localisation (both of them created in the shift share analysis), (3) a sector diversity index (4) region fixed effects which control for specific unobserved region effects which are constant over time and (5) a period dummy are also included. In order to make the effect of urbanity country and period specific, two-way and three-way interaction terms are included in the regression equation. This way, the model facilitates a comparison of the importance of urbanity across NUTS3 regions within and between EU countries for two time periods.

The policy implications of this study lie in the field of distribution and re-distribution of welfare. In many policy fields (spatial policy, social security, local finance policies) The Netherlands has a tradition of 'distributive justice'. Based on the empirical findings this policy principle may be continued or either adapted. Similar policy evaluations could be performed for the other EU countries considered in this study.

*The Bioeconomy: Knowledge Dynamics and Regional Development Policy*

## **ORGANIZATIONAL LEARNING IN REGIONAL DEVELOPMENT PROJECTS**

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**Anja Overgaard Thomassen, Aalborg University, DENMARK**

### INTRODUCTION

This paper presents a conceptual framework in the form of organizational learning for analysing and understanding the work of three municipalities in establishing a sustainable energy supply system. The three municipalities are all located in the rural areas in the Northern part of Denmark and are named Mariagerfjord, Frederikshavn and Thisted. These projects are concerned with the establishment of Bio-gas plants as an important part of the energy supply chain.

All the projects are complex and involve a number of technological, organizational and management challenges. They are characterised as network projects where collaboration takes place across organizational and institutional boundaries. They involve different actors such as politicians, municipalities, private companies, energy production companies, professional experts, farmers, citizens, grass roots organizations and researchers.

We thus need a conceptual framework that can face these challenges so that we can navigate in them. The term 'navigate' indicates that we are travellers and explorers in the projects. It implies that nothing can be taken for granted and the relationships are undergoing change and movement all the time. One of the distinctive characteristics of the projects is that they go across organizational and institutional boundaries and becomes a matter of concern for actors, who function under very different circumstances. Our focus point is not learning within a particular organizational unit but learning within and between activity chains and network of relations that constitute the energy supply systems in the three municipalities.

Another main characteristic of our research approach is the attempt 'to follow the actors' (Latour, 2005, p. 12) in the sense of trying to understand the actors where they are but also the connections and relations they create during the projects. Following the actors means to follow their actions and their creation of meaning including the political conditions in which they are created. Following the actors also implies that we need to follow the social orderings that they create when they talk and act.

A third characteristic of our approach is our understanding of knowledge and learning as assemblages and combinations of heterogeneous elements (Latour, 2005). In this way actors' practices are assemblages that continuously have to be made from different elements belonging to space, materials, documents, systems, tools, natural resources, words, concepts, language etc. Organizational learning is created deconstructing chains of activities and re-assemble them in new ways and with new elements.

The following sections will deal with these themes in a more thorough way.

First, we will elaborate what an organizational practice is and what it consists of. Importantly practice is described as an assemblage of different elements. Further practice is a relational phenomenon, where the boundary between the personal and the collective, the 'inner' and the 'outer' is dissolved. This does not mean that for instance the personal is not there but it is impossible to unravel what is personal and what is collective, what is inner and what is outer and what is private and what is public. We create our reality from our experiences but also from the resources available in the situation through a process in which history and situation become entangled and transact thereby changing each other.

An important aspect of practice is what we have referred to as the political conditions and which is being treated as the second point. Actors are actors because they are intentional and have an interest in what they do. Practice is not just a question of knowledge but also a question of identity, position, identity and power (Jørgensen, 2007; Flyvbjerg, 1998). Politics is closely associated with being an actor. Power is thus not to be understood as a negative phenomenon but as a concept, which highlights the forces of connections which are embedded in practices, and which condition what can and cannot be done.

As a third point we elaborate how we can research these development projects. Concretely we propose a method of mapping where we trace associations and connections as they unfold in the projects. Mapping is not to be understood as a snapshot in any given moment. Rather mapping is thought of a description of dynamic and evolving sets of relations, as assemblages in the making; a mapping of the social as it continuously created. It follows that we do not expect a linear story to unfold but rather expect a rhizomatic network of stories where actors not only position themselves differently but may also change position during the process.

*Sustainability - Climate Change, Environment and Energy*

## **BIOTECHNOLOGY DRIVING THE LIVING ARCTIC: ARCTIC BIOECONOMY II – BIOTECHNOLOGY**

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The Arctic faces both great challenges and possibilities in the near future. One of the main drivers of change in the Arctic region is changes in population, especially due to lack of job opportunities and monotonous industry. Therefore, the Arctic Region is experiencing brain drain where highly educated individual are not returning after seeking education. This holds also true for women, both educated and uneducated resulting in low birth rate. To reverse this development, new opportunities are needed.

The GDP of the Arctic Region is highly driven by the bioeconomy, especially in the West Nordic country (Greenland, the Faroe Islands and Iceland) (Smáradóttir et al., 2014). Biotechnology is a valuable tool possible to use in creating new job opportunities related to the bioeconomy by e.g. increasing value of raw material by creating valuable ingredients for food, feed and industry as well as replacing oil based feedstock. Therefore, by using biotechnology as a tool to support the bioeconomy and emphasise on locating the research in the Arctic region, this would enhance infrastructure of the Arctic region mitigating problems such as brain drain and gender equality in the Arctic and effect the economy in a positive way. Strong emphasis on the bioeconomy

would also create more sustainable industry harmonising with the environmental sector so that both would benefit further maintain the pristine image that is so valuable for the Arctic region.

The project Arctic Bioeconomy II – Biotechnology is supported by the Nordic Council of Ministers, AG-Fisk and other Nordic bodies and will look at feasible biorefinery feedstocks available in the region and opportunities to create multiple value streams from such resources. Emphasis will be on utilizing waste streams from traditional industries with the goal of minimizing waste and maximizing value and on underutilized natural resources, including macro-algae that. Macro- and micro-algae can be used as biorefinery feedstock and especially micro-algae biomass can be produced specifically for biorefinery utilization. The project will focus on utilizing the genetic-recourses in the high North that is extensive and unique due extreme environmental conditions and geological uniqueness of the North.

As a result of the project, the Arctic region will be better equipped facing the future changes and better able to build up infrastructure, create new jobs for highly educated young people. The economy will benefit in a green and sustainable way maintaining the pristine image that is so valuable for e.g. marketing, tourism and food production in the Arctic region. Further, in order to maximize the potentials of the bioeconomy and use of biotechnology, interdisciplinary cooperation in the form of e.g. Centre of Excellence should be formed in the Arctic Region, focusing on combining environment, economy, social sciences, climate change research and biotechnology with industry and production.

*Role of Social Networks in Regional Development*

## **KNOWLEDGE NETWORK ANALYSIS AND CLUSTER DEVELOPMENT**

**Sándor Juhász, University of Szeged, HUNGARY**

Clusters and the networks behind them are highlighted research areas in regional economics. The role of concentration and specialisation has been investigated since decades. The theory of agglomeration economies emphasized the importance of externalities on the development of a region. Based on these notions clusters are regarded as the motors of local economies. Studies concerning about regional development explain many phenomenon with networks – like information exchange, knowledge flow, clusters, innovation or industrial relations – but until very recently these networks have been rather unformalized and sometimes only metaphorical. How these complex relationships really formed and shaped were not much discussed until very recently. The interest in knowledge networks as showing the flow of innovation related knowledge are intensified with the spread of the network analysis methods. The main question of this study is how knowledge network analysis can contribute to the development of clusters. After the overview of the significance of regional clusters and local networks in regional development, the role of knowledge networks is presented with the help of analysing the potential printing and paper product cluster in the region of Kecskemét in the center of the great Hungarian plain. I would adjudge the importance of knowledge network analysis on the basis of a primary research experience.

Knowledge networks link firms through the transfer of innovation-related knowledge, aimed at the solution of complex technical problems. These networks thus are based on the transfer of knowledge, which occurs informally for problem solving and is promoted by the local community of technicians, entrepreneurs and other regional actors. The knowledge flow between firms of the printing and paper product cluster of Kecskemét was explored by a questionnaire involving 26 enterprises. The research is mainly based on the methods of network analysis featuring the structure and the main actors of the network. However, the research focused on the importance of the knowledge network in the cluster development, it also has some very interesting findings on the influence of historical aspects on cluster network evolution and also on the effect of spatial proximity in a micro space.

The main conclusions of the study are that knowledge network exploration can help to examine the local embeddedness of the clusters, the type of connections between the firms, the structure of the network and also the identification of the most influential actors. Knowledge network exploration as a method can help to understand clusters better and supports the preparation of specialised cluster development.

**PRO-POOR LOCAL DEVELOPMENT IN THE LIGHT OF THE CAPABILITY APPROACH: THE CASE OF A HOUSING PROJECT IN HUNGARY**

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**Zoltán Bajmócy, University of Szeged, HUNGARY**  
**György Málovics, University of Szeged, HUNGARY**

In the theoretical and practical debates about poverty reduction the human development and capability approach (CA) of Amartya Sen has gained significant attention. CA provides such an open-ended approach that may be able – at least partially – to integrate the numerous aspects introduced by the various disciplines (economics, sociology, psychology, economic geography etc.) dealing with this issue.

Present paper fits into an emerging stream of literature that approximates the human development and capability approach and the literature of regional and local development (rooted in regional science). The novelty of our approach lies in (1) the application of the results of the CA regarding poverty reduction in regional science, (2) the framework of analyses we developed on this basis, and (3) carrying out empirical analysis on the basis of the CA in a relatively high income region.

The objective of the paper is to suggest a framework on the basis of the CA for local development, which comprises the minimum set of aspects needed to consider in poverty reduction initiatives; and to analyse the practical applicability of this framework through an empirical case in Hungary. Through interviews conducted with local decision makers, experts and CSO representatives, we analyse how the suggested aspects emerge in the general thinking of stakeholders. Then we examine how these aspects emerge in the stakeholders' view about a given case: a planned housing project for disadvantaged people in Szeged, Hungary.

We conclude that the expansion of capabilities (the actual freedom to carry out valuable doings and beings), which serves as the objective in our framework, is in line with the various knowledge and experience of the interviewees. However, going by the interviews, it is not unequivocal how to actually meet the goal. It is also apparent that the aspects present in our framework are not considered in the same way and to the same extent when thinking about poverty in general or when forming an opinion about a given case.

**THE IMPACT OF ACCESS TO EXTERNAL FINANCE ON FIRM RELOCATION DECISIONS. EVIDENCE FROM POST-CRISIS GREEK FIRM MOVEMENTS TO BULGARIA**

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Several aspects of the economic and institutional framework have been investigated and have been found to significantly affect firm relocation, which has been a major topic of economic geography research agenda. These aspects, such as labour and transportation cost, determine the profitability of the location. It is well established in economic geography literature that firms dynamically relocate to the most profitable territory. Most studies have been conducted under conditions of economic growth. However, the current economic crisis has been changing the environment under which firms operate and, thus, seems to affect firm relocation that is a dynamic process. Firms seek resolving crisis by deciding to, among others, relocate to more profitable or low cost territories in the context of the changing environment. Specifically, the economic crisis has resulted in many economies in economic decline, disinvestment and drop of external finance provision.

Focusing on the latter, this paper contributes to economic geography literature by investigating the various ways that access to external finance affects firm relocation decisions, which has been rather overlooked by economic geographers. External finance is among the most important issues related to firm operation as it facilitates production. Furthermore, in times of economic decline access to external finance becomes determinant for firm survival.

In the context of the changing economic and institutional conditions as a result of the crisis, the significance of some aspects that affect firm relocation decisions may change. On the other hand, some others may emerge as elements that significantly affect firm mobility. This paper argues that one of these elements is the access to external finance in the broader context of the important banking troubles as a result of the current economic crisis.

The aspects of the economic and institutional context that affect firm movements are explored in order to approach the research aim of this paper. A comparative analysis between pre- and post-crisis firm movements from Greece to Bulgaria is employed. These two economies have been differently affected by the current crisis.

Greece provides enough evidence in order to shed light on the impact of access to external finance on firm relocation. Firstly, Greek firm movements to Bulgaria have recently increased as firms could not stand the risky economic and institutional environment of Greece. Specifically, while 1,000 Greek companies were located in Bulgaria in 2006, more than 3,000 Greek firms, especially manufacturing and services SMEs, were in Bulgaria in the end of 2013. Secondly, the reason for this is that Greece is the EU national economy that has been mostly affected by the crisis. Thirdly, in this context, huge lack of external finance has emerged in the last five years. Finally, access to external finance merits discussion regarding its impact on firm relocation decisions especially in Greece in the view of the fact that the Greek SMEs have historically been credit-dependent and greatly indebted.

The data is based on a fieldwork study in Bulgaria. 176 questionnaires and 72 interviews were conducted with owners of Greek SMEs in Bulgaria. These firms have moved to Bulgaria in both pre- and post-crisis period allowing comparisons of the process in the two distinct periods. Qualitative analysis is employed in order to investigate the various ways that access to external finance affects firm relocation.

*Territorial Governance and Regional Leadership*

## **THE IMPACT OF LEADERSHIP AND PLACE IDENTITY ON ENTREPRENEURSHIP IN CEE PERIPHERIES: A COMPARATIVE CASE STUDY IN THE REPUBLIC OF ESTONIA**

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During the last decades, intensive economic restructuring has been taking place in Central Eastern Europe. As a consequence, a lot of peripheries are in the need to find new growing business sectors, create sustainable employment opportunities in order to guarantee population persistence. In this context, some researchers have advocated the idea of the positive impact of place identity and strong leadership on the attractiveness of a place for potential inhabitants, entrepreneurs, investors and labour (Spilling 1991; Oliveira et al 2010). So far, place marketing initiatives and knowledge economies have considered the emotional attachment of inhabitants/entrepreneurs with 'their' places and the importance of leadership in the economic development of peripheries only to a small extent.

In my analysis I therefore want to focus on place identity (sense of place), leadership and entrepreneurship in peripheries. The main aim is to scrutinize the link between the previously mentioned factors. Lynch (1960) defines place identity as something, which creates uniqueness or difference to other places and that can be recognized by a special identity that ascribed to this place. Hence, place identity determines the perceived uniqueness of and cognitive connection with the place (Jorgensen and Steadman 2001). Dixon and Durrheim (2009) argue that the question who we are is connected to the questions where we are and where we belong. It is the sum of beliefs, feelings and ways of behaving, which come forward in this environment of being connected physically and spiritually to a place (Winterton and Warburton 2012). The results of my study on leadership and identity in the Estonian regions of Noarootsi and Vormsi proofed place identity to be an important factor in local development (Kindel 2014). Another potentially significant factor is leadership. The argument is that the existence of strong and charismatic leaders in places can enhance and maintain a strong identification of community members and at the same time enable the creation and persistence of a positive place image, which will eventually attract a critical mass of new inhabitants and entrepreneurs. According to Bass' leadership theory in economics, three types of leadership styles can be identified: transformational,

transactional and laissez-faire. From the territorial identity point of view the transformational leadership style should be most effective, as it helps to broaden and elevate the interests of the community. Transformational leadership generates awareness for and acceptance of the purposes and mission of the group and stir group members to look beyond their own self-interest for the common good (Bass 1990). The research on Noarootsi and Vormsi raised the question, if the sense of place influences the choices of leaders and entrepreneurs in peripheries. Therefore I plan to focus my analysis on the following question: Are places with strong identity and leadership more receptive to entrepreneurship? In order to find answers, I want to compare four places in Estonia, two of them are well known by their strong territorial identity (Setomaa, Saaremaa) and other two without (Viljandimaa, Jõgevamaa).

*Innovation and Knowledge Economies*

## **DIGITAL MEDIA 'SOFT STARTERS' IN THE ENTREPRENEURIAL CITY-REGION: HUMAN CAPITAL AND GLOBAL INNOVATION NETWORKS**

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**Ian Dowson, UNITED KINGDOM**

The availability of local resources and institutions for supporting entrepreneurship and innovation capability determines the competitiveness of firms and city-regions. The entrepreneurial decisions are embedded socially, culturally and functionally in particular institutional contexts. Entrepreneurs discover resources and assets as they create new ways of “using assets to produce goods” and services and respond to new market opportunities. However, there is little knowledge on “how entrepreneurs, through experience, develop entrepreneurial knowledge that enables them to create entrepreneurial opportunities to organise and manage new ventures” (Karatas-Ozkan, 201: 879). There is a dearth of research investigating how nascent entrepreneurs gain access to a variety of resources that they need, how they learn to combine these resources in new ways, and thus turn these into new knowledge, new opportunities, new businesses, which will arguably contribute to regional or national competitive advantage.

Companies tend to acquire new technologies and competences that align with their business models (Gassmann, 2006), and in particular, entrepreneurial firms acquire new resources and build new business models as new business opportunities arise. A growing number of studies focus on the networks in which a firm is embedded, examining the network relations of spin-offs and their social capital formation (see Soetano and van Greenhuizen, 2014; Anderson et al., 2002; Anderson et al., 2007; Alvarez et al., 2009; Walter et al., 2006). In order to understand the formation of networks and mechanisms through which entrepreneurial firms grow, the variety of combined resources and perceived opportunities of entrepreneurs have been deemed to be of value, by drawing on entrepreneurship literature and resource-based theory (Alvarez and Busenitz, 2001).

In order to understand a variety of business trajectories and resource mobilisation processes, building a further analytical framework is needed especially in order to understand the relationships between local institutional environments, start-up firms' business trajectories and firms' heterogeneous resources including the combination of networks and inter-organisational linkages. This phenomena is rooted in a specific environment, as a number of authors demonstrated that local skills, labour markets, specialised services, mutual trust and personal relationships - among other factors.

In this light, this paper focuses on the processes of entrepreneurial capital formation and networks and interaction between firms. The findings are drawn from a case study method (Yin, 2003) within one city-region with sub-sets of firm case studies conducted between 2011 and 2014. The choice of case study method is justified as many of the interactive aspects of entrepreneurship and growth, such as networking and other institutional processes, can be better understood through qualitative analysis, especially by means of case studies. The research was designed in order to illustrate the particular context of the entrepreneurial city-region, processes and the nature of networking activities of start-up firms, their characteristics, and the ways in which inter-organisational relationships are developed and resources are mobilised.

The illustrative case study in this paper focuses on digital media start-up communities and the evolution of entrepreneurial eco-system in London with global networks. The paper highlights different forms of knowledge that underline the human capital formation of the start-up communities, and how new forms of networks connect different types of knowledge bases and skills - leveraging the resources of nascent “soft starter” entrepreneurs. London’s Silicon Roundabout provides a model of an entrepreneurial city-region, where different types of resources, knowledge and skills are combined by attracting highly educated talents including PhD graduates from top research universities in the UK, US as well as elsewhere.

The findings in the study show that deep analytical knowledge is networked through other intermediary knowledge, building entrepreneurial capital and absorptive capacity of the city region. The conceptual model is developed identifying a variety of business models and growth trajectories of digital start-ups, based on the case study firms, which provides a platform for a further empirical analysis. The paper concludes by identifying future areas of study and critically examining the roles of policies and support mechanisms for entrepreneurial processes, in particular, for the sustainable growth in less favoured regions and city-regions.

*Economic Resilience of Firms and Territories B: Local System Approaches*

## **THE ECONOMIC RESILIENCE OF UK REGIONS**

**Anastasios Kitsos, Plymouth University, UNITED KINGDOM**

**Paul Bishop, Plymouth University, UNITED KINGDOM**

In recent years, the concept of regional resilience has entered the research agenda of economics and gained significant popularity. Regions have to face the adversities not only of natural or man-made disasters but also the increasing financial pressures posed from economic downturns. Due to its multi-faceted nature and its potential impact, research on resilience is of interest not only in the field of economics but also in the social sciences and policy realms.

Due to its early stage of development and its historic evolution, research in economic resilience is facing two crucial issues. The first is that of operationalization and the different approaches of one, multiple or no equilibria. The second problem is that of measurement and in particular the choice between single variables or composite indicators in order to gauge the resilience of places.

The current research on economic resilience is still unclear on whether the concept should be viewed as a return to a previous equilibrium point, a movement to a new equilibrium point or as a continuous process of adaptation and improvement. The different approaches signal different methodologies and methods in gauging the resilience of a place. Equilibrium approaches focus more in quantitative treatments while adaptation views use more qualitative or mixed methods. However, it is argued that resilience is such a concept that, irrespective of its conceptualisation, its effects should be evident on growth or social development variables.

The limited quantitative empirical studies on resilience look into the topic by measuring the effects of economic pressures on local labour markets or income. Employment and/or income data are used and manipulated in different ways in order to reveal the impact of economic pressures in different localities. Most of these studies use one or two single variable proxies to represent the resilience performance of an area. However, a multi-faceted concept such as regional resilience can potentially be better measured by a composite indicator, rather than a single proxy.

This study explores the possibility of creating a composite indicator and examines its suitability against single proxies in better addressing the issue of the measurement of resilience. It will be argued and tested that, even though employment data may be the best available single proxy of regional resilience, it may not fully capture the impact of a crisis on a local community. The impact, as well as the management of economic pressures is a multi-dimensional phenomenon which may be better represented by a multi-dimensional variable. This composite indicator of regional resilience will look into the performance of places across the UK and will allow comparisons among regions within the country. Using EU NUTS II classification regions and a variety of



variables such as employment data, percentage of population at risk of poverty, RandD and others, the aim is to measure how specific places have responded to the 2008 crisis.

In order to do this, the issue of the operationalization of regional resilience should be addressed. The study suggests an operationalization which compares post-crisis performance to the pre-crisis one. This is not a position on the one-multiple-none equilibria debate but rather the recognition that a resilient region should be doing equally well or better than it did (or than others) during the pre-crisis period. This is subject to the adopted measurement variables as well as the country conditions within which the regions operate.

The outcome of this study is expected to assist progress on the issues of measurement and operationalization of regional resilience. In addition, it will serve as the basis for the further exploration of the determinants of resilience which are the main reason for research on the field. In this way, the discussion can then progress on the resilience enhancing agenda.

*Innovation in 'ordinary' regions and 'boring' sectors*

## **THE RIGHT TO INNOVATION OF LESS FAVOURED CITIES. THE CASE OF GRAN SASSO SCIENCE INSTITUTE IN L'AQUILA, ITALY**

**Georgios Koukoufikis, Gran Sasso Science Institute, ITALY**

The innovation dynamics are rather strong in advanced regions or close to capital cities and large metropolitan areas. On the contrary, the less favoured regions and smaller cities, due to lack of administrative capacity, agglomeration and specialized economies, and innovation culture, struggle to promote the creation of knowledge and attract highly skilled human capital. Searching for good practice examples, literature of urban and regional innovation has focused mainly on the first category of inherently dynamic and successful places, when analyzing innovation dynamics. However, it is not only these kind of places that have the right and the opportunities to innovate and it is not only interesting, but also necessary to perform such research also for less obvious and "lucky" regions and cities.

Recognizing this gap in the literature, this paper is focused on less favoured cities that have chosen to focus on innovation as one of their development goals. The aim is to provide empirical evidence of the decisions and actions put in place by key actors to overcome the inhospitable environment and implement a vision of a city driven by knowledge and innovation.

In order to address this aim, we firstly analyse the factors affecting endogenous economic growth and innovation under the concept of knowledge economy and we identify the public actors, institutional arrangements and human capital as crucial drivers of innovation in cities. We then focus our research on the case of Gran Sasso Science Institute (GSSI) in L'Aquila, Italy, seeking for empirical evidence on these key concepts. L'Aquila is a medium-sized city, devastated by a major earthquake in 2009. A development policy that was proposed and implemented under the umbrella of a post disaster relief agenda suggested the creation of a centre for advanced studies (GSSI) in the area. The GSSI's development process, from the conceptualization and planning to its final implementation phase, is being followed and analysed through field work. We investigate its necessity; the particularities faced in the implementation phase and the finally attracted human capital's behaviour patterns.

To do so, interviews with key officials of the Institute were carried out to demonstrate their point of view, extract backstage data and present their vision for both the Institute and the city; the difficulties occurred during the implementation phase; the point to which the Institute has fulfilled until now theirs and the local community's expectations; as well as the challenges a new research Institution has to overcome in its first steps, trying to balance between academic excellence and the forces pressing for more entrepreneurial institutions in the globalised knowledge hunting competition. In addition, a questionnaire was used as a research tool and was distributed among the PhD students and the rest of the research personnel of the Institute. This helped us understand the motives of high skilled human capital, giving insight of their personal

strategies; what attracted the people to a city that after a disaster lacks most of the basic elements and which are their thoughts and feelings from their experience so far.

The positive and negative reactions of the local society, institutions and authorities during the planning and implementation phase and the way these evolved leading to the final acceptance and incorporation of the Institute in the local development plans provide useful insights on the mechanisms needed to be put in place for the promotion of innovation in a physically, socially and economically striving city. Furthermore, after the elaboration of the data useful behaviour patterns come up, helping towards a better understanding of the human capital's dynamic flow in the knowledge economy that up to a point contradict to popular existing theories.

*Territorial Governance and Regional Leadership*

## **LEARNING IN RURAL REGENERATION PARTNERSHIPS**

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**Stefan Kundolf, Thünen-Institute of Rural Studies, GERMANY**

Since the beginning of the 1990ies, territorial partnerships are increasingly used as a governance instrument for restructuring rural and urban areas. The LEADER approach with its Local Action Groups is a famous example in the European Union and OECD has promoted the New Rural Paradigm since 2006. The Single Regeneration Budget in Great Britain or Regionen aktiv in Germany were similar programmes on the national level. These bottom-up or endogenous processes include the decentralisation of regeneration policy and the integration of relevant local actors coming from the public, private and community sector. Policy planners, thus, hoped to make regeneration processes more effective, efficient, and legitimate than the traditional top-down approaches. Locally designed projects should be more innovative and meet the local demand better, because different actors share their local knowledge and co-ordinate their activities using networks. However, the reality is often disappointing. The introduction of the new governance mechanisms has demonstrated at least two shortcomings. Firstly, superficial decentralisation was actually a shift to multilevel governance and reinforced central power, because hierarchical power was transformed into more subtle forms using managerial instruments like yardstick competition, project application guidelines, budget control, management by objectives, evaluation and monitoring. Secondly, local actors require the sufficient institutional capacity so that they have the knowledge, human resources, organisational structures, mutual trust and common goals needed to be capable of seizing new discretion.

In order to explain the restricted success of regeneration partnerships, the central argument is that all actors have to learn how to use the new instruments and built the capacity needed. On the other hand, the effects of this governance form should not be measured in pecuniary terms. The main effect should be rather soft like social capital, new co-operations, and mutual learning. Thus, learning lies at the heart of regeneration partnerships. Because of partly unconscious psychological processes, it seems, unfortunately, very difficult to provide empirical evidence for learning and most studies use qualitative case studies to document such processes. Against this background, we ask the research question: What do regional actors learn in rural regeneration partnerships. We define learning here as a process of different levels (individual, organisational and network learning) and of different reaches (single-loop, double-loop and deuterio learning).

To answer the question, we present empirical findings from the on-going evaluation of a pilot programme in Germany. The German Ministry of Food and Agriculture, which is in charge of rural development policy, has initiated the programme in 2011 to motivate peripheral rural districts to experiment with new strategies and ideas regenerating their region. In a yardstick competition, four regional partnerships were selected to implement their strategy. The programme aims at learning and institutional capacity building. Therefore, we surveyed learning processes in all four partnerships at the end of the programme period in 2014. We used a standardised online questionnaire to collect data from all involved actors including members of the decision-making body as well as project holders. Our hypothesis is that learning occurs particularly on the individual level and is rather instrumental in order to use the provided funding scheme. As a result, learning in

partnerships remains dependant on key persons, and the reach of reflection as well as capacity building seems superficially.

*Innovation and Knowledge Economies*

## **THE CREATION OF KNOWLEDGE SHARING INITIATIVES AND NETWORKS IN ENTREPRENEURIAL FIRMS IN THE OIL SUPPLIER INDUSTRY**

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**Elisabet S. Hauge, University of Agder/Agder Research, NORWAY**

The aim of this paper is to discuss knowledge sharing initiatives among entrepreneurial firms in the oil and gas sector in four Norwegian regions within an evolutionary economic geography perspective (EEG). According to EEG certain characteristics in a business environment sets guidelines for a firms' practice. How firms are creating knowledge sharing initiatives and networks for innovation is amongst other determined by the structure of the region (rural, metropolitan and specialized industrial)(Isaksen and Trippel 2014). Rural regions are often characterized by organizational thinness, while metropolitan regions are in general often characterized by organizational thickness. Results from previous studies shows that organizational thin regions are prone to create formal networks when they wish to cooperate with other parties about innovation. This is because firms in organizational thin regions (rural regions) often have to go out of the region to find other firms and research- and educational environments they can cooperate with. For firms in organizational thick regions, the need for formal cooperation and networks is not as important. These firms are often claimed to have easier access to research- and educational environments and other firms with different type of knowledge. They thrive on knowledge that is shared face to face and the local buzz in the region. Based in these statements and argumentative logic the paper aims to answer the research question; how do entrepreneurial firms within the oil supplier industry initiate and realizes knowledge sharing initiatives and knowledge network within four Norwegian regions?

The previous studies in this field have been quantitative and not specified by sector(Isaksen and Trippel 2014). By asking this research question the aim is to contribute to a better understanding of the complexity of implications thin and thick organizational regions have on cooperation for innovation by using qualitative data and sector specified research units.

The paper will present an explorative investigation strategy. The individual entrepreneurs and the entrepreneurial processes in 5 firms in 4 Norwegian regions are the research units. The research method will be in-depth interviews and analysis of existing data. The paper is a result of a research partnership founded by the VRI project 'Path development in different regional settings' financed by the Norwegian Research Council.

*What Place for Climate Resilient Regions? Lessons Past, Present and Possible Future Trends*

## **'GLASS HALF EMPTY OR HALF FULL?' THE OPERATIONALIZATION OF RESILIENCE AS A GOVERNANCE BUZZWORD FOR CLIMATE ADAPTATION IN UK CITY-REGIONS**

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**Gillian Bristow, Cardiff University, UNITED KINGDOM**

Using empirical data from key interviews from different city-regions across the UK, this paper assesses the way in which 'resilience' as a term has been operationalized by an array of governance and policy actors working on climate change related issues. We find that resilience has become an all-encompassing buzzword in the governance of climate at the local level in the UK. This can be assessed in two distinctly polarized ways. On one hand, that using resilience as an all-encompassing term manages to effectively (re)align particular governance actors into coherent climate adaptation strategies at sub-national scales of policy and governance (the glass is half full); or on the other hand, that the use of resilience as an all-encompassing term 'hollows out' adaptation

from local climate strategies by ostracizing particular governance actors working specifically on climate adaptation issues (the glass is half empty). This paper adds new empirical and theoretical insights into how climate adaptation and resilience is effectively managed and operationalized as a climate policy and governance construct at sub-national scales in the UK.

*Regional Territorial Development Policies on the move in Emilia-Romagna and other European Regions*

## **PROPOSAL FOR A MODEL OF LOCAL DEVELOPMENT SYSTEMS FOR THE PUGLIA REGION. TOOLS, STRATEGIES AND SCENARIOS FOR THE LOCAL DEVELOPMENT STARTING BY EMPIRICAL EVIDENCE**

**Marilena Labianca, Università del Salento, ITALY**

The strategy for Europe 2020 proposes a smart, sustainable and inclusive growth, but for this to be effective it needs to be integrated, comprehensive, multi-level and draws on active territoriality. In recent years, in the field of social studies, and especially in the geographic debate, the ineffectiveness of top down policies and the inadequacy of administrative boundaries has been recognized. The latter, in many cases, has been chosen as the basis for the implementation of development policies, especially for the so-called regions lagging in development of Italy. Specifically, among these territories which are defined by their lagging development, under the Convergence Objective of the last programming cycle (2007-2013), Puglia region also falls into this category in the new programming cycle spanning 2014–2020. The region, in fact, in recent years, under the pressure of the European Union, has launched a number of initiatives and programs aimed at fostering the endogenous development, focusing on democratic participation, strategic planning and on promoting the territorial identity, but with results not particularly encouraging for several reasons. The study of territoriality and its ability to become operational, however, requires the development of a model able to identify and describe the socio- territorial potential existing and build from it, territorial systems able to become active in policies of sustainable development, particularly in marginal and rural areas. Our previous research focusing on the region (see De Rubertis, 2010; 2013; 2014; Labianca, 2013; 2014), reveal the inadequacy of policies and of the programming tools for several reasons, such as considering the territory a mere passive support of policies and interventions; the systematic lacking of coordination, coherence and integration between tools that insist on the same territory (between actors and areas of different policies); the strong roots of traditional models of governance; the absence of a development project that considers the real potential of the regional system and of social networks. Therefore, based on previous and current research, this study aims to identify potential territorial systems in Puglia, and, at last, to propose scenarios and operational guidance, and in terms of governance. The study uses both a qualitative and quantitative approach that should allow to identify areas where it is more likely that the articulation of development policies are effective, since they take into account the real opportunities, resources, problems and potential of the territory considered in its complexity and peculiarities. The study also makes use of results from empirical evidence.

*Cities of the Mind: Subjective Wellbeing in Urban Regions*

## **REGIONAL QUALITY OF LIVING IN RELATION TO POPULATION DENSITY AND GDP/CAP**

**Piet Lagas, PBL Netherlands Environmental Assessment Agency, THE NETHERLANDS**  
**Frank Van Rijn, Netherlands Assessment Agency, THE NETHERLANDS**

This paper sets out the conceptual framework and results of the Regional Quality of Living. As part of this project, a Regional Quality of Living Index (RQI) was developed for benchmarking European regions. This RQI for non-business-related indicators may help to improve the attractiveness of regions, thus attracting people or companies to settle in those regions. A total of 25 indicators in nine categories were calculated to determine the RQI score and ranking of European NUTS2 regions. The nine categories are: Governance, Social Environment, Purchasing power and employment, Health, Education, Recreation, Public services, Natural environment and Housing. Data from Eurostat, Espon, Worldbank, European Social Survey and several other

datasources were used to calculate the regional scores for these categories and to characterize the regional Quality of Living for European regions.

Results show a non linear relation between RQI and and Gross Domestic Product per capita (GDP/cap) and population density. Significant correlation is found between RQI and GDP/cap. However below a value of about 18000 GDP/cap no RQI scores higher than 6 are found. Probably there is a some kind of threshold value that should be reached. A possible explanation could be that regions with less developed economies at first have to ensure their basic needs like transport infrastructure (Public services), basic Education and Health care services and after that the focus is on other categories of Quality of Living like Housing, Recreation, Social environment and (higher) Education.

Between population density and Quality of Living a relative weak but significant correlation is found. However at higher population densities this correlation weakens. Best results for RQI are found for population densities between 500-1000 inh/km<sup>2</sup>. It seems that a certain population density is needed for a high level of for example Education and Public services but that at very high population density the disadvantages like lower scores for Natural environment or Social environment become more dominant.

In order to find similar regions the European regions are divided in 11 clusters with comparable values for GDP/cap and population density. For GDP/cap as well as population density respectively high, moderate, and low values were identified resulting in 9 clusters. Furthermore there were two clusters with regions with respectively very low population density or very low GDP/cap. The highest scores for RQI are realized for the regions with high GDP/cap and high population density.

The highest RQI scores are found for regions in Switzerland, Sweden, Norway and the Netherlands. A wide divergence in regional scores inside the country, is observed for some countries, such as Italy and Spain, with the southern regions ranking lower than the northern. An other conclusion is that most of the regions with a capital city offered a better Quality of Living.

An update of the RQI scores with new data for 2014 will be presented, showing which regions improved.

*Have Cluster-based Economic and Regeneration Policies Lost their 'Buzz'? Where are we Heading...and where should we be Heading with Regard to Cluster Research and Policy?*

## **CLUSTERING AMONGST ENTREPRENEURS IN GENTRIFYING NEIGHBOURHOODS: AN ONGOING BUSINESS AND POLICY PRACTICE**

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**Michael Friesenecker, University of Vienna, AUSTRIA**

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The concept of 'economic clustering' can be considered a vehicle to stimulate value creation, and to scale and pin this down in order to enhance local (district) wealth and employment, and as district branding; in this capacity it is an important 'travelling policy concepts'; clustering also stems from collective business practices aiming to build up 'club goods', to benefit from network externalities and to strengthen a cluster identity and brand, at a local scales. The concept and discourse of clustering thus lend themselves for an interesting study of how interpretations and measurements of neighbourhoods economics underpin, as well as draw on, certain business and policy practices.

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#### Introduction

Home of Italy's stock exchange, the city of Milan - the second-most populous city in Italy and the capital of Lombardy - is an industrial powerhouse and the internationally accepted capital in fashion and design. Innovation measured in terms of granted patents shows a strong concentration in the province of Milan (Capello et al., 2001). The numbers of Italian patents' applicants resident in the province of Milan is more than the 80% of the total. RandD expenditures in Lombardy count for as much as 22,5% of the total at national level and the researchers are 21,1% of the national total (Istat, 2013).

Milan is considered one of the main startup cities in Europe and the first in Italy. Despite it is a matter of common perceptions instead of a scientific analysis, rankings on websites counting startups to measure the ability of a city to sustain the generation of a community of entrepreneurs -like Crunchbase and AngelList- found in Milan the best spot in Italy. Despite the city is far away from the top locations in terms of new business opportunity, corresponding to Berlin, London, and Tel Aviv, Milan benefits from a network of innovative tools such as incubators to facilitate entrepreneurship (Colapinto, 2011b), as well as it is home of many high technology firms, which lay on university departments for technology transfer (Friedman and Silberman, 2003).

Seven universities are located in the urban area of Milan. At least four of them adopt policies sustaining entrepreneurship, have created a Technology Transfer Office (TTO) and have generated academic spin-offs (Colapinto, 2011a), which are defined as new companies started by former or current university employees, researchers, or students founding their own firms in order to commercially exploit their research and inventions. Several studies have already explored the relevance of academic spin-offs in Italy (Antonelli, 2004; Baroncelli et al., 2000; Baroncelli, 2001; Cesaroni et al., 2005; Chiesa and Piccaluga, 2000; Dell'Anno, 2010; Grandi and Grimaldi, 2003; Lazzeri and Piccaluga, 2012; Palumbo, 2011; Piccaluga, 2011). Often spin-offs take advantage of available external managerial skills and incorporate them in the venture. Cluster theory expects to find the most available managerial experience in the relative technological specialization of the city (Niosi and Bas, 2001; Saxenian, 1996). Thus Milan is a suitable location for the development of academic spin-offs.

Research methods and sample .

We collected data on the academic spin-offs generated during the 14 years between 2000 and 2013 in the city of Milan. The population consists of all 74 university spin-offs companies created within four Milan universities. We have sent a questionnaire to the academic entrepreneurs which provided responses from 34 spin-offs, corresponding to a response rate of around 45% percent of the total population.

We used both published data and survey responses to study the start and early development of academic spin-offs. Our hypothesis inquire the dependence of academic spin-offs on the existing regional advantage of industries in terms of technological relatedness, e.g. whether the impact of the introduction in the founding team of an industrial partner is conditioned to the availability of managerial skills in the location according to its industrial advantage.

#### Results and discussion

Academic spin-offs imply that at least one entrepreneur joined the venture thanks to her relationship and/or affiliation to the university (as we previously specified), further members of the entrepreneurial team often come from other fields than academia. The normal entrepreneurial team profile, which on average comprise 4.75 members, includes 0.85 non university partners and 3.9 academic entrepreneurs for each spin-off.

Our results show that the spin-offs performance is positively correlated to the industries which are overweighed in at local level in comparison with the normal distribution across the country varies according to the relative industry advantage of the local environment. Industrial expertise can be relevant to the development of competences. Then, interacting with industries will influence spin-offs performances when they correlate with the relative industrial advantage of the local setting. It means that in a given environment

academic spin-offs tend to concentrate in some industries, those which count more players than the national average. Rational for this evidence may be the larger availability of managerial competence in the fields which show an higher degree of concentration in the specific local environment.

Universities may improve their ability to generate new business venture through well-designed policies and procedures. However, the spin-offs performance seems to be strongly influenced by the interaction with the local environment, i.e industries concentration and consistent competences and skills available at local level.

*Publishing Regions and Cities*

## **PUBLISHING REGIONS AND CITIES**

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For the past two decades, the Regions and Cities has been the book series of choice for any academic looking to publish in regional and urban studies, economic geography, rural sociology, business competition and a host of other interdisciplinary areas across the social sciences. The last five years have witnessed a real book with the likes of Richard Florida, Jennifer Clark and Dominique Foray choosing to publish in the series and Susan Christopherson taking over as Editor in Chief. This paper will analyse the way the series has mirrored the increased global outlook of the Regional Studies Association and will provide tips on how to submit a proposal to the series.

*Territorial Governance and Regional Leadership*

## **LOST IN TRANSLATION – THE FATE OF REGIONALISM? AN ANALYTICALLY REVIEW OF OECD’S FOUR GROWTH DRIVERS’ TRANSLATION INTO NATIONAL POLICIES FOR REGIONAL GROWTH IN ENGLAND, POLAND AND DENMARK**

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As a request from the EU parliament, OECD in 2001 came up with four drivers for national growth which the organisation and its worldwide members ever since have canonised and applied as framework of growth for national policies for regional growth. In 2005, the EU Lisbon Strategy applied the four growth drivers in securing its objectives of EU in 2010 as the most competitive region in the world. As such, many countries within EU have translated these recommendations into national policies for regional growth. Consequentially, numerous RDAs were set up or revitalized and regionalism seemingly flourished throughout Europe. But lately, regionalism has come under pressure by national government/legislators dissatisfied with the growth - or in some places the lack of it - delivered by the RDAs. Although the increased scrutiny of RDAs to deliver noticeable growth is present among the EU-members, the most concrete example of critique is UK’s abolishment and replacement of RDAs with Local Entrepreneurial Partnerships. If following OECD’s logic that growth mainly is driven by four growth drivers, the EU-members’ various institutional degree of regionalism indicate that something must have gone wrong in translating OECD’s four Growth Drivers for national growth into national policies for regional growth. The quest for better understanding the mechanisms driving and retrenching regionalism leads to the subsequent research question:

In which way are EU-members’ various institutional degree of regionalism influenced by the translation of OECD’s four Growth drivers for national growth into national policies for regional growth?

This paper examines how the growth drivers as an idea, fostered by OECD and spread to the EU-members through the Lisbon Strategy and governmental bodies, are translated into national policies for regional growth and the influence hereof on regionalism. As such, it is not, for example, an assessment of how the four growth drivers have been implemented through the various administrative tiers in different EU-countries.

To answer the research question, regionalism is defined and the different institutional degrees of regionalism conceptualised through legitimate, administrative and strategically capital which is followed up by a presentation of OECD's four growth drivers and the spreading and multiple translations hereof. This theoretical apparatus provides the framework to analyse the translation of OECD's four Growth drivers for national growth into national policies for regional growth and how this translation influences on the institutional degree of regionalism in England, Poland and Denmark.

*Role of Social Networks in Regional Development*

## **BUILDING ENTREPRENEURSHIP WITHIN REGIONS: A RESOURCE-BASED VIEW OF POLICY-INITIATED KNOWLEDGE EXCHANGE NETWORK FORMATION**

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Knowledge exchange amongst businesses is important for increasing regional productivity, innovation and competitive advantage (HUGGINS, 2008). More broadly, it is seen as a mechanism to support the economic development of regions as a whole (BRUSCO and RIGHI, 1989; STOUGH et al., 1998; LAWSON and LORENZ, 1999). These advantages have attracted the attention of policy makers interested in facilitating the development of new networks to support regional growth and increase competitiveness (LAWSON and LORENZ, 1999; OECD, 2013, 2011; MACKINNON et al., 2004). The 1990s saw various policies designed and implemented with this in mind. However, a number of these proved unsatisfactory. This led researchers to look to understand those factors which bring businesses together to engage in knowledge exchange within a region.

Recently the focus of research has shifted towards the role of intermediaries and how they are able to leverage their network resources to lubricate the flow of knowledge between regional businesses (ZHANG and LI, 2010; INKINEN and SUORSA, 2010; WOLPERT, 2002; STEWART and HYYSALO, 2008; YUSUF, 2008; HOWELLS, 2006; WRIGHT et al., 2008; NOOTEBOOM, 2003). The findings from this body of literature point to the important role of intermediaries in facilitating knowledge exchange, as well as showing that intermediaries facilitate this process through increasing communication between firms to create new regional network ties. Yet if intermediaries play such an important role in stimulating collaboration and the creation of ties between businesses, this begs the question of why policy makers are not looking more closely at intermediaries who are more able to leverage resources at a regional level. This implies that it is the choice of intermediary that is important and how they engage with a specific region. Given that policy makers continue to rely on intermediary organizations (such as policy agencies, local councils, regional agencies and local universities) to design, develop and implement new regional knowledge exchange programmes, this choice of intermediary would seem critical. Yet, in spite of the amount of work carried out little has been said about the choice of intermediary and their ability to leverage their resources for the formation of knowledge exchange networks. This is the focus of this study.

This paper is based on an in-depth study of the formation of a regional knowledge exchange network for the information and communication technologies (ICT) sector. The network was initiated by Government policy aimed at promoting regional development. A partnership of intermediaries, including a regional development agency, a local city council and a local University, were involved in designing and implementing a regional knowledge exchange network.

Through adopting a resource-based view of knowledge exchange network formation, this study contributes to the body of research which investigates key factors underpinning successful policy-initiated network formation (ASHEIM et al., 2013; PICKERNELL et al., 2007; MORRISON et al., 2003; HUGGINS, 2000, 2001; HUGGINS et al., 2008; MARTIN and SUNLEY, 2003). At the same time it also extends research which has explored the important role that intermediaries play in supporting and developing regional knowledge exchange networks and their value for regional businesses (ZHANG and LI, 2010; WOLPERT, 2002; STEWART and HYYSALO, 2008).



## **UNIVERSITY'S ATTRACTIVENESS IN RUSSIA: CAN LOCATION OF A UNIVERSITY BE MORE IMPORTANT FOR ENTRANTS THAN A UNIVERSITY ITSELF? RESULTS FROM THE MLM MODEL**

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The aim of the paper is to evaluate which group of factors: university's characteristics or regional characteristics influence more on the competitiveness of universities in their ability to attract better students in Russia. The average score of the Unified State Examination of the entrants from 449 public universities localized in 79 Russian regions was used as the proxy of attractiveness and competitiveness. This work is based on the monitoring data of the Ministry of Education and Science of Russia in 2013. The two-level model with contextual variables was applied for our purpose.

As in the linear MLM the continuous and normal distributed outcomes are preferred, the average score of the Unified State Examination has to be transformed. We divide sample on two types of high schools: budget organizations (449 observations that is 64% of the all high schools) and non-budget organizations (254 observations). The positive skewness occurs for the budget high schools scores, and it is opposite for the non-budget. Hence, we applied the logarithm transformation of the average scores for the budget high schools. From a wide range of potential explanatory variables (more than 30), the correlation with our dependent variable is more than 0.3 for three variables: the share of full-time students, the log of the total number of faculty members at the 1000 students and the log of the budget profits from research and development. We decided to use those three factors as the explanatory variables in the econometric models.

We specified a set of variables interactions. We allow for the interaction between each of the explanatory variable and those variables, which very weakly ( $> 0.15$ ) correlate with the dependent variable and at least weak ( $> 0.3$ ) correlate with our explanatory variables.

The estimated parameter for all of three explanatory variables in the sample of budget high schools were found as significant, and the university's attractiveness is positively affected by them. Those factors explained 30% of the average exam score variability. In contrast, for the sample of non-budget universities the influence of teachers' characteristics was found as insignificant. The coefficient of determination is small and equal to 17%.

Next, we estimate OLS models with interaction variables. Additional interaction variables improve the model fitting for the sample of budget organizations (from 30% to 45%). We found no interactions between innovation and other variables. In contrast, the influence of the share of full-time students is modified by two factors: the log of the number of foreign students by 1000 graduates and the log of the number of citations in the Web of Science/Scopus per 100 scientists. The higher are the level of those two variables, the higher is the impact of the share of full-time students on the competitiveness. The impact of teachers' characteristics is also affected by additional factors. We found that the impact of this variable is higher for the economic universities. We checked whether the relations between regressors and outcome is the same for all proportions of exam scores probability distribution using quantile regression. The estimated coefficient for innovation decreases between 5 and 55% quintiles. We observe significant effect of innovation only at the lower quintiles, while for the higher quintiles the effect is insignificant. We use the median of the outcome as the value, which differentiates the impact of explanatory variables. The significant impact of the innovation is proved only for the universities with lower results in the exam. The positive and significant effect of student characteristics was found only for the less competitive universities, while the effect of teacher characteristics only for the schools with the high exam scores. The coefficient of determination is much more higher for this model.

In the next step, we allow for the inequalities of the exam scores at the regional level. The difference in the universities' competitiveness between regions are measured by the random effect variance. The higher it is, the greater are the differences between regions. The results from the multilevel model estimated in the Bayesian framework using Markov Chain Monte Carlo (MCMC). The variance partitioning coefficient (level 2

variance divided by the total residual variance), which measure how the variance divides up between levels is equal to 22%. The multilevel model seems to be better than OLS as the residual variance is 11% lower for the first one.

The 70% of the total variance was explained by the universities characteristics, but we found that 22% of the unexplained variance is the result of regional heterogeneity of the universities' attractiveness in Russia.

*University Technology Transfer- The Globalization of Academic Innovation (Closed Session)*

## **UK UNIVERSITY MODELS OF TECHNOLOGY TRANSFER IN A GLOBAL ECONOMY**

**Helen Lawton Smith, Birkbeck University of London, UNITED KINGDOM**

**John Glasson, Oxford Brookes University, UNITED KINGDOM**

High profile success studies from the United States of America have long shaped the perceptions of the contribution that universities can make to innovation-led economic advance. In this paper, expectations on universities' contributions to economic and societal benefits to the country and to their localities are reviewed. It does this by placing those expectations within a conceptual framework based on the triple helix model and the regional variant, regional triple helix spaces. This allows for an analysis of national and local specifics, role of government and kinds of impact which UK universities in particular might be expected to make and how they might do it. It focuses in particular on the local case of the county of Oxfordshire and of Oxford City - with its two universities and their innovative roles and interactions within the buoyant Oxfordshire high-technology economy. It also considers the cases of Cambridge University and Imperial College in London.

While universities in UK economic policy date back decades, it is only recently that it has become explicit as a local agenda. Here we distinguish between the regional and local levels of policy making and delivery. This distinction in the UK represents a change in the political system. The regional scale in many countries represents a clearly defined area with administrative responsibilities encompassing many nodes of population and economic activity (see Howells 1999). Local here is characterised as a much smaller geographical unit with much more limited administrative powers and fewer nodes, such as a city, or in the UK, counties, which have a small number of towns and cities. We examine the rationale for this change in policy and practice and position it within the context of other reports and policies which have an impact on UK universities' technology transfer activity in the global economy since the 1990s.

Following Goldstein (2009) we ask two questions. The first is what kinds of changes in regional economic activity, or outcomes, it reasonable to expect universities to make? This is both a political as well as an academic question. The second is, how do universities in the UK stimulate economic development? We consider different types of possible activities: development of human capital (teaching), creation of knowledge (research); transfer of existing knowledge (technical assistance); technological innovation; capital investment, regional leadership and governance; and co-production of knowledge infrastructure and creative milieu. We also highlight methodological problems in estimating magnitude of impact.

*Culture and Creativity as a Driver of Regional Development*

## **CULTURAL HYBRIDISM: ENGLISH LEARNING AND THE DEVELOPMENT OF A REGIONAL CULTURAL IDENTITY**

**Raquel Lazzari Pacheco, Universidade De Santa Cruz Do Su - UNISC, BRAZIL**

Brazil has multicultural characteristics because throughout its history it has witnessed the arrival of settlers and immigrants from around the world.

The settlement process in southern Brazil happened in the nineteenth century, when foreigners from Europe including Italians, Germans, and Polish among others, were offered land to establish their colonies and occupy specific regions still to be developed.

Santa Cruz do Sul, in the state of Rio Grande do Sul, the southernmost state of Brazil, was established as a provincial colony in 1849, and settled mostly by German immigrants.

Since its settlement, the economic life centred on the production, processing and marketing of tobacco. From the twentieth century on the municipality has become a reference in the tobacco sector.

During the 1960s, social and economic factors favoured the transnationalization of the tobacco sector with the opening of the international market for Brazilian tobacco. This process resulted in the acquisition of Brazilian companies by transnational companies which are installed in this region to this day.

Based on the concept of "externalities" of Marshall (1895), a group of companies, in a given region, provide forms of organised production process supported by the economies of scale. They can also take advantage of "external effects" generated by the culture of the place, its history and the need for personal and professional improvement of the actors of that "territorialized particularity", thus bringing benefits to the region and to themselves.

In the case of the region of Santa Cruz do Sul, the presence of the companies has boosted the creation of jobs and businesses, increasing the demand for improved education and creativity of workers. Hence the companies recognize the workforce as being co-responsible for the improvement of products and processes, and there is a requirement for cultural and interactional changes relevant to their management. The cognitive aspect of the workforce cannot be disregarded, because knowledge and information are relevant, when considering the cultural content involved in the dynamics of productivity.

In the growing globalization of the industry there is a shared management, using ubiquitous information systems that permeate society, which requires a growing mediator format, seen through English.

English is still considered the "world language" because it encompasses and expresses the globalization of modern life; its worldliness preserves other languages inside this "transglossary" space, becoming the official language of international relations.

With the transnationalization of the region of Santa Cruz do Sul, there was a need to use a mediator language that embraces the two cultures: the corporate culture (global) and regional culture. This dynamic has generated a new mindset towards learning English.

Thus, the interest of the companies to provide and encourage language learning determines an investment in the "actors" of the production process and learning English has become a focal point within the region with the creation of various schools of English and companies programmes which encourage and support language study.

Immersion in learning the English language relates to the fact that a language is best learned when connected to its cultural background: language is a social system, in which we bring out a set of meanings that are already interwoven in its cultural and linguistic system.

Human beings, in this social interaction, have the ability to interpret and make sense of their social action due to various systems and codes that give meaning to their actions and that allow us to interpret the actions of others in a meaningful way. These systems and codes are our "cultures".

Therefore when learning English, there is an interaction of meanings in the life of the community in question, in which culture - the result of this social interaction- is the bond of a set of ideas, behaviours and social practices that transform this community which is constantly reconstructing its identity.

Currently, due to the presence of transnational companies, and considering the cultural mobility which occurs in any dimension of scale, people from different parts of the world come to live in this region, bringing their

culture and seeking to coexist and interact with the local culture, thus providing an exchange of values and experiences that hybridize.

This work intends to review relevant theoretical concepts of cultural hybridism, regarding the study of English language from the perspective of its contribution to the development of a regional cultural identity, in which Santa Cruz do Sul is located; to evaluate data from the company programmes which give incentive to the learning of English; and to report on the cultural experience of foreigners living in this community where English language was their initial means of communication.

*Developing Rural and Peripheral Regions*

## **HOW INSTITUTIONAL ENTREPRENEURSHIP CONTRIBUTES TO SHAPING INSTITUTIONAL PRACTICES IN DEMOGRAPHICALLY DECLINING REGIONS**

**Birgit Leick, University of Bayreuth, GERMANY**

Institutions influence regional economic development in various ways. Consequently the contemporary literature in economic geography since the “institutional turn” has acknowledged the rising importance of institutions as a factor shaping regional growth processes. More recently, economic geographers have been paying attention to processes and drivers of institutional change. Institutional change comes into play in contexts when regional economies are under transformation due to endogenous or external developments. A prototypical scenario for regional transformation is the phenomenon of demographic decline. Over the next decades, demographic decline will turn into a major challenge for many rural and peripheral regions across Europe. Particularly in Germany, ageing and outmigration of the population lead to declining total populations. Hence firms and industries that are embedded in demographically declining regional economies face rising pressures to adapt to changes associated with demographic decline. Challenges encountering firms are, for example, shrinking labour markets, shortages of skilled labour, ageing consumers and changes in the demand for locally consumed goods and services. In such constellations, institutional frameworks can be a stabilizing element for firms to deal with uncertainty arising from market environments. At the same time, institutions and institutional practices are subject to change themselves.

The present paper aims to make a contribution to this emerging field of institutionalism in contemporary economic geography. It focuses on institutional entrepreneurship through local bottom-up initiatives that are raised by firms, organizations, and networks in regions in demographic decline. The concept of institutional entrepreneurship is applied to study an important agency-based channel to institutional change. The specific research question the paper addresses is how local initiatives change institutional practices through approaches that are classified as institutional entrepreneurship by interacting with and modifying the institutional settings surrounding them. The concept of institutional entrepreneurship pays specific attention to opportunity-recognition and strategic outset as well as resources, self-interest and power to describe the behaviour of entrepreneurial agents and networks. Thus, adopting an actor-centric perspective and based on a case study of six local initiatives across declining regions in Germany, the paper elaborates the triggers and properties of institutional entrepreneurs in the context of demographic decline. It also discusses the potential contribution of such initiatives to influence regional development. Empirically, the paper draws from an across-case analysis of six network-based initiatives from different German regions (East and West Germany) that have been qualified as ‘entrepreneurial’.

## **SMALL HISTORIC TOWNS PRESERVATION AND DEVELOPMENT IN RUSSIA: THE CASE OF THE IBRD**

**Leonid Limonov, ICSE Leontief Centre, RUSSIA**

The presentation includes description of the aims and approaches used for preparation of the RF Ministry of Culture and the IBRD Project “Small Historic Towns Preservation and Development in Russia”. After a nation-wide competition 9 historic towns were selected for the Project (4 – for big investments in restoration and upgrading of urban structure fragments as well as in tourism development, marketing and promotion and 5 – for small investments in tourism development). The main goal of the Project is to ensure social and economic development of these historic towns through developing of tourism based on the existing cultural heritage and potential for cultural and educational tourism. Support to the tourism development may include preparation of tourism master plans and promotion plans, capacity building and training, information campaign, assistance to cultural institutions in modernization of their products, support to local arts and crafts etc.

Key tasks for preparation of the Project by consultants, selected through the international tender, comprise the following:

- description of the existing institutional infrastructure, including evaluation of the ongoing plans and programs
- selection of a fragment of the urban structure
- set of history and culture studies of the selected fragment
- risk analysis to identify the need in specific IBRD safeguard mechanisms
- tentative estimates of the investment needs and periods for works
- survey of the tourism market, specifically, cultural tourism sector
- preparation of a tourism potential development proposal for the settlement
- tentative estimates of the investment needs and periods for works and activities for the tourism potential development in the historic settlement
- project social impact
- project environmental assessment
- economic and financial analysis
- development of the overall investment proposal

The Project should take into consideration and be based on following principles and approaches:

- Comprehensive approach to restoration, preservation and cost-effective and rational use of the cultural heritage, as well as tourism development in selected historic settlements.
- Creating conditions for cost-effective use of the cultural heritage due to circumspect development of tourism services and products.
- Exploitation of the cultural heritage as a factor of socio-economic development of the territories, creation clusters of local and regional importance.
- Creating synergic effect
- Developing knowledge and competencies of executives managing the cultural heritage on the local, regional levels and on the level of specific objects
- Importance of institutional factors and conditions of development
- Partnership between local and regional authorities, business and local community

Main methodological problems to be discussed at the presentation are methods of urban fragments selection and justification of the choice, evaluation of economic impact and constraints for using cost-benefit analysis at the prefeasibility stage of Project preparation, as well as methods of social impact evaluation.

## **A STUDY OF INDIVIDUALS' TRAVEL BEHAVIOUR IN RELATION TO TRANSPORT POLICY?**

**Yi-Chun Lin, University of Newcastle upon Tyne, UNITED KINGDOM**

Taiwan is a developing country, and the population is around 23,433,753. In recent years, it has become wealthier so that makes the possibility that people aspire to car ownership and to travelling in by car. In 2013, on average 1.09 people have cars, and 1.65 people have the motorcycles. Since 2010 the situation for transport planners to implemented MRT Tricyclic three-line construction, and the MRT Pilot Bus as part of their urban development in order to attract users go by public transport systems rather than using the car.

MRT Tricyclic three-line construction is aimed at encouraging the public to travel by public transport and decreasing the usage of private transport in Taipei City and New Taipei City. Also, it strengthens the role of New Taipei City in Taipei metropolitan area, which is an important investment of public transport system within ten years. In 2010, the government designed MRT networks, which regarded New Taipei city as the center, and was based on the perspectives of New Taipei city.

Transport planners implemented the measure of MRT Tricyclic three-line construction, which is based on transport aspect, economic development aspect, and environmental aspect. With regards to transport aspect, they developed the networks of MRT, which is based on urban planning, and the concepts of urban and rural development of New Taipei City in the short term, middle term and long term. The MRT lines were designed to connect with the existing MRT lines of Taipei City in order to emphasize the importance of New Taipei City and boost its development in Taipei metropolitan area. In terms of economic development aspect, New Taipei City is full of abundant resources on sightseeing, history, culture, and technology, so after it was upgraded to municipality in 2010, many people are attracted from Taipei city and the surrounding cities to New Taipei City in work, business, and shopping trips. Regarding to environmental aspect, MRT is a railway transport system, which saves energy with low carbon emissions, and the construction models are either underground construction or elevated construction. MRT does not cause traffic jams, as well car accidents, compared to the private vehicles, which contributes to less environmental problems. An interesting finding emerged that the unexpectedly high take-up of the MRT Pilot Bus services were provided, which is an effective policy to switch private transport users from using private vehicle modes to using public transport, meanwhile MRT Tricyclic three-line construction is being constructed.

However, this creates both an opportunity and a threat; as MRT Tricyclic three-line construction were planned and provided as part of New Taipei City as well as Taoyuan City emerging in Taiwan, but even where they are provided there remains the issue of whether or not they will be taken up by users.

The paper concluded that transport policies and initiatives aimed at influencing people away from using motorized vehicle modes towards to use more sustainable modes, should take a holistic approach for two-way communication between the public and the government.

## **TOWARDS 'THICKER' FORMS OF REGIONAL GOVERNANCE? HOW EUROPE 2020 STRATEGY AFFECTS SUBNATIONAL GOVERNANCE**

**Magnus Lindh, Karlstad University, SWEDEN**

Following Lowi's classic devise, 'Policy determines Politics' (1964), this paper argue that the EU Cohesion Policy 2014-2020, together with Europe 2020 Strategy and Smart Specialisation represent a new phase in EU governance that may spur and support new forms of regional governance within an EU related framework. Subnational activities in relation to the EU policy-cycle are an important part of the concept of Europeanization. Regional action may be viewed both as a consequence of, and as a driver for, Europeanization. In that sense is it important to study how new forms of regional action could be understood in the context of 'policy' versus the 'politics' of Europeanization.

The paper conceptualizes and introduces two forms of 'regional action': 'thin' and 'thick'. In unitary states, as the Nordic, regional involvements in EU-related issues could be described as highly asymmetric. As a tool to identify and analyze these differences 'thin'-action refer to a more specific, reactive, project-based and misfit-oriented ad hoc action; whilst 'thick'-action refers to generic, proactive, programmatic actions, following an a priori established political agenda that includes a broader set of different societal actors. The paper argues that 'thin' and 'thick' forms of regional action can be used to further understand regional policymaker's responses to EU agendas of smart, sustainable and inclusive growth. The paper explores the challenges faced by regional policy makers in the case of Region Värmland in Sweden when handling 'thin' and 'thick' forms of regional action. The paper brings into perspective 'cross-loading' and 'up-loading' Europeanization in particular.

*Innovation and Knowledge Economies*

### **COLLABORATIVE INNOVATION, NEW TECHNOLOGIES AND WORK REDESIGN: EMPLOYEES' EXPERIENCES IN REGIONAL PUBLIC HEALTH SERVICES IN THE UK**

**Colin Lindsay, University of Strathclyde, UNITED KINGDOM**

There is consensus on the need to promote innovative practices in work organization and service delivery in public services. This paper deploys the concepts of 'collaborative innovation' and 'employee-driven innovation' to discuss employees' and managers' experiences of a major technology-driven work redesign project within public National Health Service (NHS) pharmacy services in one area of the UK, namely Scotland. The project involved a substantial investment in the introduction of robotics and the radical redesign of work processes in pharmacy distribution. This paper analyses 36 in-depth interviews to explore how employees and managers collaborated to drive changes in work organization and practice that complemented the introduction of robotics technologies in an attempt to improve the quality and efficiency of NHS pharmacy services. Drawing on recent commentaries by Hartley et al. (2013), the article critiques New Public Management (NPM)-dominated understandings of innovation in public services. Rather, within our case study, we find that the emergence of collaborative innovation – and especially employee-led initiatives – was vital to the realization of the project's objectives and the mitigation of some NPM-related problems in relation to work organization and job quality. In line with Hartley et al.'s approach to collaborative innovation, we found evidence of both managers and employees at various organizational and governance levels acting as: 'convenors', empowering and bringing together the actors to frame the interactive arena and clarify the interactive process; 'mediators', building trust, aligning interests and resolving disputes; and 'catalysts', encouraging the reframing of problems and bringing new knowledge to encourage transformative learning. Our analysis also suggests that the concept of employee-driven innovation – which sees organizations' innovative capacity as innovation as 'embedded in everyday critical and reflective experiences and work practices, which in turn are often triggered by social interaction and exchange' (Kesting and Ulhoi 2010) – may provide a useful (alternative or potentially complementary) model for understanding and promoting work redesign in line with the opportunities offered by new technologies. The paper concludes by identifying potential lessons for large public and private sector organizations that seek to align workplace transformation with the introduction of innovative processes and new technologies.

*Labour Markets and Migration*

### **IMMIGRANTS' MOBILITY PATTERNS IN THE UNITED STATES AND ACROSS SELECTED METROPOLITAN AREAS, 1990-2010**

**Cathy Yang Liu, Georgia State University, UNITED STATES**  
**Gary Painter, University of Southern California, UNITED STATES**

Recent research has documented the decline in residential mobility rates in the United States over the past several decades, and especially between 2005 and 2010. In particular, interstate migration dropped by about

50 percent since 1991 (Kaplan and Schuhofer-Wohl, 2013). Such patterns vary by age, gender, education, race/ethnicity, family structure, and nativity. (Molloy et al 2011). While the immigrant populations have been historically mobile in pursuing economic opportunities, recent housing market collapse and economic contraction might have reduced their geographic mobility. As compared to those in new and emerging immigrant gateways, immigrants in established gateways with high immigrant concentration experienced worse housing outcomes (Painter and Yu, 2014) and employment outcomes (Liu and Edwards, 2014). Case studies show that Latino construction workers exit the hard-hit housing markets of Las Vegas, Los Angeles, and Phoenix after the recession (Painter and Calnan, 2013).

This research will examine the overall mobility pattern of the immigrant population in comparison to the native-born population over three decades from 1990 to 2010 (specifically, 1990, 2000, 2005, and 2010 to factor in the great recession). Did immigrants' mobility rate decline at a similar rate as the native-born population? Distinction will be made among inter-state, inter-MSA, and inter-county moves to capture mobility at various levels. Age-cohort analysis will be conducted to assess the relative importance of age cohorts, arrival cohorts, as well as other individual socio-demographic characteristics including skills, race/ethnicity, and national origin in immigrants' mobility choices. In a second set of analysis, we will select a representative sample of Metropolitan Statistical Areas (MSAs) based on their size, region, migration history, and gateway type and includes both established and new, emerging gateways (Singer, 2004). We will further test any metropolitan-level characteristics that might attract or lose immigrant residents who are already in the United States and what type of immigrants? Urban housing market, labor market, and immigrant networks would all play a role in this context.

We will use Decennial Census Microdata from 1990 and 2000 and American Community Survey Microdata for 2005 and 2008-2012 combined samples (for 2010) for the empirical analysis. We will focus on a series of mobility variables on the mobility status as well as mobility origins and destinations.

#### *Mega Events and Regional Development*

### **EVENT-LED STRATEGY FOR CULTURAL TOURISM DEVELOPMENT: THE CASE OF LIVERPOOL AS THE 2008 EUROPEAN CAPITAL OF CULTURE**

**Yi-De Liu, Graduate Institute of European Cultures and Tourism, TAIWAN**

For many European cities, culture is frequently cited as the key element of their urban tourism function. Indeed, a number of cities for example, Glasgow, Dublin and Barcelona, are widely regarded as key reference points for attempting to regenerate post-industrial cities through culture. They have successfully constructed a tourist destination image through investing in cultural tourism. The aim of this paper is to conceptualise the role of cultural events in developing cultural tourism and its significance for city's tourism policy. Liverpool – the 2008 European Capital of Culture is used as case study to investigate some key issues surrounding the event-led urban tourism policy. Specifically, this study tends to achieve the following objectives: (1) identifying the key factors of event-led cultural tourism development strategies; (2) testing the analytical framework developed in the context of Liverpool; and (3) exploring Liverpool's successes and challenges in developing cultural tourism.

Based on a review of key theories and current research related to cultural tourism development, the author proposes an analytical framework, which constitutes five aspects, including: (1) experience economy; (2) city image; (3) urban regeneration; (4) cultural provision; and (5) partnership establishment. This case study is partly based on written documents and partly on interviews with key personnel representing the cultural and tourism sectors in Liverpool. For the primary research part, as this study focuses specifically on the perspectives of practitioners in the cultural and tourism industries, and semi-structured interviews were conducted with 10 informants in the summer of 2014. They represent different areas of the city's cultural tourism offers, such as museum, art gallery, creative quarter, cultural heritage, tourism marketing and event etc. The secondary data relies mainly on content analysis of the 'Impacts 08' published reports and academic publications.



The study findings point to a number of ways in which the cultural event constitutes a boost for the development of cultural tourism. This study demonstrates how Liverpool created distinctiveness and ensured the sustainability of experience economy. In order to ensure long-term success, cities need to stage a series of events and control over the experience production process. Second, the experience of Liverpool demonstrates that the ECOC is only one part of the long process of regeneration. Its impact and sustainability is greater when regeneration initiatives are integrated into a total urban development strategy. Third, sustaining the image beyond a major event requires continued promotion and product development. The legacy of winning ECOC for Liverpool's enhanced profile was properly planned and sustained due to various strategic marketing initiatives. Furthermore, the lessons from Liverpool show that cultural impacts could be maximised if a longer term and coordinating body is set up and run efficiently. Also, Liverpool's approach to ECOC governance was the result of extensive partnership across public, private and third sectors.

Finally, this article indicates that the successful development of the city as a cultural tourism destination is influenced by a combination of inter-related factors. However, insufficient time has passed to judge whether Liverpool ECOC 2008 is a "success". Also, this study makes no attempt to be universally applicable. Future studies may move into a direction to provide more empirical evidence about the interrelationship and possible mediating effects of the factors.

*EU Regional Policy and Practice*

## **INCREASING OF INNOVATION WITH EUROPEAN UNION FUNDS SUPPORT, CASE OF POLISH REGIONS**

**Judyta Lubacha-Sember, Cracow University of Economics, POLAND**

European Funds (the European Regional Development Fund, the European Social Fund and the Cohesion Fund) are one of the most important instruments of European Union regional policy. In the 2007-2013 programming period they concerned three main objectives: the Convergence objective, the Regional competitiveness and employment objective, and the European territorial cooperation objective. Improvement and promotion of regional innovation was among the others included to measures of first two objectives as well as priorities of individual Funds. In the 2007-2013 programming period, the first priority theme of Convergence and Regional competitiveness and employment objective was Research and technological development (RandTD), innovation and entrepreneurship. Regional Operational Programmes are basis of realisation Convergence and Regional competitiveness and employment objectives. Each region prepares programme bases on individual needs, resources and specific situation but taking into consideration the Community strategic guidelines on cohesion. Priorities of Regional Operational Programme should be linked with Community priorities.

Each from Polish regions included improvement of innovation potential and building of innovation friendly environment in priority axis's of Regional Operational Programme for the 2007-2013 programming period. Innovativeness is considered in that Programmes on the one hand as a source of regional competitiveness and development, in the other hand as a source of competitiveness of companies.

Questions that arise in connection with spending of European Union Funds are following: Which priorities received more funds? Which beneficiaries, private or public, received more funds? Which types of projects were more often financed? Which types of projects received more funds?

The main objective of the article is to present allocation of European Funds in Polish regions according to innovation priority. Firstly, priority axis's concerning innovation from each of 16 Regional Operational Programme are presented. Secondly, an analysis of projects realised within this priorities is conducted. The analysis includes following stages: distinction of groups of projects beneficiaries (e.g. SME, higher education units, local governments), and presentation of data for each Polish region, distinction of groups of projects types (e.g. RandD infrastructure, implementation of new technology in enterprises), and presentation of data for each Polish region.

The analysis presents practise of EU regional policy by describing how European Union Funds were used in Polish voivodships in order to improve innovativeness of Polish companies and regions. It presents also, which beneficiaries gained most funds, and which areas were underinvested.

The second objective is to check if Polish regions improve their performance in main innovation inputs and outputs indicators in years 2007-2013. It allow to compare the start level of innovativeness in Polish regions with the end level, and observe if it changed.

*ESPON Session: The European Territory in the Future*

## **CRORURIS 2030: THE CONCEPT BEHIND SCENARIO-BASED APPROACH TO CROATIAN RURAL FUTURES**

**Aleksandar Lukić, University of Zagreb, CROATIA**

The paper presents the concept for producing a set of alternative future scenarios for Croatian rural areas in 2030 with the goal of encouraging informed and evidence-based public debate on rural futures. The territorial size, population number, functions, and variety of challenges rural areas face today, put the question of their future as one of the most pressing contemporary issues in Europe. Recently, there have been numerous scenario-based approaches to study future trends and driving forces for rural Europe, both in academic and political discourse, on national and EU level (e.g. SCENAR 2020, EURURALIS etc.). On the contrary, to our knowledge, no scenario-based research on rural areas in Croatia has been conducted and only few partial impact analyses have been conducted in recent Croatian agricultural policy.

This might come as a surprise since rural areas account for almost 90% of the land and are home to almost half of the population in Croatia. They are still the most important food production zones, both in Croatia and in Europe, although this primary function has been challenged by numerous modernization and globalization processes and complemented by other economic, social, cultural, and environmental functions. As a result, we have witnessed the (re)emergence of heterogeneous and diversified rural areas, juxtaposing depopulation and land abandonment in some regions, and tourist development or agricultural intensification in others.

This diversity, confirmed in numerous typologies of rural areas in Europe (including ESPON studies), is also evident in rural areas in Croatia. The recent typological study revealed significant diversity ranging from rural periphery and related types of areas with negative structures and trends (more than one third of Croatian territory is home to less than 7% of the Croatian, mostly elderly, population) to very dynamic, commuting dependent types in city-regions or economically diversified, predominantly touristic rural areas. The typology confirmed the need to consider diversity and future trends in the line with the place-based approach, one of the cornerstones of the Territorial Agenda of the European Union 2020.

The main objectives of the CRORURIS study are as follows: 1. to develop a conceptual framework for understanding recent change in rural Croatia; 2. to develop methodological framework for identifying predominant trends and key uncertainties, differentiating them geographically by typological approach and projecting them forward using statistical modelling and Delphi method; 3. to construct alternative future scenarios and relate them to the context of rural Europe. The rural demographic patterns, the economic and agricultural market transformations and trends, and the environmental and land-use change have been identified as the main themes in scenario building. Scenarios help envision various development possibilities and future end states. They help in perceiving interconnectedness within a system; being multidimensional, they mirror socio-geographical complexity thus avoiding overly simplistic views on development. Scenario method points to the importance of an interdisciplinary approach and coordination of development goals. Bearing that in mind, CRORURIS will be carried out by interdisciplinary team consisting of human and physical geographers, a GIS specialist, a sociologist, an agricultural economist and a psychologist-statistician. If successful, we expect that CRORURIS study will greatly improve interdisciplinary and comprehensive views on complexities of planning and development in rural areas of Croatia. The developed theoretical framework and set of alternative scenarios could be useful in disciplines such as: geography, sociology, agricultural economics, economy, spatial and regional planning, cultural anthropology, ethnography, etc. The opportunity to present the concept in the early stage of its development and discuss it with international academic community is seen as one of the very important steps of the project.

**UNIVERSITIES, SCIENCE PARKS AND RESPONSIBLE INNOVATION**

**Miklos Lukovics, University of Szeged, HUNGARY**  
**Janos Gyurkovics, University of Szeged, HUNGARY**

Nowadays, knowledge becomes more and more important in the economy. Its increasing importance has placed knowledge-creating institutions in the focus of economic development strategies. Among these institutions, special attention is paid to universities because they ensure qualified workforce and provide the basis of new knowledge and innovation which are necessary for the long-term competitiveness of a company. Moreover, these factors could be the main drivers of the development of a territory. This is particularly important for lagging regions with universities because these regions can build upon universities to connect the regional economy to the processes of knowledge-based economy. The tools of economic development initiatives have also broadened with university-based development tools which contain the science parks as a subtype.

In addition to the above, as another important megatrend, the European Union is paying increasing attention to the subject of Responsible Research and Innovation, which is not only one of the flagships of the 2014-2020 programming period but, in our opinion, has a major influence on the future level of success of science parks. The aim of this study is to review the subject of science parks – primarily from the point of view of the role of universities in defining and walking these parks’ professional routes. We wish to pay special attention to how responsible innovation can be introduced and consciously managed in the professional work carried out in science parks.

*Role of Institutions in Regional Development*

**COLLEGES AS ANCHORS OF INNOVATION IN RURAL SOCIO-ECONOMIC DEVELOPMENT**

**Terri MacDonald, Selkirk College, CANADA**

Restructuring surrounding regional economic development has created new challenges and opportunities for rural communities across Canada. Innovation, learning, and knowledge flows are critical to economic outcomes and the local region is the ideal scale at which to develop a learning-based competitive advantage. The transition of a region to a knowledge-based economy requires an ability to rapidly adapt to take advantage of emerging opportunities. Colleges are uniquely positioned to support the capacity of a regional network to experiment, innovate and adapt to changing circumstances. A movement to a more holistic understanding of rural development is also required, where innovation and learning occur in social settings and the economy is embedded within a larger socio-economic-ecological system. Further, research confirms the benefits of an evolution in economic development from a transaction-based approach to a systemic approach that is more strategic, inclusive and adaptive.

This presentation aims to contribute to a better understanding of the practical application of New Regionalism, which calls for a better understanding of the processes of learning and innovation in a regional setting. British Columbia, Canada’s Kootenay Development Region will be explored as a rural case study region to better understand how community colleges can stimulate innovation and support collaborative learning. The presentation will focus on learnings from the Columbia Basin Rural Development Institute with an exploration into processes of learning and innovation in a rural regional setting, an exploration of the role of colleges in regional socio-economic development, and a discussion of applied research capacity at community colleges. A college applied research capacity framework will be introduced to frame a discussion on the shifting role of community colleges in Canada.

The Columbia Basin Rural Development Institute (RDI), founded in 2011, is the only college-based rural development institute in Canada. The RDI is based on a multi-year partnership between the regions’ two community colleges and the Columbia Basin Trust. The RDI was established to support evidence-based decision-making in the region through the provision of information, applied research and related outreach and

extension support. The RDI has led and partnered on a number of regional, rural development focused applied research projects exploring business retention and expansion, sustainability indicators, climate change adaptation, land use planning, digital technology adoption, food systems, non-profit social sector collaboration, and workforce innovation in rural economic development. The RDI serves the Kootenay Development Region, which covers a land area the size of Austria and has a population of just over 160,000. The economy is primarily resource-based with forestry and mining as key economic drivers. The region's hydro-electric power generation accounts for approximately 44% of electricity generated in the province and the region is home to British Columbia's largest coal fields. The region is also amenity-rich, supporting a vibrant tourism industry.

*Imbalances and resilience of Europe's peripheries in the 21st century: What is the future of these peripheries and what should we do about them?*

## **"THE FOREST IS A POOR MAN'S SWEATER" REGIONAL DEMOGRAPHIC VARIATIONS IN SWEDISH HOUSEHOLD-BASED ELDERLY SOCIAL SECURITY PRIOR TO STATE PENSION REFORM; 1880-1907**

**Mark Magnuson, Karlstad University, SWEDEN**

### Introduction

I will present Sweden as a land which was dominated by both nuclear and stem-family household traditions on the eve of the national pension reform. The research aim is to provide a background to my broader dissertation which addresses the impact emigration, personal saving, and remittance on household level elderly care.

### Background

In 1913, the Swedish parliament easily passed a universal coverage pension act, taking the first steps towards its current Nordic welfare model. In preparation for this bill, statistician Hugo Burström and scientist and actuary Anders Lindstedt, unleashed a full coverage economic survey aimed to document the economic condition of all of those over 60. The results led Burström to argue that the elderly security was failing due to the new industrial form, which increased mobility and broke up the binding personal relationships between employee and employer, meanwhile severely disturbing the landowner's traditional ability to draw on natural provisions connected with the land as protection against his or his household's sickness and old age. Simultaneously, he found the elderly were unable to use the savings bank innovation despite rising wages.

### Contested "Traditions" in Time and Space

As that pension act neared the century mark, Per Gunnar Edebalk and Mats Olsson, (2010) revisited the motivations for the passage of the act and found that "both contemporary debaters and modern researchers have underestimated the vitality of the traditional rural security systems." They concluded that, "the traditional rural social security systems, founded on family, property and employment, were more vital than we have been led to believe." Hugo Burström was not the first to be considered "misleading" about their contemporary household traditions. Following the results of the Cambridge group's Household and Family in Past Time (HFPT) in 1972 led by Peter Laslett, a century of family studies from Fredrick Le Play in 19th century continental Europe to those calling for a National Social Security Act in the United States, had all misled those studying family structure. However, as researchers such as Lutz Berkner (1972) and Emanuel Todd (1976) probed regions which lay at the edges of Europe such as Austria, Italy and Sweden, the evidence for a united nuclear-family household tradition began to weaken. By the 2000s enough micro-studies and "Big Data" research projects had undermined the HFPT's results to the point that it has become problematic in demography. Paul Puschmann and Arne Solli (2014) assess the impact of 40 years of revision writing Peter Laslett, "successfully dismantled the sociological paradigm that industrialization and urbanization had changed family life, but did not replace it with any new theory, nor did he give guidelines for future research"

Regional variation within the Swedish context can be found to some degree in the results of the emigrationsutredning from the first decade of 20th century, but suspected after the HFPT's revisions by David

Gaunt (1977) who was researching five parishes in central Sweden. Gaunt found that the family structure was likely dependent on not just size of farm as Berkner and Todd noted, but also the likely dependence on the regional dominance of various economies, going on to rephrase Laslett's (1965) title for Sweden "the many Sweden's we lost."

Presentation:

As Gaunt suspected, Sweden did not share a single family household structural tradition. Using complete count census micro-data from 1890 and 1900, I will address selected contemporary economic data from The Swedish Emigration Commission (Emigrationsutredningen) and Old Age Insurance Committee (Ålderdomsförsäkringskommittén) which spatially correlates with the clustered demographic variations into distinct central and peripheral regions.

*Comparative Policy Approaches in the Regional Development of the Low Carbon Vehicle Sector*

## **COMBINED AND COORDINATED POLICIES FOR ELECTRIFICATION OF HEAVY VEHICLES IN SWEDEN: A TECHNOLOGICAL INNOVATION SYSTEMS ANALYSIS**

**Thomas Magnusson, Linköping university, SWEDEN**

**Christian Berggren, Linköping university, SWEDEN**

This paper analyses the conditions for the diffusion of stepwise-electrified heavy vehicles (hybrid-electric, plug-in hybrid and fully electric trucks and buses) in urban traffic using the technological innovation systems framework (Bergek et al, 2008; Hekkert et al, 2007) with data from recent developments in Sweden.

The case of heavy vehicle electrification in European cities is interesting for several reasons. First, the European heavy vehicle industry is highly competitive globally, including six large OEMs – Daimler/Mercedes, Volvo, Fiat/Iveco, DAF, MAN and Scania. Two of these industry incumbents – Volvo and Scania – are based in Sweden. Second, heavy vehicles constitute an industry where stringent demands on cost, reliability and robustness normally delay the diffusion of new technologies. However, in this usually very conservative industry, there is now a vibrant activity – particularly in the city bus segment, where a number of different technologies and configurations are being tested. Third, whereas both industry incumbents and new niche manufacturers participate in this accelerated activity, one incumbent firm – Volvo – has surpassed the other large OEMs, announcing strategic ambitions to take the lead in the electrification of heavy vehicles.

The technological innovation system analysis elaborated in the paper shows that the Swedish system is strong in terms of experimentation and knowledge development. However, the experimentation and knowledge development so far has primarily been concentrated to vehicle manufacturers and technical universities. To support market diffusion, there is a need for an active involvement of a variety of local actors such as vehicle operators, public transport authorities, power distribution companies, property owners and municipal officers. To be able to take an active role in this development, these actors need support from regional and national policy makers.

The analysis further suggests that because of its silent, clean and vibration-free features, electrified heavy vehicles have a significant potential to build legitimacy in the society. However, this potential remains to be realized. Currently there are a number of obstacles, which delays diffusion of the technology. In particular, these obstacles relate to institutional barriers and contradictory policies. Both national and regional policies in Sweden for example tend to single-mindedly promote biofuels and de-emphasise energy efficiency. By consequence, regional actors have invested in facilities and infrastructure for production and supply of biofuels, which have captured a significant part of the Swedish inner-city bus segment. Historically, the promotion of biofuels was a successful strategy to improve local air quality and reduce greenhouse gas emissions. Now these investments tend to result in a lock-in, which reduces the market entry possibilities for electrified heavy vehicles. Moreover, public transport authorities' limited financial and engineering resources limit the possibilities for thorough tests and evaluations, and these authorities are locked into lengthy contract periods with private operators, which further delay market diffusion.

Coordinated national and regional/local policies are required to reach ambitious targets on market development and industrial competitiveness. The paper discusses how a combination of transitional subsidies, support systems, incentives and directives need to be implemented to overcome the identified obstacles, and facilitate a stepwise introduction of electrified heavy vehicles for urban traffic.

*The Future of Leadership Research in Urban and Regional Development in Europe*

## **ENTREPRENEURIAL LEADERSHIP AND GOVERNANCE FOR THE DEVELOPMENT OF RURAL REGIONS.**

**Marie Mahon, National University of Ireland, Galway, IRELAND**  
**Maura Farrell, National University of Ireland Galway, IRELAND**  
**John McDonagh, National University of Ireland Galway, IRELAND**

This paper investigates the potential of rural regions to develop leadership capacities as a response to the challenges of achieving sustainable and inclusive development. Specifically, it explores the extent to which socially innovative processes and practices play a role in facilitating entrepreneurial forms of governance at regional and local levels which enable appropriate responses to specific place-based development issues to emerge.

Drawing on the concept of co-production it examines some predominant kinds of engagement emerging between public and private actors seeking to deliver facilities, services and infrastructure required for a rural region to advance competitively. These can include natural resource management, health and social care, education, transport and cultural facilities. The evidence would indicate that local leadership capacity is a key component in initiating and sustaining successful arrangements of this kind. Government continues to hold a central role in terms of policy and support leverage for development, but reflexive responses to innovative and entrepreneurial strategies are not always in evidence.

Using examples of such arrangements from the Irish context, this paper outlines the processes and practices employed by local leaders to advance development, and the ongoing significance of relationships with different scales of government in terms of how resources are shared, and power and authority is negotiated. The Irish context is distinctive in terms of central government's historic reluctance to cede significant authority to regional or local levels, or to other development actors that have relied on government support. This power has been levered principally through centralised control of funding resources. However, Ireland has now entered a stage in which its share of Structural Funding is significantly decreased, and its economic crisis has already seen a reduction of funding to rural development programmes. Socially innovative partnership arrangements involving proactive local and regional leaders in development are therefore an increasing necessity for the sustainable future of rural regions.

*Cross-Border (Research)/Regions*

## **CROSS-BORDER REGIONAL INNOVATION SYSTEM INTEGRATION IN THE EUROPEAN UNION: AN ANALYTICAL FRAMEWORK**

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**Allan Williams, University of Surrey, UNITED KINGDOM**  
**Adi Weidenfeld, Middlesex University, UNITED KINGDOM**

Innovation and inter-regional cooperation are topical, persistent and recurrent themes in European Union (EU) policy concerns and documentation, with knowledge flows being integral to both themes. Accordingly, the promotion of socio-economic and socio-cultural development of Cross-Border Regions (CBRs) is highly significant for achieving the cohesion and cooperation goals of the EU and its neighbours. Therefore, discovering the obstacles and enablers of knowledge transfer is highly relevant for utilizing the potential for

learning and innovation via inter-regional cooperation, as geographical proximity per se does not always lead to high levels of knowledge flows. The highlighted importance of these themes in the context of borderlands has recently led to the coining of a new concept, Cross-Border Regional Innovation System (CBRIS). Consequently, the discussion of CBRISs has been closely tied to that of different types of borders and proximity (physical and relational), to the literature on regional innovation systems and to the varying determinants of cross-border development and integration (knowledge infrastructure, business, relational, socio-institutional, governance and accessibility dimensions). Accordingly, the integration processes in CBRISs have been conceptualized in terms of varying degrees of development, characterized as having different stages of internal integration ranging from weakly-, to semi-, to strongly-integrated systems. However, very little attention has been given to the empirical analysis of the concept.

This paper suggests a framework for empirically validating the concept by examining the levels of integration between cross-border regions. In line with this, the problematic of delineating a suitable geographical scale for analysing CBRISs is discussed in the light of earlier critical reflections on the concept of regional innovation system. The outcome is a tentative framework that can be operationalized by measurable indicators of cross-border cooperation in a regional innovation system setting. The suggested framework combines the importance of different types of proximities with the stages of integration of CBRISs. Suggestions for further empirical accounts to validate the concept (in order to draw more definite conclusions about the integration processes in CBRISs) include comparative analysis utilising quantitative data to depict the impacts of different observable measures of varying dimensions of proximity and integration on the ease, volume and impacts of knowledge flows in cross-border settings. These quantitative studies should take advantage of the existing databases to combine a comprehensive dataset for analyses on a comparative EU-level. In line with this, further elaborations of the more intangible aspects of CBRIS integration should be operationalised through the use of questionnaires and interviews directed at city officials, regional development agencies and local companies to draw a more precise picture of the impacts of the “non-measurable” dimensions of proximity and integration in terms of, for example, the formal and informal institutions and social acceptance of integration.

*Innovation and Knowledge Economies*

## **INNOVATION: THE CORE OF ECONOMIC COMPETITIVENESS**

**Edward J. Malecki, The Ohio State University, UNITED STATES**

For many business leaders and policymakers, innovation and knowledge typify the characteristics of a knowledge economy and represent areas in which places compete. Rankings and comparisons among national and regional economies are now common. This chapter reviews the research on competitiveness, and demonstrates that knowledge, innovation and innovative capability are the core of economic competitiveness. The global innovation networks that enable creativity and innovation are formed in – and are attracted to – some places and not others. Although there are multiple dimensions of competitiveness, innovation is the fundamental dimension, comprised of local, global, and virtual networks and systems of innovation.

**SPATIAL IMPACT OF THE ROAD INFRASTRUCTURE DEVELOPMENT. AN ACCESSIBILITY APPROACH – ROMANIA**

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In recent years Romania, like many other EU countries, is in a process of rapid transport infrastructure development. The Romanian Government by the Ministry of Transportation is planning to finalize around 3000 km of motorways and expressways by 2025. Financed mainly by EU funds (TEN-T Core and TEN-T Comprehensive FEDER), state budget and PPP arrangements, the development of transport infrastructure will modify the existing spatial accessibility at the national and regional level.

The priority axes for EU Investments in the infrastructure development in Romania are: modernization and development of TEN-T priority axes aiming at sustainable transport system integrated with EU transport networks; modernization and development of the national transport infrastructure outside the TEN-T priority axes aiming at sustainable national transport system; modernization of transport sector aiming at higher degree of environmental protection, human health and passenger safety and Technical Assistance (European Commission, 2013).

The main lines of communication have always played an important role in defining the axes of development. They form large and extensive networks, covering the territory, but only some of them achieve a certain degree of importance. Most of the times, towns and cities have emerged and developed along the main communication lines, especially at the junction of two or more such axes. Therefore, the polarizing and attraction force of these “power lines” of the territory has usually increased and is ever increasing due to the constant development related to the urban growth, strongly linked to the access of such cities to a main transport line. The advantage of economic competitiveness offered by a higher accessibility index is already visible in the Romanian economic system. For this reason the spatial distribution of accessibility improvement represents a concern in order to prevent the deepening of local and regional disparities and the uneven development of the communities.

The main objective of the present study is to analyze the accessibility implications of the road infrastructure development by applying the time-based connectivity index to three levels: assessing the existing conditions, TEN-T infrastructure development and road development according to the National Master Plan (Romanian Parliament, Law 363/2006).

This study suggests a new index for accessibility measurement by combining gravity-based models with Place Rank and adapting it to Romanian system of settlements. Based on the GIS estimation of travel time, this index evaluates not only the geographical position of a specific community relative to the road network, but also the level of accessibility of rural and urban communities to the social services located in central places. The GIS-based maps indicate the existing disparities (between well-connected and isolated regions in terms of accessibility to the central places) and the impact of new infrastructure projects on these disparities. The resulting models (maps) can be used as efficient tools for transport planning and development at different scales (international, national, regional and local).



## **THE MULTIPLE DIMENSIONS OF LEARNING AND INNOVATION PROCESSES: A RELATIONAL APPROACH**

**Jesper Manniche, Centre for Regional and Tourism Research, DENMARK**

**Stefania Testa, University of Genova/DIME, ITALY**

A key issue in regional studies is to identify the determinants of learning and innovation processes at firm and regional levels. Regional researchers traditionally have put emphasis on geographical co-location (see e.g. Becattini, 1989, Saxenian, 1994) but have recently pointed out that other elements are also important such as cognitive, institutional and relational dimensions (e.g. Oinas and Lagendijk, 2005, Torre and Rallet, 2005; Lorentzen, 2005; Gertler and Levitt, 2005; Lagendijk, 2006). The conceptual complexity in understanding learning and innovation is further stressed by the highly complex nature of current innovation processes shaped, for example, by the growing mobility of information, knowledge, individuals and capital, changes to society's values and practices which are responsible for changes in products and services mainly in terms of symbolic meanings, and the increasing composition of products by means of technologies which are flexible and configurable, i.e. they are adapted to the needs and ideas in many sectors instead of being cumulatively applied within sector-specific production and technology trajectories.

To conceptualize and empirically study the increasingly complex nature of innovation processes and the impact of different contextual elements, we suggest a framework, which emphasize the role for firms' innovations of four dimensions: varying types of cognitive processes, territorial scales, and organizational and institutional contexts. The framework builds on a number of influential contributions of recent regional studies. One of these is the works on the concept of Combinatorial Knowledge Dynamics (Crevoisier and Jeannerat 2009, Halkier et al. 2012, Manniche 2012, Strambach 2012; Strambach and Klement 2013 by), emphasizing the role of different knowledge bases and interaction at different territorial scales. Another inspiration is the French School on proximity dynamics (see e.g. Torre and Gilly, 2000) and especially the work of Boschma (2005) with its five dimensions of proximity (organizational, social, institutional, cognitive and geographical).

Yet, the suggested framework differs in several respects from these contributions. First of all, we describe the cognitive dimension involved in innovations by means of the Differentiated Knowledge Base (DKB) model (Asheim and Gertler, 2005; Hansen et al., 2005; Asheim et al., 2007a–c; Moodysson et al., 2008), which was not referred to by Boschma. For analytical reasons, we distinguish between local and distant knowledge sources, formal and informal institutional environments, and intra- and inter-organizational settings. For conceptual reasons, we do not, like Boschma (2005), explicitly refer to a social dimension, i.e. to social relations between agents at the micro level, because such a lens is embedded in all the mentioned dimensions. In addition, we appreciate the relational perspective of the "proximity approach". The DKB model as well is in line with such a relational perspective since its categories are defined by how and by means of which types of actors and relations knowledge is developed, transformed, and diffused in society. Nevertheless, until now, relational concepts have been mainly described as stylized regional characteristics rather than from a "pure" relational view (Rutten and Boekema, 2012). A "pure" relational view in regional studies entails that agents (whoever they are) and their relations rather than regions as bounded territories should be the object of analysis, in line with Boggs and Rantisi (2003) and Shearmur (2011). Such a view implies an analytical shift, from the macro-level to the micro-level, i.e. agents and their interrelations.

The goal of this paper is two-fold:

1. In line with the suggestions of Rutten and Boekema (2012), contributing to further developing a relational approach in regional studies, deepening our understanding about the complex types of relations among agents involved in innovation processes.
2. In line with the suggestions of Mattes (2012), explicating spatial and non-spatial dynamics by highlighting the interaction across the multiple dimensions considered in the suggested framework.

In order to reach the goals of this paper, we follow Mattes' (2012) suggestion of performing process-oriented in-depth case studies of the whole innovation process, following it from its emergence to the market launch. Moreover, we adopt the innovation biography method (see e.g. Butzin et al. 2010, Butzin and Widmaier 2012;

Stramback and Klement 2013; Dahlstrom and Hedin 2010; Manniche 2012) which, opportunely applied, may answer the call of Boggs and Rantisi (2003) of “being relational in theory, practice and method” (page 114). We use a single case study from the food sector, which, in our opinion, can be seen as paradigmatic as regards the above-mentioned elements affecting nowadays innovation processes. We show the role of the different dimensions (knowledge bases, territorial scales, institutional and organizational contexts) and the way they are combined, in a sort of intertwined “group dancing”.

*Labour Markets and Migration*

## **EMPLOYMENT AND SEASONALITY DURING THE CRISIS ON THE EXAMPLE OF CROATIA AND SLOVENIA**

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The aim of this paper is to analyze the changes that occurred after the economic crisis at the end of the last decade in Croatia and Slovenia. Similar to the rest of Europe, this is also an area affected by a sharp drop in employment, but it was not equally distributed and not all areas were affected in the same way. The paper analyzes monthly changes in unemployment in these two countries at the level of local self-government units. There are 768 such units in total, comprised of all towns and municipalities in the two countries. Time series analysis will be used to demonstrate that one of the answers to the crisis was increased seasonality of employment and work. The shock of economic crisis that came after a period of relatively stable growth was offset by increased seasonality that occurs in the region after 2010. The paper identifies three types of areas according to the type of employment after the crisis: (mainly) coastal areas with traditionally seasonal employment related to tourism, achieving highest levels of seasonality in the last ten years; (mainly) urban areas based on service sector and industry, which recorded a decline of employment and a higher incidence of seasonality; and rural areas with the highest unemployment rate and a slight increase in seasonality. The paper will present characteristics of these zones, dominated by certain types of employment according to seasonal trends, through various indicators based on national statistics (educational achievement, local economy structure, average income). This data will also be presented using geographical information system. Data analysis shows that the area of increased seasonal employment was most resilient during the crisis, whereas previously economically more stable areas, dominated by industrial and service economy, suffered more, especially industry and construction. This shift can also be seen in the context of gender because the increase in unemployment occurred primarily in sectors that employ more men which means that gender disparities in unemployment have decreased in general. Such a change in the context of work and employment is problematic due to the nature of employment that proved resilient to the crisis, because the economy based on tourism does not contribute in the context of research, development and innovation and requires less educated workforce. On the other hand, we can see that during the recent period of increased employment industry and service sectors play the increased role, which means that more qualified workforce is demanded. However, rural areas remain vulnerable at all times, which means that their condition has structural causes, mainly related to education and ageing population.

*New Manufacturing, Creative Productions, Innovative Workplaces and Urban Space*

## **COWORKING SPACES IN THE URBAN CONTEXT. A CLUSTER ANALYSIS FOR THE CITY OF MILAN**

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The late 2000s have experienced the proliferation of new innovative workplaces named “Coworking Splaces” (hereinafter CSs). Deskwanted.com, a web portal dedicated to CSs, registered 2,500 spaces worldwide, located

in 80 countries (by February 2013). But what is, specifically, a CS? According to Moriset (2014), coworking spaces are regarded as “serendipity accelerators” designed to host creative people and entrepreneurs who endeavour to break isolation and to find a convivial environment that favours meeting and collaboration. Several are, indeed, the immaterial benefits of CSs: knowledge transfer, informal exchange, collaboration and interaction with others.

This phenomenon has been fostered by: (i) the economic and cultural globalization and the development of Information and Communication Technologies (ICTs); (ii) the growing of knowledge-based economy; (iii) the ongoing digital industrial revolution and the raising of makers’ movement (Rifkin, 2011; Micelli, 2011; Anderson, 2012); (iv) the booming of sharing economy; (v) the current economic downturn. Although globalization and ICTs have massively reduced the transaction costs associated with overcoming spaces and leading multi-locality (Lapintie, Di Marino 2014), the exchange of tacit knowledge still requires face-to-face contacts (McCann, 2008). On the one hand, the knowledge-based economy has promoted an increasing work’s flexibility: knowledge workers can perform their job at any time and any place, using their computer as a mobile office (Bizzarri, 2009). On the other hand, the digital industrial revolution and the movement of makers – based on the innovative and potentially powerful connection of digital devices and industrial production (Micelli, 2014) – reduce the traditional distance between services and manufacturing and influence both the organization of existing and new companies and their spatial relationships. Specifically, fostering the development of the market-oriented production, the digital industrial revolution and the makers’ movement may lead to a democratization of work, society and urban space (Anderson, 2012), even though the development of the new manufacturing economy will not be obvious and without risks of failure (Bauman, 2014). Besides, the strictly related sharing economy enables people to share material and digital goods and services, as well as spaces (Pais, 2012), with significant effects on the use of (indoor and outdoor) places: from buildings to cities. In addition to the above mentioned phenomena, it is worth emphasizing the role of the current economic downturn in shaping the CSs: collective organizational alternatives to the traditional workplaces (Colleoni, Arvidsson, 2014), where new activities are promoted by sharing spaces, exchanging expertise and, consequently, reducing costs.

Within the globalization process, the economic downturn is determining a re-centralization of the world cities and the large metropolitan regions as both privileged places of economic and social change and engines of productive and cultural development. This strengthening perspective about the role of cities in global economic and cultural systems is still weak in the Italian context, that is historically established on an ancient urban network, but where the re-consideration of cities as socio-spatial laboratories – related to the current economic re-configuration – is still marginal. The only exception is represented by Milan: an urban node of macro-regional and world networks, that is one of the most significant European spatial supports for the ongoing social and economic innovations.

The scientific literature on CSs is scanty and the spatial features of CSs as well as their impact on the urban space are neglected. The few existing studies have mainly been developed by sociologists (Colleoni and Arvidsson, 2014; Pais, 2012; Spinuzzi, 2012) rather than by economists (Deijl, 2014), geographers and urban planners (Moriset, 2014). The present paper aims to extend the existing literature by focusing on the CS phenomenon in Milan: a city that represents the core of the Italian knowledge-based and new manufacturing economy, thus hosting the majority of the Italian CSs. Besides, Milan is experiencing a metamorphosis that is based on the transformation of the socio-economic structure, which is one of the issues the current Municipal Administration is investing on (i.e. the recent “Milan Smart City” and “Milan Sharing City” Guidelines).

Specifically, the goal of the paper is twofold: (i) to investigate the relationships between new productions, social innovation and urban space starting from the identification of similarities and differences of the several CSs located in the inner city of Milan and, consequently, (ii) to analyze their effects on the local context (i.e. the urban space devoted to the innovative economic activities in terms of material and immaterial resources and outputs). To this aim, a critical mapping and a spatial and functional cluster analysis are developed on the basis of the following groups of variables: (i) socio-demographic variables (age and development steps, size of user community, management leadership); (ii) economic sector specialization and supply-side (offered facilities and organization of activities/events); (iii) space structure, dimension and organization; (iv) location factors (premises, physical transformation’s typology, accessibility by public transport, bike sharing or parking availability; real estate values; urban environment quality; retail system; public – educational, cultural, social – facilities); (vi) ex ante and ex post relationship with the local (embeddedness) and international (networks)

context; (vii) incentives (use of public incentives promoting new innovative spaces). This critical mapping and the cluster analysis could, therefore, fill the gap in the literature of urban studies about the relationship between urban space, social organization and new economic activities, and contribute to the policy making debate.

The paper is structured into six sections. The introduction is followed by a literature review on the CSs that spans multiple disciplines: urban sociology, geography, planning and economics. Section three is dedicated to the analysis of the Milan case with specific attention to the policy tools, which have been implemented to foster these new innovative workplaces. The data and the methodology adopted to investigate similarities and differences of the existing Milan CSs are described in section four. The results of the cluster analysis are presented in section five, while section six is dedicated to conclusions, further research questions and policy recommendations. In this perspective, specific attention may be placed on the relations between CSs (and afterwards others innovation places such as FabLabs or incubators) and the system of urban policies and planning tools, with particular regard to a wider spatial system (larger than the inner city, and included within the municipal borders). The current regional size of cities and the new Metropolitan Cities, recently established by the Italian Law, suggests a further research phase able to expand the analysis on the CSs at the scale of the new Milan Metropolitan City.

*Developing Rural and Peripheral Regions*

## **EVIDENCE OF PLACE: BECOMING A REGION IN RURAL CANADA**

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The purpose of this paper is to investigate whether place is emerging in practice as a critical dimension in the development of Canadian rural regions. Recently, Jones and Paasi (2013) set as an assignment for regional researchers the task to better understand how regions “become.” There is symmetry to the timing of this question in Canada. We have a decent understanding of how regional development, using a space-based approach, was constructed in the 30-year period between the 1950s and the early 1980s, a period known as the “long boom” (Weaver, 1982; Hayter 2000). Following the recession of the early 1980s, we have also garnered a reasonable consensus of the restructuring principles and processes that have been dismantling much of that hard and soft regional development infrastructure for the past 30 years (Beaumier, 1996, 1998; Polèse, 1999; Savoie, 2003). This now leaves us with the question of what next? Will rural regions in Canada continue to fray under the pressures of political and economic restructuring, or will they re-group, drawing upon new (or revisited) principles and processes to identify opportunities and new ways of being? The research upon which this paper is based is part of a larger, collaborative study investigating new regionalism across Canada that in part seeks to contribute to answering this question.

Though countries throughout the industrialized world have been steadily dismantling (in policy and investment) the development infrastructure associated with the first wave of post-war regionalism, regional development itself has been making a comeback. New regionalism has emerged as a prominent approach, and reconceptualization of the spatial entity of the region, for addressing the complexity of territorial development and mitigating the negative impacts associated with both political and industrial restructuring (Barnes and Gertler, 1999; Storper, 1999; Savitch and Vogel, 2000; Scott, 2000, 2004; Ortiz-Guerrero, 2013). As both senior governments and large industries have withdrawn from the direct linkages of development responsibility, the region promises both enough scale and capacity to construct and invest in new trajectories of development. New regionalism thus occupies an intermediating position, within a dynamic tension between the abandonment of traditional patterns of top-down stewardship and the appeal of local control and place-sensitive intervention.

In this paper, we focus on one central theme within the new regionalist literature: place and place-based development. We are particularly interested in the definition and expression of identity as a mobilizing force

for regionalism. As Bristow (2010: 155) states, place is a “holistic concept that bridges the analysis of people, institutions, and economies with the context-specific natural resources on which they ultimately depend”. New regionalism demands a more active regional participation and engagement in the development process, which may act on its own or in actions of co-construction with any level or type of government. New Regionalism, in incorporating governance as one of its dimensions allows for government, if and when required (Amin, 1999; Hettne, Inotai, and Sunkel, 2000; Heisler, 2012). Thus, in answering Jones and Paasi’s (2013) question of how regions become, it seems a critical dimension involves the recognition and mobilization of regionalism by regional actors. Regardless of the theoretical transition from space to place, in practice these regional actors, particularly in the face of declining senior government or industrial stewardship of regions, must essentially choose to be a region – and to act accordingly in their planning and development decisions and activities. Our findings suggest that while identity plays a critical role in fostering regional development processes, it is either too emergent or actively resisted within our research sites to be a significant force for place-based regional development.

*Innovation in ‘ordinary’ regions and ‘boring’ sectors*

## **KNOWLEDGE UPGRADING IN A FRAGMENTED INNOVATION SYSTEM: A CASE STUDY OF THREE PORTUGUESE WINE REGIONS**

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This paper will discuss the knowledge upgrading of firms in a fragmented innovation and productive system. It will discuss the interaction between business strategies, institutional environment and human capital training and how they can be combined to overcome (at least partially) the structural deficiencies of the whole system. In doing so it will rely on a revisiting of the literatures on vertical disintegration, the concept of knowledge bases, and well established work on networking and the circulation of qualified workers. Empirically it will rely on comparing the evolution of wine production in three wine regions in Portugal, which have all witnessed different trajectories, as a result of three interrelated factors: 1) there was a geographical and institutional separation between the production of raw material (grapes) and the transformation and commercialisation of wine, which contributed to the low quality of wine in Portugal until the end of the 1980s. The reconversion of resources towards the production of quality wine was dependent on the vertical integration of production, which happened at different times in all three regions and helps explain their different trajectories; 2) the verticalisation of wine production not only created incentives for investment all along the productive process, but it also brought together two different types of knowledge: synthetic and symbolic, the first involved in growing vines and transforming them and the second in the final production of wine and commercialisation. This contributed to an improvement of the final product; 3) due to the fragmented nature of the Portuguese national and regional innovation systems, the acquisition and transference of knowledge happened mostly through human capital training and the circulation of labour. With a few exceptions, most firms have no formal engagements with Universities or research centres, and rely on informal connections to acquire and share knowledge.

## **EVOLUTION OF URBAN PATTERNS IN PORTUGUESE COASTAL TOURISTIC AREAS. A SPATIOTEMPORAL EVALUATION THROUGH DENSITY ANALYSIS**

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Over the past decades, tourism has acquired an increasingly relevant dimension, bringing unprecedented benefits to the socio-economic framework of many coastal regions around the world. However, its negative impacts are also evident at the territorial level.

The significant contribution of tourism development to the proliferation of massive urbanisation is well known. Generalised urbanisation growth is linked to higher accessibility and mobility by car, namely by highway and road, and also changes in lifestyle and consumption, in a way that valorised leisure and touristic activities. Consequently, touristic infrastructure, equipment and holiday housing growth followed an urban sprawl model generally characterised by low density patterns of population and public services.

In Portugal, tourism-related urbanisation processes are closely connected to the stronger attractiveness of coastal areas associated with bathing. In these areas, tourist settlements materialize in various types and patterns. An example amongst others is the increasing number of secondary homes, emerging both as compact apartments near to urban sites with close-by trade facilities and services, and also in the form of new urban patterns of low density generally characterized by detached villas with private pool and gardens that can be found in condominiums, tourist villages or resorts. While the first type represents traditional coastal beach land use and intensive urban development patterns, the second one configures new urban-rural relations, not always favourable to local development.

Consequently, achieving sustainable tourism through appropriate planning and management is presently a concern in most touristic areas.

Bearing in mind these facts and changes, this work aims to analyse urban form and development processes in touristic coastal areas, by means of an approach based on the supply side of tourism. This incorporates four essential vectors: natural resources and environment; the built environment; transportation; and offer of services, hospitality and cultural resources.

To achieve this, we focused on the built environment and concentrated on a methodology for mapping and assessing the spatiotemporal evolution of touristic urban development in selected coastal areas. Specifically, our assessment is based on the built space and road network infrastructure of coastal regions that have experienced different types of touristic growth within its territory. Four case study areas in the Algarve region were selected, within the municipalities of Lagos, Lagoa, Albufeira and Loulé. These areas evolved differently: in Lagos and Albufeira they expanded from a previously existing non-touristic urban nucleus; Lagoa grew in a disperse settlement pattern and Loulé developed along planned resort guidelines.

A two-step process in a GIS environment was developed for this purpose. The first set of tasks involved producing vector cartography of the building footprints and road network for each study area, portraying the years of 1995 and 2010. In the second phase, we calculated raster surfaces with density measurements, namely the Ground Space Index (area covered by building footprints, percentage per hectare) and the Network Density (network length per surface unit, kilometers per square kilometer). This allows for a more thorough examination of the spatial patterns of density, by computing highly localized density measurements instead of those simply aggregated per administrative unit, at any level. Density surfaces were then subtracted to detect local density variation patches between 1995 and 2010. Assuming a threshold of more than 0% and less or equal than 7% built area per hectare, disperse settlement areas were mapped and their evolution

assessed. Pearson correlation coefficients were calculated between density variation datasets for built space density and road network, to assess the association between variations.

Overall, results first show, as expected, that both total built space and road network have increased in all study areas. The total area of disperse settlement has diminished in all cases except Loulé. However, localized analysis unfolded a somewhat different picture, with decrease patches being detected and scrutinized as well. For instance, exact spots of disperse settlement increase or decrease were observed, being this a major concern in this region (particularly in Lagoa, but not exclusively). Correlation analysis showed that built space and road network seem to have increased together (all correlations are positive), albeit Albufeira presents a larger correlation than all remaining areas.

By going beyond total area measurements and detecting precise patterns of evolution, we believe that this course of analysis can contribute to improve the present territorial planning and management framework. Thus, these metrics can be used to evaluate the regulatory efficiency of territorial management plans laid over time in coastal areas, such as measuring their degree of success in mitigating disperse settlement patterns or promoting the correct implantation of equipment and infrastructures in areas where tourism production and consumption were/are on the rise.

#### *Role of Institutions in Regional Development*

### **TERRITORIAL APPROACH TO DEVELOPMENT: THE KEY ROLE OF GOVERNANCE, INSTITUTIONS AND CAPACITY BUILDING**

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Multi-sectoral development policies such as climate change, rural development, food security or disaster risk reduction require coordinated actions by various stakeholders at multiple levels. The territorial approach (OECD, 2010; Barca, 2009; Barca et al., 2012) integrates policy-making and planning processes that are informed by and involve stakeholders at all levels, and recognizes the complexity and multidimensional nature of sustainable development and resilience. Moreover, it emphasizes the shift from a top-down towards a bottom-up and multi-level development model with the political and economic responsibilities distributed to different institutional levels and in particular at territorial level.

The territorial approach builds on the comparative strength of institutions at all levels, both formal and informal (traditions, values of the places, habits, culture, social capital, and social trust). Its implementation is based on operational and action-oriented partnerships – be they vertical, horizontal, or networked – between public, private, and other non-governmental actors situated at different levels of the governance system.

The institutionalisation and implementation of the territorial approach, however, is challenged by some practical obstacles, from communities which lack the capacity to implement action plans, to national governments which often do not have adequate financial means or political will. There is a need to further identify synergies between different levels of governance and particularly at the local level, to strengthen institutional mechanisms and to promote dialogue between political actors, science, and the private sector, in order to increase the effectiveness of development policies and strategies at all levels. Given the key role played by institutions for implementing effectively the territorial approach and given the widely recognized institutional weaknesses in developing countries, particularly at sub-national level, (institutional) capacity building becomes a key policy action and objective.

This paper aims at investigating and critically analyzing the issue of multi-level governance and its relevance for multi-sectoral development policies through an in-depth review of the literature and national policies as well as semi-structured interviews with experts and policy-makers both at the national and local level in three countries, covering Asia, Africa and Latin America. In a first step the paper will discuss the role and the importance of formal and informal institutions to promote sustainable development and resilience. The second part of the analysis will investigate the state and need for capacities to enhance multi-level governance

in developing countries by assessing main drivers for success, opportunities and capacity building needs for the implementation of the territorial approach. The qualitative analysis will enrich current research findings and can provide innovative insights on practicable and solution-oriented pathways for the implementation of a territorial approach to sustainable development and resilience.

Based on both the analysis of the literature and the interviews with practitioners, the paper will define strengths, weaknesses and possible improvements for the well-functioning of multi-level governance and institutions as well as recommendations on how to strengthen these dimensions and create incentives for the involvement of all stakeholders.

*Urban Tourism (Disentangling the 'Urban Character' of City Tourism)*

## **FACTORS AFFECTING TIME SPENT VISITING HISTORICAL ATTRACTIONS: AN EMPIRICAL ANALYSIS IN GIRONA**

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With mass tourism, the micro-spatial and temporal dimensions of tourist behaviour have been receiving increasing attention in the research and planning of city tourism. With large numbers of visitors, there is the need for increasing the available knowledge of tourists' time and space consumption, as it is vital for better managing the tourists' impact on the cities and destinations in general, to create a sustainable tourism destination. The information on movement of tourists and also on the time they spend at each attraction can be useful for identifying bottlenecks and unnecessary barriers for planning the city space and uses, redefine city attractions, redefine tourist information and the marketing of attractions. The heterogeneity in tourists' visits to heritage sites has also called for more research on visitor's behaviour in the attractions (Prentice, 2001, referenced in Tchetchik et al, 2009; Richards, 1996; Tchetchik et al, 2009). When high concentration of tourists takes place in the heritage part of the city, and knowledge of their behaviour in terms of the total time spent visiting, and the determinants of the time spent at each attraction can be of great relevance for better planning that area of the city, developing more tailored site visiting packages, recommended tours and activities for tourists at each attraction at the old town city.

Following Grinberger et al (2014), a crucial element for managing mass tourism in cities which are activities (attraction)-oriented rather than space oriented, is knowledge about the activity-time behaviour of tourists. Page (1995) also pointed out that studies on the urban tourists and the activities undertaken was limited. The time spent at a site/attraction "provides the basis for further segmenting the visitors according to their experiential consumption of the attraction" (Tchetchik et al, 2009, p.225). These three can be applied in the case of Girona, Spain, which is analysed here, where most mass tourism attractions (heritage attractions) are in a reduced area of the city, and within walking reach one to the other. Not much information is known on the behaviour of tourists except for the study of Galí-Espelt and Donaire (2006).

Although there are studies analysing the time-space behaviour, especially in the geographic approach literature to the study of tourism, there are not many studies focussing on empirically estimating, with non-descriptive methods, the relevance of factors affecting the time behaviour of tourists when visiting attractions at a destination, with Tchetchik et al. (2009), being a relevant exception. Our objective is to analyse the determinants of the time spent visiting heritage attractions: the whole visit, a visit and the time spent at each attraction, with a non-descriptive analytical methodology which allows to obtain results more generable than those coming from descriptive methods; and looking at what type of information on time consumption behaviour can be obtained from a priori relevant determinants of that behaviour: socio-demographic characteristics of the tourist; the tourist group; previous knowledge of the destination and sources of information. The results from this type of analysis can be very useful for managing tourists and tourists' flows in small and crowded spaces, and better satisfy tourists' expectations and preferences.



The study we present here uses a database which has been created combining two information – gathering instruments; a methodology which is relatively extended now from its initial uses: high-resolution time-space data was collected by global positioning system (GPS) and other relevant tourist's information was collected by traditional questionnaires. Tracking tourists' behaviour offers information on the time and space consumption of tourists. GPS data is much more accurate and unbiased than direct observations. From this tracking, we use the information on the time the tourist spends at each attraction. From the questionnaire, we use the information for the analysis of the factors affecting that duration, visitors' socio-demographics and trip characteristics.

We use econometric models for estimating the time the visitor spends visiting attractions: duration models, probit and tobit models. Results show that there are some common patterns of visit, but heterogeneity is also present; factors such as nationality of the visitor, the presence of children in the visiting group and doing the visit with an official guide are statistically significant in explaining heterogeneity. These results may constitute valuable information which, complemented with other information obtained with the use of other techniques and methods of analysis, can enhance the knowledge on visitors' behaviours, and hence can prove useful for planners and for future research on the consumption of cities and attractions.

*Economic Resilience of Firms and Territories B: Local System Approaches*

## **SOCIAL RESILIENCE CHARACTERISTICS AND DETERMINANTS. AN ANALYSIS OF THE ITALIAN PROVINCES AFTER THE ECONOMIC SHOCK OF 2007**

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The notion of resilience is being utilized by an increasing number of authors to understand the dynamics of local and regional economies and particularly how they deal with economic shocks after the crises of 2007. Reggiani deGraff and Nijkamp (2002) argued that the notion of resilience could be a key aspect of the dynamics of spatial economic systems, specially concerning how such systems respond to shocks, disturbance and perturbation. The resilience of a place after a shock, natural disaster or economic shock, will depend not only on the economic resilience but also on the ability of a community to cope with external stresses and disturbances as results of social political and environmental change. This definition underlines the importance of the link between Social and Ecological System (SES) (Agder 2000, Holling 1973, 1996, 2001; Gunderson et al., 1995; Carpenter et al., 2005; Hotelling e Gunderson 2002; Holling et al., 2002; Walker e Mayers 2004) that are not only the sum of social and ecological components (Liu et al., 2007) but a complex system in which the social and ecological component are recognized as interdependent (Folke 1998; Folke et al., 2010). The economic literature defined social resilience as the ability of a community to withstand external shocks using infrastructure of social type, i.e. the ability of individuals, organizations and communities to adapt, tolerate, absorb, cope and adjust with respect to change and threats (Adger 2000). This definition is compatible with the theory of Complex Adaptive Social System which are characterized by non linear dynamics and adaptive capacity that enables them to rearrange the internal structure in response to external shock. Following this approach resilience is a process (Pendall 2007) characterized by four interrelate dimensions: resistance, recovery, re-orientation and renewal. Resilience is thus defined in terms of system's capacity to absorb, resist and respond to a disturbance and at the list maintain its functioning if not necessarily the same structure (Cutter et al., 2008; Carpenter et al., 2001).

The concept of social resilience can be used to describe adaptive capacities of individuals (Bonanno et al., 2007), communities (Norris 2008) and larger societies (Adger 2000). Following Norris we will use the concept of community resilience where community is defined as an entity that has geographic boundaries and share fate composed of built, natural, social and economic environmental that influence one another in complex ways. A resilient community is able to activate a network of adaptive capacity after a shock. The literature focalized the attention on natural disaster (Norris 2008; Aldrich 2012). Our analysis is based on economic shock but there is no generally accepted methodology for how the concept should be operationalized and measured empirically. Some approach are based on case study (Evans e Karecha, 2013), simple indices (Martin 2012), statistical time series (Fingleton, Garretsen e Martin, 2012), casual structural models (Doran e Fingleton 2013), construction of index and indicators (Graziano 2013; Martini 2014).

The aim of the paper is study the social resilience of the territories after the economic shock of 2007. The literature has not yet provided a set of indicators to measure the social resilience. To determine the indicators we started with the identification of the characteristics of social resilience through a survey of the literature and we identified the following features: Knowledge skill e learning, community network, place base connection, community infrastructure and diverse and innovative economy- (Berkes e Ross 2013, Magis 2010, Maclean et al., 2014). Using this features some indicators will be identified and aggregated in indices using a multivariate techniques. The analysis will be developed at Provincial scale. The indices of social resilience thus obtained will be used to study the resilience of the Italian provinces after the economic shock of 2007.

*Innovation and Knowledge Economies*

## **DIGITAL SOCIAL INNOVATION IN EUROPE: EXPLORING ENTREPRENEURS' CONSTRUCTION OF SOCIETAL CHALLENGES**

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The underlying principle of social innovation is that there is no place for a centrally determined agenda. Individuals, companies, public organisations and in fact anyone is encouraged to have a say and actively contribute to tackle the span of problems that currently affect communities. In other words, they are empowered social innovators as long as they have an interest in addressing societal challenges and are able to generate ideas for solutions that have the potential to tackle them.

Digital social innovation follows the same principles, whilst exploring the potential of open data infrastructures, knowledge co-creation platforms and decentralised social networking to leverage the power of collective intelligence and to help entrepreneurs develop IT based innovations.

In Europe attention is now growing around these collaborative and disperse innovation processes, which stimulate the identification of sustainable, practice-based solutions that can improve the life of citizens and communities. Within the European Union, in particular, there is widespread encouragement to the emergence and development of grassroots collective awareness platforms committed to setting up participatory democratic processes and to designing new visions of sustainable societies.

The generation and extraction of community derived ideas is commonly facilitated by crowdfunding web-based platforms that support knowledge exchange, foster discussion and encourage the development of best practice. Typically these platforms invite social entrepreneurs to submit proposals, which are subsequently evaluated by the crowd community in order to determine whether or not the novel ideas advanced can be transformed into added value social initiatives and are worthy of funding. Most importantly, they allow small scale innovations involving digital technologies to emerge and evolve, notably through the engagement with key communities, extended creativity networks, business incubators and investors.

This paper aims at inductively understanding this process of idea generation and extraction in crowdfunding web-based platforms, specifically through analysing European entrepreneurs' framing and construction of key societal challenges via the proposal of innovative IT based products and services. In order to achieve this goal, the investigation operates through thematic analysis of the postings made to a web-based forum where 215 entrepreneurs and innovators from across the European Union have put forward their social enterprise ideas and simultaneously competed for funding.

The results of the analysis help understand how social entrepreneurs across European Union countries exploit digital networks in social innovation activities to propose new products and services that they perceive to hold significant social value.

## **HOW OUTWARD LOOKING IS SMART SPECIALISATION? MECHANISMS, DRIVERS AND BARRIERS TO INTERREGIONAL COLLABORATION IN RESEARCH AND INNOVATION POLICY**

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Research and innovation networks are increasingly global, as evidenced by growing shares of international RandD projects, co-patenting and co-publications (see e.g. Wagner and Leydesdorff, 2005). Notwithstanding the contribution of proximity and place to knowledge spillovers and local buzz (Bathelt et al., 2004) innovation networks are rarely contained within regional boundaries and often transcend regional and national borders. This contrasts sharply with the dominant practice of designing and implementing regional innovation policies solely within the restricted boundaries of administrative regions (OECD, 2013).

The importance of global innovation networks calls for a type of regional innovation policy that goes beyond regional borders and takes into account the degree to which actors in a region are able to connect to, and benefit from, such networks and resources. The recent advocacy for place-based approaches to regional development (Barca, 2009) and the development of regional strategies for smart specialisation (RIS3) as an ex-ante conditionality within the new cohesion policy framework have further stressed this need. The RIS3 guide (European Commission, 2012) indeed emphasises the need for regional strategies to adopt an 'outward looking' approach in terms of their orientation towards global value chains, the assessment of priorities vis-à-vis other regions, as well as the consideration of cross regional projects and networks.

However the motives and conditions for transnational and inter-regional policy collaboration in research and innovation remains so far underexplored (Uyarra et al, 2014). This paper seeks to address this gap by exploring the multiple rationales and dimensions underpinning inter-regional collaboration in research and innovation policy, mainly in the context of RIS3. The paper draws on primary data collected via a dedicated survey to regional development agencies and managing authorities of 151 EU and associated countries regions and 14 member states. It maps existing collaborative efforts across EU regions, including the geography of these emerging experiences, forms of collaboration, as well as drivers and barriers associated to such cooperation processes.

## **THE ECONOMICS OF EXPO 2015 : TOO GOOD TO BE TRUE?**

**Jérôme Massiani, Università Ca Foscari, ITALY**

### **Objectives**

Every 4 years International Exhibitions, alike Olympic Games, are subject to a fierce competition among candidate cities and crystallize the hope that cities place on receiving the benefits associated with hosting such events. Consistently with this paradigm, the attribution of the 2015 International Exhibition to Milan (Expo 2015) has raised the hope in the local and national community to enjoy substantial economic benefits. Accordingly, this hope has been substantiated, in the public debate, by the publication of various economic impact studies that yielded a favorable image of the event impact. However, a more in depth analysis, consistent with many results accumulated by the economics of hallmark events, suggests that the figures presented in the public debate are based on discussible foundations and distorted computations.

The three existing Economic Impact studies, that strongly drove the economic debate, apart from being poorly open to third part scrutiny, appear prone to various distortions essentially in the incorrect treatment of substitution effects. While those studies consider that any visitors' expense for the expo should be accounted as a benefit, a rigorous analysis suggests that only the additional expenditure (increase in number/spending of foreign tourists, net increase in spending from the locals) should be considered as impacting the economic system considered. Similar consideration applies to the infrastructure expenditures that come at the price of

substituting to other projects or, at least partially, to decrease of consumption due to increased taxation. Additionally, many so called “secondary” benefits of the event appear to be in contrast with well established results of economic analysis.

#### Methods

Based on the data made available by existing studies and by various other sources, but implementing a use of data consistent with the existence of substitution or displacement effects, we provide a quantitative estimate of the real impact of Expo.

#### Expected Results

Correct accounting of these effects drives to a drastic reduction of expected net benefits. Additionally, once the welfare economics based Cost Benefit approach is substituted to Economic Impact, the actual net benefits for the local or national community appear even more subject to discussion.

In synthesis, in contrast to previous studies, our preliminary analysis, through a parsimonious yet consistent approach, contributes to the ongoing discussion on the benefits of Expo 2015 by dramatically rescaling the interest of hosting the event.

#### *Developing Rural and Peripheral Regions*

### **THE TWO-EDGED SWORD: CLUSTERING AND SME PERFORMANCE**

**Martin Mathews, University of Westminster, UNITED KINGDOM**

**Stephan Ludwig, University of Westminster, UNITED KINGDOM**

The aim of this paper is to examine the question of firm performance in industrial districts. Do district or cluster firms perform better than dispersed or remote firms? While the literature generally assumes that this is the case and many international, national and regional governments and organisations have incorporated cluster thinking into their development programmes, there is little empirical evidence to support this assumption. The sparse empirical studies on this question are highly contradictory. We undertook an original research approach by including the entire population of firms in an industry in our analysis. We use panel data constructed from the financial data of a homogenous sample of 239 bar-turning firms to analyse according to 6 performance criteria, comparing Arve valley firms (cluster) with non-cluster firms ('remotes'). Information included performance indicators for a ten year period from 2003 to 2013. To investigate the influence of firm location on performance we specified a time series regression model while controlling for the performance levels in previous years. Significant differences were revealed between the two groups. District firms had higher sales per employee, higher labour costs, sub-contract out more work, but had lower returns on capital employed than remote or dispersed SMEs. However district and non-district firms showed similar levels of profitability and operating margins (EBITDA). District firms in the Arve Valley suffered from contradictory forces; some positive and some negative making economic agglomeration, in this case, a two-edged sword. Implications are discussed for both firms and regional development agencies.

#### *Innovation and Knowledge Economies*

### **BEYOND RECIPROCAL PROXIMITY EFFECTS: THE ROLE OF POWER**

**Jannika Mattes, Carl von Ossietzky University of Oldenburg, GERMANY**

**Teis Hansen, Lund University, SWEDEN**

Not only spatial proximity, but also organizational, institutional, cognitive and social proximity play a crucial role for facilitating the transfer of knowledge and inter-personal learning. This is widely discussed and acknowledged in the innovation literature. While each form of proximity has its own characteristics as a facilitator of innovation, overly proximate constellations may lead to lock-in situations. It is hence critical to find arrangements in which the degree of proximity in the different types is appropriate.

While we know quite well how different forms of proximity go together and that they perform different roles in innovation projects, the question of how proximity forms are interrelated with power largely remains in the dark. This question is crucial as the relationships between individuals who are to learn from each other are seldom completely reciprocal and instead regularly governed by the particular power constellations of the participants (hierarchy, dependency etc.). Thus, there is a need to go beyond the idea that proximity is necessarily bringing equal benefits to all collaborators, which has so far been assumed by the proximity literature.

Power is a particularly complicated phenomenon in innovation projects. In learning-oriented projects, the participants are meant to bring in their knowledge and capacities. At the same time, power struggles can significantly hinder learning and endanger innovation. This paper asks how power interferes with proximity types and which role different proximity types play for facilitating interaction dependent on the power constellation. The paper proceeds in the following way: After an overview on the debates of proximity types and power in innovation, the paper draws the two strands of literature together and develops a conceptual framework describing the interrelation between power and proximity types. Based on this framework, we ask how certain power constellations influence the role of the different types of proximity. These theoretical ideas will then be illustrated empirically. We thereby draw upon evidence from a case study of a German multinational company and the collaboration between employees based in various corporate subsidiaries. The case highlights that power mediates the influence of proximity on collaboration and, accordingly, that changing power relations alter the effects of proximity for the collaborators.

The paper thus contributes in a twofold way. First, for academic research, it calls for the need to acknowledge power elements in the debate on proximity types and suggests a framework to do so. Second, for practitioners, it calls for awareness for power issues and an active reflection of the necessary types of proximity when designing corporate work environments.

*Labour Markets and Migration*

## **BIRDS OF A FEATHER FLOCK TOGETHER: TRANSNATIONAL ENTREPRENEURS AND SILICON VALLEY'S ALLURING ENTREPRENEURIAL ECOSYSTEM**

**Suzanne Mawson, University of Stirling, UNITED KINGDOM**

**Ross Brown, University of St Andrews, UNITED KINGDOM**

**Lauren Peterson, University of St Andrews, UNITED KINGDOM**

Many scholars consider entrepreneurship to be a 'local event' where entrepreneurs are "home grown", rather than "an imported crop" (Dahl and Sorenson, 2009, p. 180). Despite this, there is growing evidence of (and interest in) the growing number of entrepreneurs who relocate from their home economies when looking to establish, and grow, their businesses. It is recognised that these 'transnational entrepreneurs' (Yeung, 2002) are drawn to new spatial locations by a number of 'pull factors', particularly educational and employment opportunities (Saxenian, 2006). Many of these individuals seek things like venture capital or access to other finance to grow their business, which may not be available in their home economy due to resource deficiencies (Prijsjker et al., 2014). In addition to educational and business opportunities, support infrastructure within the wider entrepreneurial ecosystem is also recognised to be a critical pull factor for transnational entrepreneurs.

A new and increasingly important element of this entrepreneurial architecture in many of the world's most dynamic ecosystems like Silicon Valley are business 'accelerator programmes'. Accelerator programmes or 'start-up factories' (Miller and Bound, 2011) are an evolution of the traditional business incubator model, with a focus on expediting entrepreneurial development and firm growth rather than assisting in the initial set-up process (Brown and Mawson, 2014). Within Silicon Valley, these programmes have been responsible for developing some of the most influential internet companies in recent years, including Dropbox and Airbnb. These programmes are often a microcosm of the larger entrepreneurial ecosystem in which they operate: they have a defined culture; offer access to finance, human capital and support interventions; link in with relevant policy to support entrepreneurs and entrepreneurship; and offer access to markets and other relevant

networking opportunities (Isenberg, 2011). They are noted for being highly attractive and, necessarily, very selective.

Despite a growing body of work on transnational entrepreneurship and the importance of business accelerator programmes, we still know very little about what motivates entrepreneurs to migrate to new spatial locations to join these programmes. This is a critical gap in the literature. This paper attempts to address this issue by exploring what are the factors motivating growth-oriented transnational entrepreneurs to migrate to Silicon Valley's accelerator programmes. We will explore migration in the context of Silicon Valley, one of the world's most successful entrepreneurial ecosystems, focusing on one specific accelerator programme as a representation of the wider ecosystem. This paper draws on eight case studies, which were prepared from qualitative interview data with transnational entrepreneurs and accelerator management, as well as secondary research. Data was collected between Summer 2013 and Spring 2014.

Our research identified a number of notable issues. First, we found that there was a very strong demand from the interviewed entrepreneurs to be part of an accelerator programme generally. The strong desire to work intimately with other dynamic, like-minded entrepreneurs was the most cited motivation for joining the programme. That being said, the benefits of the entrepreneurial ecosystem such as access to sophisticated sources of venture capital, 'entrepreneurial' human capital, potential customers and potential acquirers were also considered to be important 'pull factors'. Interestingly, these transnational entrepreneurs viewed migration to be a natural part of their development as an entrepreneur as well as their firm's evolutionary growth process – but not necessarily a permanent locational movement. Whilst they wished to be part of the accelerator's ecosystem, and therefore part of Silicon Valley's ecosystem, this was often planned to be a temporary immersion. The migratory process undertaken by these entrepreneurs can be conceptualised as a relational spatiotemporal process designed to aid the growth of their ventures rather than a desire to permanently relocate. Our work has a number of important implications for the entrepreneurship and economic geography literatures. These implications, together with the attendant policy implications, will be discussed and future research directions will be outlined.

*EU Regional Policy and Practice*

## **THE EUROPEAN MARKET FOR CORPORATE CONTROL**

**Killian McCarthy, University of Groningen, THE NETHERLANDS**

**Wifred Dolfsma, University of Groningen, THE NETHERLANDS**

Europe has dramatically changed in the last two decades:

- The European Union (1957) expanded, in four phases (1995, 2004, 2007, and 2013) from 12 members in 1986 to 28 in 2013,
- the European Single market, created in 1986 to promote free-trade within the European Union, and the European Free Trade Association, grew from 12 members to 32 members,
- the Berlin Wall fell, in 1989, beginning the process of German reunification, and in 1991 the Soviet Union collapsed, creating 15 new countries in Eastern Union,
- the Euro was created in 1999 when eleven countries gave up their national currencies, and their rights to operate national monetary policies. The Eurozone expanded in 2001, 2007, 2008, 2009, 2011, and 2014, and today 18 countries, and 334 million people use the Euro.

These alterations to the shape and operation of the European market, creates a natural environment for experiments in the effects of policy and the functioning of markets. In this paper, we consider the way in which these alterations altered one particular market: the European market for corporate control.

The European market for mergers and acquisitions is not only a large market, but it is sensitive to policy and likely, therefore, to react strongly to change. We test this proposition using a sample of 263,570 mergers and acquisitions, announced and completed in the period 1985-2014.

Some of our findings are in line with our expectations. For example, we find that: the Fall of the Wall dramatically altered the number of deals done in the region: all else equal, our analysis suggests that there were 4,194 more deals done after 1991 than had been predicted before the fall of the wall. Unsurprisingly, most of these acquisitions were by Western European acquirers looking for Eastern targets, and rarely visa versa. We also find that the Eurozone has dramatically altered the number of deals done in the region. We find that joining the Eurozone leads increases the number of deals to and from the joining country, and that the expansion of the Eurozone has lead Eurozone acquirers to prefer Eurozone targets over non-Eurozone targets. In other words, we find that the Eurozone has led to more integration, which of course makes sense, as it reduces so many transaction costs.

Some of our other findings, however, were unexpected. We expected, for example, that joining the EU and the Single Market, would reduce the barriers to cross-border acquisitions, and increase the number of deals done. We report, however, that an intention to join the EU, and the Single market increases the number of deals, but actually joining the EU, and the Single Market, negatively impacts the number of cross-border acquisitions both into, and out of, the joining country. This surprising result may be due, we speculate, to a sort of cherry-picking effect: there may be greater arbitrage opportunities those outside of the EU / Single market, than for those inside the EU / Single Market.

Our thorough study of the European market for corporate control not only offers insights into the effect of the policy experiments in recent years, but to the consequence of policy on the geography of the firm. We also add to a limited on the dynamics of the European merger market.

#### *Spatial Planning and Infrastructure*

### **THE DEMISE OF REGIONAL PLANNING IN ENGLAND: WILL THE TURN TO LOCALISM AND DOWNSCALING OF PLANNING DISADVANTAGE ENGLISH CITIES?**

**Dave McGuinness, Northumbria University, UNITED KINGDOM**

England stands isolated in Europe as a nation without a regional tier of governance and related strategic planning. Upon gaining power in 2010 the Coalition government dismantled the existing un-elected regional tier of governance in England. The previous Labour administration tasked regional assemblies and regional development agencies with creating Integrated Regional Strategy (IRS) with a holistic focus on economic, social and environmental issues.

The Localism Act (2011) and National Planning Policy Framework (NPPF) brought about a scale change in English planning. Regional spatial planning has been scrapped and local planning authorities have simply been encouraged to 'co-operate' when preparing local (development) plans. A key question for English planning practitioners, is how do they ensure 'co-operation' and plan for the 'larger than local', now that formal structures for spatial planning have been dismantled?

New policy innovations like City Deals/Growth Deals for England's largest cities (which enable large conurbations to develop bespoke economic strategies) have exacerbated the uneven strategic planning fix in England. The lack of comprehensive spatial planning in England means many smaller towns that fall outside arbitrary city-region boundaries fall between the gaps. The purpose of the research is to explore these contemporary factors and to ascertain how the current uneven sub-national institutional fix will impact upon strategic planning and competitiveness in England. Will the evolving Local Enterprise Partnerships (LEPs) step up and fill this spatial planning void or will they avoid spatial planning, viewing it as 'mission creep' from their main role as economic development bodies.

The empirical focus of the paper is derived from a series of elite interviews with senior planners from major cities in England. The paper aims to identify some of the primary challenges that planning professionals face in this new localist era in England. With a specific focus on sub-national spatial planning the paper will attempt to explore the implications of the contemporary lack of regional institutional capacity, lack of strategic spatial

planning and future visioning at a regional scale upon the competitiveness of English cities, within wider Europe.

*Innovation and Knowledge Economies*

## **ANALYSING THE IMPACT OF FIRM AND REGIONAL CHARACTERISTICS ON INNOVATION PERFORMANCE**

**Helen McGuirk, University of Limerick, IRELAND**  
**Justin Doran, University College Cork, IRELAND**  
**Helena Lenihan, University of Limerick, IRELAND**  
**Geraldine Ryan, University College Cork, IRELAND**

Innovation is the generation of new ideas, processes or products, the commercialisation of new knowledge. It permeates all sectors, users, suppliers, and consumers and explaining why (and how) firms innovate remains a challenge for academics and practitioners alike. Innovation is shaped by both institutional contexts and public policy. There is a substantial literature analysing the impact of the specific factors on the likelihood of innovation output: at the micro (firm) level, studies are dominated by topics such as firm size and research and development activity, and separately, the impact of regional characteristics on regional innovation performance and national innovation systems. This research analyses the role of internal firm characteristics and the regional environment on firm level innovation. 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. The current research is one of the few to consider the impact of regional variables on four types of firm level innovation. By considering micro-level as well as regional data, we can control for firm specific effects which impact on innovation performance, not captured by other studies which focus solely on aggregate regional analysis. The primary data source for this paper is the Irish Community Innovation Survey (CIS) 2010. The data contains information on the drivers of firm level innovation for a sample of over 3,000 firms in Ireland. The CIS survey is conducted jointly by Forfás (formally Ireland's policy advisory board for enterprise trade, science, technology and innovation, now integrated with the Department of Jobs, Enterprise and Innovation) and the Central Statistics Office in Ireland. We augment the survey using regional level data (from six sources) at the NUTS3 level. This provides a series of variables indicating the degree of entrepreneurial and innovative capacity within Ireland and 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: 1) we merge firm level as well as regional level data; 2) apply econometric techniques to account for the hierarchical nature of the data, and 3) our socio-economic factors capture a wider array of important regional characteristics than previous studies which focus typically on regional RandD performance or patenting. In doing so, our research provides a more nuanced approach to capturing the effects of regional innovation milieus on individual firms. In the case of internal drivers we find intramural RandD consistently important for innovation performance while interaction with external agents such as customers, competitors etc., has a positive effect on innovation. For regional components, we find highly innovative regions with strong formal supports stimulate 'new to market' type innovation while informal investment has little impact. Process innovation does not require entrepreneurial activity but requires innovation support. The type of regional environment, which is important for differing types of innovation outputs vary and has potential policy implications. Our findings challenge policymakers not only to think about possible policy interventions and creating enabling environments with respect to the 'usual' firm level (e.g. RandD) and regional level factors (e.g. role of knowledge and geography) that drive innovation but to think about the less frequently studied elements. These elements include an urban regional innovation ecosystem (e.g. entrepreneurial activity and innovation support) that on their own may drive, support and/or enable innovation and/or interact with other factors (at different levels) to drive optimal innovation outcomes.



## VISIONING THE EUROPEAN TERRITORY

**Peter Mehlbye, ESPON Coordination Unit, LUXEMBOURG**

The world is changing rapidly and getting increasingly interdependent. New markets and trade patterns are in the making. People move to settle down to work or visit destinations further away from home than before. Global events impact daily life and living conditions such as the change of climate.

Territories, regions and cities should be prepared for these changes and for the future. This requires benchmarking in a wider territorial context and openness for seeing opportunities for development and challenges that this might bring. The increasingly interdependent and integrated world also brings new emphasis to the need for considering long-term territorial visions, strategies and scenarios at a higher scale than before, even at EU level.

The support from research is important to ensure evidence-informed alternatives and realism into the debate and in policy decisions. Often research is reactive or at best has a short or medium long time horizon ahead. Dealing with territorial development however requires a long perspective, to 2050 or even longer, and the use of forecasting and modelling showing possible futures for the larger territory as such, as well as for its regions and cities.

National and regional authorities are in many places working with visions or strategies for the territorial development, however, a consistent European picture cannot be created by simply putting them together.

Policy makers have asked ESPON to support a policy dialogue on the European territory of the future. In a participatory and interactive way involving many stakeholders at national as well as European level a project led to a proposal for a Territorial Vision 2050. This vision builds on research related to the current state, a baseline scenario and alternative scenarios using modelling exercises. The project results take the challenging step looking into the future and suggest policy aims for the long-term development of Europe.

The key message is that making Europe an open and polycentric territory will provide the same level of economic growth and make Europe more territorial cohesive in the long term.

The aims that should be pursued in moving towards an open and polycentric situation in 2050 are:

1. To connect Europe globally meaning providing advanced transport, energy and telecommunication services to European regions that can support the valorisation of their assets at global scale. This implies better links to world-wide networks and a more geographical spread of intercontinental gateways in Europe in favour of polycentricity.
2. To promote the co-development with neighbouring regions exploring joined opportunities and thereby reducing economic gaps. This would support openness and access to new markets and strengthen territorial balance through development closer to external borders.
3. To unleash regional diversity and endogenous development by providing equal development opportunities among European regions by taking solidarity steps towards regions that are less well-off. Further development in that direction would bring more regional balance and counteract unfair differences in living conditions in part of Europe.
4. To support a balanced urban structure by reinforcing second tier cities all over Europe and more profound networking of cities at regional and continental level to create synergies. This would complement the metropolitan regions and increase the number of globally important European cities contributing as well to a polycentric Europe.
5. To protect and enhance natural assets and manage ecosystems sustainably to ensure long-term services, both in urbanised and less-urbanised areas. This would support the attractiveness of European places

for economic activity, visitors and for the quality of life of citizens in a balanced way and again contribute to making Europe open and polycentric.

Finally, policy actions and political responsibility for moving towards these 5 aims are presented for discussion as options for policy making.

The need for considering the future of the European territory at political level is now taken up by the current trio of EU Presidencies (Italy, Latvia and Luxembourg) the scenario results and visionary aims from the ESPON project on Vision and Scenarios for the European Territory towards 2050 has provided an important input. The process of making the future of the European territory visible in the policy arena continues in order to create ownership and join forces in line with a long term vision and ensure governance that can make dreams come true.

*On Regionalism within International Law: A Themed Panel*

## **CHANGING PATTERN OF REGIONAL GOVERNANCE IN EURASIA: THE RISING CHALLENGES OF THE EURASIAN ECONOMIC UNION**

**Valentina Meiksane, University of Central Lancashire/Lancashire Law School, UNITED KINGDOM**

This work is a continuation of the on-going research project of the concept, theory and institutional practice of regionalism conducted at the Lancashire Law School, University of Central Lancashire.

This paper builds upon the findings of previous research of on regional institutional developments within International Relations and Law, with reference to earlier case-studies of the Shanghai Cooperation Association and the African Union. My paper explores development processes on the Eurasian region through the study of the newly-relaunched Eurasian Economic Union, its identity and differences from the European Union, African Union and the Shanghai Cooperation Association.

To establish the changing pattern of regional governance in Eurasia, this work follows the development of integrational processes on the Eurasian space and considers whether the Eurasian Economic Union can be rightly considered as engaged in a final stage of Eurasian regional integration?

The Eurasian Economic Union started its work on 1st January 2015. Although, the idea of its creation was proposed back in 1994 by the President of Kazakhstan, it took 20 years for Russia, Belarus and Kazakhstan to sign the Treaty on the creation of the Union. On the same day when the Treaty was signed, the Union expanded its borders due to the accession of Armenia and it is likely that in the near future Kyrgyzstan will also join. Acting as a direct successor of the Eurasian Economic Community and of the Customs Union, the Union promotes the process of Eurasian integration on the post-soviet space. Thus, Russia as the most powerful actor, leading power or hegemon in Eurasia, arguably leading the Union, also decisively influences the politics of the whole region. Therefore, when researching the Eurasian region, it is necessary to refer to Russia as to a powerful regional leader or leading power in the Schmittian Grossraum sense of this term.

Moreover, being a newly created regional block, with four member-states to date, the EAEU seeks to attract more states to join this regional body. Especially, it is vital for Russia, as it aims to include most of its neighbour states into the Union, to protect its borders and extend economic cooperation. Therefore, with the aim of becoming a powerful “bridge” mediating between Europe and Asia, Russia should be very careful when further developing its political economic and institutional relations with other states and neighbouring regional blocks, such as the Shanghai Cooperation Organisation and the European Union.

Thus, this research, aiming to determine the impact and changes brought by the Eurasian Economic Union in the Eurasian region and its governance. Relying on the previous experience of the European Union and cooperation with the Shanghai Cooperation Organisation, it tracks the development of the Eurasian Union by comparing historical backgrounds of European and Eurasian regions; examines their geographical and geopolitical aspects; reviews the development timelines and analyses constitutional basis by studying their Founding treaties.

**AMBITIOUS ENTREPRENEURS AND MOBILITY: ENTREPRENEURSHIP AND MIGRATION  
ACROSS THE LOCAL AUTHORITIES IN ENGLAND AND WALES A MULTI-LEVEL STUDY**

**Tomasz Mickiewicz, Aston University, UNITED KINGDOM**

**Mark Hart, Aston University, UNITED KINGDOM**

In this study we explore if immigrants are more likely to engage in high aspiration entrepreneurship. We also investigate how they compare with internal migrants – is it international mobility or also within-country mobility that is associated with high entrepreneurial ambitions? We also distinguish between the individual effects of migration and local (positive) externalities that come with migration. And we ask if it is the ethnicity or the mobility that matters for entrepreneurial ambitions? Last but not least, we explore if the effects of mobility are conditional on other characteristics - human capital in particular.

Our focus on growth ambitions is first motivated by theory. Entrepreneurial growth starts with attitudes and characteristics of those who run companies: what owners-managers think matters first and foremost (Penrose, 1959). Second, focus on ambitions is justified empirically: there is evidence of significant positive correlation between aspirations and growth outcomes. Thus, even when it is actual growth that triggers our main interest, we can take aspirations as a proxy for growth that is likely to follow. Third, our motivation is practical: longitudinal datasets that capture actual growth are narrow and typically cannot tackle selection problem - by focusing on aspirations we get a wider empirical base.

Consistent with the literature, our definition of ambitious entrepreneurship is based on Global Entrepreneurship Monitor (GEM) and relates to early stage entrepreneurs (i.e. either involved in start-ups or owners-managers of young companies up to 42 months) who aim to increase employment by 50% or more over the next five years, and will employ 10 people or more. Our data comes from GEM UK, a representative sample of working age population. We use harmonised 2003-2013 data (81k-283k observations used in estimations), with location of respondents attributed to one of 326 local authorities (LA) and one of 39 local enterprise partnership (LEP) at the higher level. We apply a multilevel logit model, estimating a likelihood of being engaged in high ambition entrepreneurship. Multi-level analysis seeks to distinguish between the set of independent variables which operate at the individual level (i.e., age, gender education, attitudes etc.) and those which operate at a 'higher level' (i.e., LEP or LA – contextual variables) and controls for the fact that individual observations share joint factors across space.

Our explanatory variables include the indicator for being an immigrant and for being a regional migrant, averages for these two calculated at LA level (densities of both immigrants and regional migrants), indicator for being a graduate and the LA average (density of people with higher education), ethnicity (15 categories), being female, age (categorised into 7 intervals), annual dummies, and GEM-specific indicators of knowing other entrepreneurs, of being an owner manager of existing company, a business angel in past 3 years, and shutting down a business within 12 months, plus random intercepts for LA areas.

Three results stand out as very robust. First, both immigrants and regional migrants are more likely to engage in high ambition entrepreneurship. Second, the likelihood is even higher for regional migrants than for immigrants. Third, with respect to contextual factors, the impact of quality of local human capital dominates. In contrast, contextual effects of migration become less significant as soon as we control for local human capital; however they oscillate between significant positive and insignificant positive, therefore for sure there is no displacement: if anything, having migrants around has a positive spillover effect.

We also find that ethnicity matters a lot for growth ambitions, but make no difference when interacted with migration – these two effects are both strong, but clearly distinguishable. In addition, we introduced control for ethnic diversity measure (calculated as a local Herfindahl index of ethnic distribution), the coefficient is positive, but the effect is weakly insignificant.

We also verified that the results on migration are robust over the business cycle; they do not change significantly over time. We introduced a proxy for local dynamism: percentage change in population, which had no effect and did not change other results.

We explored several interaction effects. Interactions between individual migration and education suggest that higher education matter less for migrants. However interactions between contextual migration and education indicate that the environment that combines human capital and presence of migrants is the most conducive to high aspirations entrepreneurship. Last but not least, knowing other entrepreneurs has more positive effect for immigrants.

The two main lessons are: immigrants are characterised by high entrepreneurial ambitions - therefore those interested in promoting entrepreneurship should embrace immigration as a source of economic dynamism. At the same time it seems that mobility itself is important. High inter-regional mobility has an even more positive effect on entrepreneurship than immigration.

This is not just the case of people moving their businesses after they became successful, but of people engaging in entrepreneurship after they moved.

*Innovation and Knowledge Economies*

## **FOREIGN INVENTORS IN THE US: TESTING FOR DIASPORA AND BRAIN GAIN EFFECTS**

**Ernest Miguelez, CNRS - GREThA University of Bordeaux, FRANCE**

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The last decade has seen the convergence of two important streams of literature dealing with the diffusion of technical knowledge and the mobility of scientists and engineers. First, research in the geography of innovation has explored the role of social ties in facilitating knowledge diffusion, and in determining its spatial reach. Among such ties, a good deal of attention has been paid to those binding members of scientific and technical “diasporas”, namely the communities of migrant scientists and engineers from the same origin country. Second, migration and development scholars have explored to what extent these diasporas contribute to innovation in their home countries, through international knowledge flows.

So far, however, both streams of literature have focused almost exclusively on the US as a destination country, and on China and India as origin countries of highly skilled migrants in general, and migrant inventors in particular. This overlooks the fact that several European countries are also important sources of highly skilled migrants to the US; and that Europe hosts quite robust flows of intra-continental migration. The focus on China and India is also at the origin of present difficulties in assessing whether the evidence on the role of those countries’ diasporas can be generalized to other countries.

In this paper we contribute both substantively and methodologically to this emerging field by analysing the forward citation patterns of patents filed by foreign inventors in the US from five Asian countries (China, India, Ira, Japan, and South Korea) and as many European ones (France, Germany, Italy, Poland, and Russia). All our data are novel and come from EP-INV, a database of uniquely identified inventors listed on patent applications filed at the European Patent Office, combined with information from IBM-GNR© (Global Name Recognition system, courtesy of IBM), by means of an original algorithm. Complementary data come from PCT applications, through a new dataset on the nationality of inventors released by the World Intellectual Property Organization (WIPO). In particular, we assess the role of ethnic ties in the diffusion of technical knowledge by means of a large database of EPO patents filed by US-resident inventors of foreign origin (“ethnic” inventors), 1980-2010, which we identify both through linguistic analysis of names and surnames and information on nationality.

We test for the existence of “diaspora” and “brain gain” effects. We state a diaspora effect to exist when foreign inventors of the same ethnic group and active in the same country of destination (in our case, the US) have a higher propensity to cite one another’s patents, compared to patents by other inventors, other things being equal. We state a “brain gain” effect to exist when the same foreign inventors’ patents are also disproportionately cited by inventors active in their countries of origin, so that the latter stand to gain from their migrants’ knowledge remittances”.

We find evidence of the diaspora effects for the Asian countries (especially for China and India), but not for the European ones, with the exception of Russia. Diaspora ties, however, do not appear to of primary importance in conveying knowledge diffusion (social ties established through co-inventorship carry more weight). As for “brain gain” effects, our evidence is more mixed. Not all countries of origin that exhibit a diaspora effect also stand to gain in terms of absorption of knowledge generated by such diaspora. By contrast, we find that we find that multinationals play an important role. In a few cases, the absence of a brain gain effects stands in contrast with the existence of an “international diaspora” effect exists, by which migrants from the same country of origin dispersed across different destination countries cite disproportionately each other.

*Developing Rural and Peripheral Regions*

## **ASSESSING FARM AND NON-FARM HOUSEHOLD ECONOMIC WELL-BEING. A NORTHERN IRELAND CASE**

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Traditionally the definition and analysis of household well-being has focused on the main economic measures of income and wealth. However, there is now an increased interest within the wider economic literature in exploring those measures which contribute to household well-being and can extend beyond purely economic measures. Furthermore, from a farm household perspective, there is increased research and policy interest in the general well-being of farm households, including how decision-making processes within the farm family influence overall well-being. This paper explores the causal effect of both economic and non-economic factors on well-being for farm and non-farm households in Northern Ireland.

Two complementary national surveys are used in this analysis: the Understanding Society (UKUSoc) conducted by the Economic and Social Research Council with funding from multiple government departments in the UK, and a Farm Household Survey (FHS) conducted by the Agri-Food and Bioscience Institute (AFBI) in Northern Ireland. The UKUSoc is a longitudinal study of approximately 40,000 households in the United Kingdom (England, Scotland, Wales and Northern Ireland), with former participants of the British Household Panel Survey (BHPS) as part of Understanding Society from Wave 2. A counterfactual non-farm sample was drawn from the Northern Ireland sub-sample of Wave 3 (2012) of the Understanding Society Dataset. The sample selection used in this analysis is based on the response numbers of the same QaL question. The resulting sample comprised 2,645 individuals (1,096 males and 1,549 females) representing 1,445 households.

The paper allows empirical comparison of the economic well-being of farm and non-farm households, and tests for statistical differences between farm and non-farm household well-being.

The analysis and results of this study both support and add to previous research. Preliminary findings show that almost three fifths of those living in Northern Ireland report a high level of satisfaction with life overall, with farm households recording a slightly lower rate of life satisfaction compared with the non-farm households. Regression results support the U-shaped life-cycle effect hypothesis. In terms of gender, for farm based females, the level of education and having an off-farm job has a positive impact on life satisfaction compared to males. For males, being in full time employment brings an increase in the life satisfaction overall. Women's work off-farm is beneficial for overall satisfaction of the household as well, acting as a supplementary source of income to the household, but providing benefits beyond those which are purely financial. Although the models provide explanation for life satisfaction amongst the non-farm males and all females, for farm males, satisfaction with life is not explained by the variables included in the analysis. This unobserved effect is something which the authors hope to explore through further work in the future. Further work will focus on testing possible correlation effects within the data, by including: household net worth, time spent on non-paid work (household chores), time allocated to caring, leisure time and also health perception and health status.

## **THE TERRITORY AS BASIS FOR TOURISTIC PLANNING**

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Tourism has received in the past years emphasis in the economic context of Brazil. Thus, intensifies the need for further discussion on this issue in its ample dimensions. To contribute for the discussions on planning and public management of tourism area in the context of regional development, this research has as main objective to analyze the understanding of the territory by public agents in the context of planning and management of tourism in the Extreme South of RS region. It is understood the importance of the territory and the valuation of the particularities to the extent that it seeks to emphasize the heterogeneous and understand the regional diversity as potentiality. The region should be understood as a dynamic particularity in which the endogenous actions presents in the territory gain strength. The planning of tourism in Brazil has been guided by a model of decentralized and participative public management that promotes the integration among the various instances of government. As a result, the Ministry of Tourism shows itself committed to work the tourism on a regional basis, for the simple fact that, in most cases, tourism is not viable in only one municipality. In this sense, it is observed that the Extreme South region faces an increase in the flow of people due to the establishment and growth of the Naval and Offshore Pole in Rio Grande. Although the Polo is located in this municipality, the flow generated reflects the neighboring municipalities because there is no basic and tourist infrastructure sufficient in only one municipality. Still the region had, in its process of formation, structuring historical factors that influenced the characteristics of the region, still visible in its current context. The theoretical and methodological approach referenced on historical dialectic materialism was supported on qualitative research, with an emphasis on case study, using content analysis as data interpretation procedure. It was observed based on the interviews with the public tourism managers in the region, that there is the understanding that is necessary to act on a regional way, however the lack of protagonism of these managers prevents build up a regional project indeed. At last, understand the territory in the context of the planning and public management of tourism requires seek to respect, in the planning actions, the particularities aspects of a specific territory, that is, realized the particularities as potentialities for regional development. Although tourism is widely identified as one of the potential to generate employment and income, able to stimulate the regional economy, it is necessary to first overcome the many barriers and bring the municipal actors around a regional project.

## **HIRED GUNS: CONSULTANTS AND EXPERTISE IN REGIONAL GOVERNANCE**

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In his 1977 book *Six Guns and Society: A Structural Study of the Western Will Wright* pointed out how the extremely influential western genre in books, movies and tv-shows followed a certain trope or story arch through which a number of social practices and discourses were articulated. In particular, western stories very often follows the trials and tribulation of specific towns or regions that are struggling to be prosperous. Often, what stops these towns or regions from developing properly are both internal and external threats, such as corrupt legal officers, hostile 'indian' tribes and perhaps also some unscrupulous political elite in cahoot with insidious 'big business'.

Then, along comes the gunslinger. The lone gunman that travels through town and takes up the challenges it faces by showing, through his actions, how the local population can come together and overcome their obstacles if they work together and follow a number of principles.

In this book we pay attention to what we understand as a new form of such gunslingers, namely what we call the traveling experts from public and private organizations that roam European space looking for regions, cities and towns to develop. In large metropolitan areas as well as peripheral regions in the outskirts of Europe

local politicians increasingly enlist the help of consultants and experts to make their regions competitive in a global race for resources, people and talent. In this particular trope, the experts enter local sites looking for ways to develop them by invoking concepts such as creativity, entrepreneurship, innovation and leadership. When doing so, they provide a setting, and a script, for how specific sites can, and should, behave in relation to the external and internal threats that disrupt and impede their development. Today such threats are represented as globalization and intense competition, and the experts assume the function of the lone gunmen, serving as hired guns ready to act and rally regional politics and policy around a common goal: to become globally competitive.

In this paper we investigate the dramaturgical setting of regional development consultants. Drawing from empirical cases of Swedish regional development policies we discuss how neoliberal governmentality, the ideology of globalization and the marketization of politics can be studied as key features of the articulation of regional space.

### *Spatial Planning and Infrastructure*

## **AN ALTERNATIVE FRAMEWORK FOR A SOCIALLY EQUITABLE URBAN METROPOLITAN STRUCTURE: INTEGRATING POLICY, TECHNOLOGY AND RESEARCH- LESSONS FROM KOLKATA, INDIA**

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The present paper is part of a larger research which attempts to critically analyse the social and spatial implications of the neoliberal economic policies on metropolitan urban structure and the growing development at the peripheral locations of cities, which have been largely criticised for leading to segmentation of India's cities and intra-city inequalities and seeks to formulate an alternative planning framework to rebuild the structure of the city region in a more equitable manner.

Recent studies have shown that most million plus cities are growing as multi-municipal agglomerations. The growth and distribution of population within these large urban areas is not uniform. Most large metropolises in India, Greater Mumbai, Kolkata, Delhi and Chennai have recorded a higher growth at peripheries than in the cores, in the decades of 1981-91 and 1991-2001. The development at the periphery has been exerting considerable pressure on land and other natural resources. The character of urban development at the periphery has been changing over the years with changes in the economic and administrative structure.

This establishes the need for the present research which has as its objective the need to redefine the urban regional structure in a more socially and economically equitable manner, through alternative models of development, with emphasis on residential land markets and affordable housing. Linking theory and policy with the role of administrative and technological infrastructure forms the core of the study.

In spite of an immense body of academic empirical and theoretical research on land and urban housing markets, there exists a gap between such research and the practice and policies dictating urban development by local governments across the developing world. World Bank in 1993 identified some 'emerging priorities for housing research' which aimed at developing research structures which could influence government policies effectively. Universal models of housing and urban land markets are being proved to be defunct and city specific approaches are increasingly being developed. Also the distributive and spatial angles of land consumption have to be regarded in totality for local governments to take effective measures, as concluded in recent studies titled which focus on developing countries in Asia.

The present research applies a general thematic structure of analysis to different territorial domains (international, Indian and a specific city) to compare variations in development as a consequence of varying policies, regulatory framework and implementation mechanisms. The empirical study is undertaken in Kolkata Metropolitan Area. Some of the findings of the empirical study and the framework suggested are summarised in this paper.

The research methodology may be broadly summarised in the following section.

Extensive use of GIS mapping is undertaken to link statistical and spatial data and create thematic maps for data interpretation. Thematic maps are generated using GIS technology to map statistical data in a spatial form, with data tagged to the basic urban and rural administrative units. Thematic maps of both temporal and spatial variations are generated for the parameters of population, density, conversion of rural to urban units in peripheral areas to identify the density profiles of these areas. This is followed by mapping sample property prices from all the corridors of peripheral growth and the temporal and spatial variations analysed. The absolute property prices in different peripheral locations as well as average annual escalations of prices are compared to understand the property price gradient in the growing peripheral areas of the metropolis. Following the spatial mapping, the emerging patterns of distinct thematic maps are correlated using appropriate statistical techniques.

The study brings together the three realms of (i) administrative hierarchy (ii) technology and (iii) research framework, to enable policy makers to take informed decisions. From the analysis undertaken in the course of the work, four main areas of research action can be identified summarised : (i) linking policy to implementation (ii) aligning all policies and programmes with an objective (iii) addressing urban land and housing issues in totality (iv) the role of local governments.

Through the body of the research, a research framework emerges which can be applied by urban governments in large metropolitan regions to compute land values and appropriately assign agencies of development. A rational approach to decision making by metropolitan planning committees and their constituent urban and rural local bodies, for determining the best use of land, not from the real estate erspective alone, but to optimise the use of a scarce resource and supply according to the social demand, has been developed as a research outcome.

#### *Urbanisation and Cities*

### **REGION, PERIPHERY AND THE CITY CORE: TRANSFORMATIONS IN MORPHOLOGY AND GROWTH SYMBIOSIS; A CASE OF KOLKATA CITY AND REGION**

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The urbanization and growth of the city of Kolkata is the history of the growth of Kolkata city at the core and a greater Kolkata region which has grown along the river Hooghly. For ease of understanding the structure of the core and the region, it is worthwhile to mention the two administrative structures, the Kolkata Municipal Corporation (KMC), representing the core and the Kolkata Metropolitan Area (KMA), representing the region. While the KMC area is 185 Sq.Kms and has a population of 4.5 million, the area of KMA is 1850 Sq.Kms with a population of 14 million, both according to the census data of 2001.

The present paper works at three different scales. It works at

- The regional (represented by the KMA),
- The periphery of the core city of Kolkata and
- The core city itself, the KMC area.

The development in these areas has been guided by the presence of many state agencies, who have contributed to the development of the city structure. Historically, agencies such as the Calcutta Improvement Trust (CIT), the Calcutta Metropolitan Planning Organisation (CMPO) have guided the development of the city region, through varied thrusts which differed with each organisation and also with time. Presently, KMDA, a statutory authority functioning under the administrative control of Urban Development Department of Government of West Bengal has the mandate of working in tandem with the elected Urban Local bodies (ULBs) toward the overall development of KMA.



The paper investigates the dynamics of temporal development in the metropolitan region, with the changing roles of the old and new parts of the city, the social and spatial links between the core and the periphery and the resulting urban morphology. The paper has as its thrust the declining role of the core, as a consequence of new peri-urban growth.

It is thus, essential to understand the functioning of the earliest residential areas at the city core which are representative of the city. Thus, the essential focus of the present paper is to understand the functioning of the core city of Kolkata, with an inside out approach to eventually address the emerging morphology of the entire region. Specifically, the paper examines the transformations of residential neighbourhoods at the core, their uniqueness, incremental growth patterns, migration and (de)gentrification along with speculative development scenarios and aligns them in the broader framework of development at the scale of the Metropolitan area.

*Culture and Creativity as a Driver of Regional Development*

## **LOCATIONAL CHOICES OF CREATIVE WORKERS: THE ROLE OF ORGANIZATIONS**

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In the contemporary cultural economy, the issue of what kind of factors affect the locational choices of creative workers has been a topic of increased interest over the past years, both in research and policy circles (e.g., Florida, 2003; Van der Waal, 2013). The discussion around this issue seems to have overlapped with a more general debate in economic geography and urban studies, which is polarized between two basic explanatory models. The first one claims that “people follow jobs”: the presence and amount of job offerings attract (creative) people to cities, fostering urban growth in several sectors, creativity included (e.g., Storper and Scott, 2009). The second model claims that “jobs follow people”: the presence and amount of amenities determine attraction of creative people to particular places, and the co-location of creative people that ensues fosters economic and thus urban growth (e.g., Florida, 2004; Wenting, Atzema and Frenken, 2011).

While these two models are certainly different in their assumptions, one common implication of both is that a city’s or a region’s attractiveness is basically correlated to its size (Denis-Jacob, 2012). Since large metropolitan areas are home both to important organizations (that offer considerable amounts of specialized jobs), and urban amenities (that translate in an attractive pool of amenities), extant research seems to agree on the relative superiority of large cities in attracting creative talent.

Recent studies have investigated how small and medium sized cities could cultivate their creative and artistic scenes (e.g., Nelson, 2005; Petrov, 2007). In doing so, they pointed to a variety of factors such as liveability and sustainability (Lewis and Donald, 2010) or location and proximity with respect to metropolitan areas (Waitt and Gibson, 2009) as important motives for people’s choices to locate in small and medium sized cities. However, since extant literature is polarized between studies investigating locational choices in ‘totally winning’ contexts – i.e. in large cities that host prominent cultural institutions, and research focusing on peripheral contexts where no important organization is present, this paper aims at investigating the ‘swollen middle’ - i.e. those medium and small cities that host some level of amenities and a few renowned organizations. More specifically, we aim to investigate how small and medium-sized cities may take advantage of the presence of such prominent organizations, and improve their attraction and retention capacity in ways different from the ‘large city, many opportunities’ model that has received most attention.

In addressing this research question, we present an explorative study of the locational choices of dancers working for an outstanding contemporary ballet company, based in a medium-sized city in Northern Italy. Through in-depth qualitative analyses, we were able to delve into dancers’ motives of attraction (i.e. first decision of locating in the city), retention (i.e., decisions of remaining in the city), and satisfaction/dissatisfaction with the context. In so doing, we employed concepts and insights drawn from

organizational theories of job embeddedness, which refers to the broad array of forces that affect a person's intention to stay in a job (Holtom et al., 2008: 252; Mitchell et al., 2001).

Results highlight that factors of attraction could differ from those of retention: the former mainly relate to the institution's outstanding features, the latter relate more to the interplay between organizational factors and city context. In particular, we found that respondents may be divided in three groups. A first group is formed by people very embedded in the organization, who also appreciate some context's features related to liveability and a city's proximity to metropolitan areas. Other dancers were attracted by the organization, but dislike the characteristics of the local context, claiming they may drive them away from the city in the long run. Finally, a third group of dancers appreciate the amenities of the city and their positive interaction with the organization, which engages in several initiatives aimed at enhancing its strong relationship with the local environment. These dancers are the more embedded in the local context and claim they would remain (or return) in Reggio Emilia even when they leave the organization.

We believe this study contributes to a more nuanced view on the debate about locational choices of creative workers. It suggests that locational choices may be affected by the characteristics of a prominent organization and the interaction between its features and the context itself. In doing so, we also contribute to extant studies by providing a fine-grained account of how small cities, too, may attract and retain creative workers, when they are home to prominent institutions, and when the embeddedness of these latter in the broader context is able in turn to enhance the embeddedness of people coming from outside.

*Labour Markets and Migration*

## **TERRITORIAL MOBILITY AND SOCIO-SPATIAL POLARISATION IN ROMANIA AND HUNGARY**

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The present research focuses on the configuration of space in light of core-periphery polarization in Eastern Europe, and on the role of territorial mobility during this process. Using the case of Romania and Hungary, the interdependency between the two factors is being explored to show how core-periphery disparities affect migration flows and, at the same time, how the mobility of various social groups contributes to the increase or decrease of socio-economic polarization. Using quantitative data analysis, the paper aims at answering the questions „How do post-socialist development strategies influence spatial polarization?“, „Why do people migrate or commute to certain areas?“, „Who are the people who choose to become mobile?“ and “How does the influx of people affect further economic-spatial development?”.

Looking at the two countries to be analysed in the present research, Romania and Hungary, the gap between better developed core regions and the resulting peripheries has been widening over the past 25 years, making it increasingly difficult for the less developed areas to catch up and compete with the established centres. Since 1989, different socio-economic processes have generated various responses regarding migration patterns. Firstly, the transition from a centralized to a market economy has re-widened the gap between centres and peripheries, after state investments during socialism had managed to reduce them to various extents. Without the support of the state, during the 1990s a considerable number of production sites for traditional industries proved to be uncompetitive and had to be either downsized or closed entirely. Arguably, the general downsizing of industrial employment was the post-socialist process which affected both economic development and population redistribution the most. Because of this, the countries' unemployment rates grew and masses of people found themselves in the position of not being able to afford the living costs in the city anymore. The immediate solution was to move away from the cities, to rural settlements.

As the transition period moved on, the economic restructuring and peripheralisation of the post-socialist period came together with further migration flows. Given the general tendency in both countries towards increasing disparities and, implicitly, towards a further development of urban centres, these centres started attracting again a growing number of people. But the cities did not grow in population, the nearby villages did. In fact both in Romania and in Hungary suburbs are the only settlement category to experience a growing population over the last years.

Currently, both countries are benefiting from the intense exchange of economic, political and defence strategies, facilitated by them joining the European Union in 2004 (Hungary) respectively 2007 (Romania). However, there are also downsides. In addition to being in competition over capital accumulation within the European and global market, the two analysed countries also compete for attracting human resources. The growing urban and regional cores are depending on an also growing pond of workers and consumers, to sustain the existing local economies and to fuel new, prospective economical projects. Since the birth rate is already low in both analysed countries (in Romania after 1989, the fertility rate dropped from 2.3 to 1.3), the extra amount of workers needs to be provided through migration. Due to the global character of the labour market and to the fact that joining the European Union has made emigration significantly easier, the cores are competing for workforce against other countries. Emigration has become an important topic especially in Romania, with an estimated number of 2-3 million Romanians working abroad at the time, which are sending almost \$10 billion back into the country.

To summarize, the present research explores the relationship between territorial mobility and spatial polarisation and uses the cases of Romania and Hungary to illustrate the importance of one factor for the other. The empirical reality of the two countries is being illustrated with the help of secondary quantitative data, including demographic, economic and social indicators, as well as a local development index. This allows connecting migration flows to the various economic phases of development, and identifying the major migration patterns, which have occurred since 1989 (internal migration from periphery to centre, external migration from peripheries, commuting between suburb and center, commuting or migration at the border between Romania and Hungary, return migration). The comparative approach allows differentiating between the general traits of the polarisation-migration relation and the particular culturally based aspects.

*Social Justice, Housing and Civil Society*

## **A KNOWLEDGE-BASED URBAN DEVELOPMENT THROUGH A SMART CITY: CASE STUDY OF TURIN**

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The proposed research addresses one of the emerging phenomena of the recent times “Smart City” and compares this concept with the concept of “Knowledge City”. The research investigates how smart actions and initiatives can lead the way toward the knowledge based development (KBD). The types of environment which need to be developed for knowledge-based activities differ significantly from those developed for by commodity-based activities and call for different development strategies. Knowledge based development has to be placed by the means of so called ‘soft factors’, software, org-ware and amenities. Moreover, smart city aims to address various urban problems through ICT-based technologies. This research proposes that a smart city in its essence can be a driving force for creating a suitable environment for KBD.

This paper implements the case study of Turin to scrutinize the initiatives on culture, science, technology and innovation, and policies in urban, economic and social development. The research eventually investigates the factors which need to be addressed to improve the quality of environment for implementation of KBD in smart city of Turin.

## **THE IMPACT OF THE CONSUMER'S ENVIRONMENT ON THE DEMAND FOR ORGANIC PRODUCTS**

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The demand for organic products in France represented about 2.4 percent of households' food budgets in 2012. The distinctive feature of the organic market is a strong growth rate: the turnover has doubled since 2007. In France, where the tendency is identical to that at the European level, the land area used for organic farming reached 3.09 percent by the end of 2010, after increasing by 53 percent between 2005 and 2010. This growth was stimulated by demand and supportive public policies (such as conversion aid, tax credits, promotion, direct purchases by the public sector, etc.) from authorities that regard the development of organic farming as one of the pillars of their sustainable development strategy.

The central question of the paper is whether, in addition to the individual determinants that influence the consumption of organic products, it is possible and relevant to talk about collective territorial or environmental determinants. This hypothesis is based on the empirical observation of interregional heterogeneity. The collective territorial determinants would reflect the regional dynamics between the supply of organic products, downstream processing, the retail sector and households' consumption of organic products. It makes sense to assume that a stronger presence of organic farming would lead to an increase in the placement of organic products in local distribution channels. Accordingly, consumers would be more aware of the organic concept and products, which would result in an increase in the budget share that households devote to the purchase of organic products.

We analyse this question with an econometric model that includes factors relating to both individuals and their environment. In order to study households' purchasing behaviour in relation to organic products, we consider the consumer's choice of a basket of goods rather than product by product. We use the Kantar Worldpanel database, for the year 2010, that provides information on the food purchases of 22 539 representative French households. For each purchase, this database lists the quantities bought, the price of the product, the retail outlet where the household made the purchase, and whether the purchased product is organic or not. Furthermore, the Kantar panel indicates the geographical code of the household's hometown and records their socio-demographic characteristics. The other databases we use are: LSA (Libre Service Actualités – Self Service News), l'Inao (Institut national de l'Origine et de la Qualité – National Institute for Designations of Origin and Quality) and Agence Bio. The geolocation of each database enables us to regroup them at a département (corresponding to NUTS 3 level) or living area-level.

We implement the two stage Heckman method (1979) in order to correct the regression coefficients for a potential bias (39 percent of households do not consume any organic products). In the first stage, we estimate a model with a qualitative latent variable that determines the purchasing decision, i.e. the binary decision of whether or not to buy organic products. In the second stage, we examine the budget share devoted to organic products, i.e. the intensity of organic purchases.

In addition to factors already identified in previous studies (i.e. price and household's characteristics), other features, related to the household's environment (the type of local sales channels, the portion of agricultural area used for organic farming, and the number of organic operators in the living area) also impact on the household's propensity to purchase organic products. We find that the local presence of suppliers of organic products (farms, food processors and retailers) and the purchases of organic products have a significant impact on the probability with which the household buys organic products and on the budget share it devotes to organic purchases. Living in a département with a high percentage of organic farming has a positive effect on households' consumption of organic products. The presence of organic farms in the vicinity also plays an important role in advertising to consumers.

## **CAN MAKERS' SPACES BE DRIVERS OF SPATIAL AND SOCIAL CHANGE AT THE LOCAL SCALE? THREE CASE HISTORIES IN MILAN**

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Milan seems recently to be the stage of various processes of change, which involve the urban fabric and the socio-economic components distributed here and there in the city. Among the agents of change, FabLabs (Fabrication Laboratory) and their proponents (generally identified as 'Makers') have provoked a general interest. Makers' spaces appear hard to classify through traditional categories; they are socio-spatial units equipped with digital fabrication machines, even if these are not usually run and used only by people who have specific expertise in computational sciences (Anderson, 2012; Gershenfeld, 2007).

Makers' spaces can be more or less connected with the proximity context or the neighbourhood they locate in, but they are integrated in global networks through the Internet, which allows them to share information and knowledge, and also to support the new manufacturing output. These generic elements of the Makers' spaces perimeter do not take in account local features that are quite hard to explore. Great attention has been devoted to outline the phenomenon in an economic approach, often resulting on the Makers' spaces generalisation and the positives they enable, in a similar fashion to what has happened with Florida's paradigm of the creative class.

We argue that Makers' spaces are a much more heterogeneous and complex phenomenon than what has been reported until now. Makers' space and the urban environment are conceived in our perspective as an assemblage of flows of people, materialities, and technology (site, activities, production). Our analysis focuses on the relation between the Makers' space and the urban environment they locate in, in order to discuss the concept of proximity and its implications in terms of place-making.

Three case histories of Makers' spaces in Milan are discussed in order to empirically approach the specific phenomenology of makers' spaces and those who can be related to these new production sites. In the case histories presented, the urban context where the selected Makers' spaces locate is explored. Methodologically, our explorative research is based on interviews to Makers. Their work, the most salient social practices connected with it, and the multiple typologies of relationships, which have been or could be activated with the urban context are enquired.

In the conclusion, we will discuss about the coherence of the features of Makers' spaces emerged through these cases with the of international definition of Makers' spaces or Fab labs (Gershenfeld,2007) on one side, and on the other side we will evaluate how our specific cases are developing in the stream of the Milan Smart Cities policies.

### *Urbanisation and Cities*

## **THE COST OF TRANSIT PROJECT DELAYS IN TERMS OF JOB QUALITY: THE CASE OF SÃO PAULO METROPOLITAN REGION**

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In the São Paulo Metropolitan Region (SPMR), central areas concentrate the bulk of formal jobs, that is, jobs that are fairly remunerated, stable, secure, legally recognized and protected. Lower-income peripheral areas, on the other hand, display high incidence of informal employment. This division is reinforced by a suboptimal and skewed provision of urban public transport (hereinafter called transit). Against this background, transit policies, and more specifically, the expansion of transit networks, can be seen as an alternative for decreasing segregation and improving job quality. Transit projects often face serious unforeseen delays, however, potentially deterring change in some areas. One salient example for the SPMR is the metro Line 4, conceived in

the 1940s, included in the 1968 metro plans, but still under construction in 2014. Against this background, we investigate whether transit expansions undertaken between 2000 and 2010 led to improvements in job quality in areas with improved network access relative to areas which faced project delays.

The existing literature does not yet offer estimates of the impact of transit expansions on local job quality. For the particular case of improvements in public transport, the Spatial Mismatch Hypothesis (SMH) empirical literature offers some evidence in support of a positive and significant effect of public transport improvements on labor market outcomes (Kawabata, 2003; Holzer et al, 2003). Theoretical predictions on the expected effect of transit expansions on local job quality are ambiguous. On the one hand, transit expansions can result in lower spatial compensation costs for formal firms, and ultimately higher (local) formal job creation (Moreno-Monroy and Posada, 2014). On the other hand, if richer workers prefer to commute by car, transit expansions can result in concentrations of lower-income workers around public transport access points (Glaeser et al, 2008).

The scarcity of sound empirical evidence is perhaps related to the methodological difficulty of estimating the impact of new infrastructure on urban variables. In an urban system, residential and job choices are made simultaneously, and are determined by multiple variables, one of which is the access to public infrastructure. Furthermore, transport provision is not determined randomly but it is based on observable and unobservable attributes of the areas which are likely to be correlated with local job quality indicators.

One strand of literature proposes addressing these issues with the use of instrumental variables. An instrument that determines the change in transport infrastructure changes areas, but remains exogenous to labor quality, can provide a source of quasi-random variation through which the impacts can be estimated net of endogenous selection. Another strand of literature suggests the use of difference-in-difference methods to tackle the endogeneity of urban transport infrastructure allocation. The idea is to find “control areas” which would have experienced similar change in outcomes as areas receiving transport infrastructure had they not received it.

In this paper, we combine a difference-in-difference method with an instrumental variable strategy. We use a historical network plan for the SPMR as an instrument in order to identify the impact of transit expansions on a measure of local job quality (i.e., the local informality rate) between 2000 and 2010. The validity of our strategy relies on the correction for possible endogenous selection, as well as the choice of a “control group” against which to compare our “treatment group”, i.e., the areas close to bus corridors and metro and railway stations opened between 2000 and 2010. In order to attribute the estimated impact to transit expansions, we need to ensure that the chosen areas were in principle suitable for new transport infrastructure, and that they are similar in terms of relevant characteristics. We include the pre-treatment values of relevant socio-economic variables as controls, and carefully construct our sample to include all areas that were pre-selected for transport project interventions within the same time frame. One advantage of considering areas for which infrastructure plans were laid out but not implemented is that these areas are similar precisely with respect to relevant characteristics for the allocation of transport infrastructure. An additional advantage is that we can interpret the impacts as the “penalty” or cost of transport infrastructure project delays. We find this cost to be significant: in areas close to transport expansions, the average informality rate decreased 14 percent faster than areas that should have received infrastructure but did not because of delays. This result is robust to a series of robustness checks.

## **WHICH RULES FOR THE HUMANLY RESILIENT CITY: ENABLING SELF-RELIANT POLYCENTRIC URBAN DEVELOPMENTS**

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1. The problem of urban growth management and its environmental impacts has been frequently addressed thanks to orthodox public planning tools (i.e., “teleocratic systems” of planning focused on mainly “directional” rules: Moroni, 2010), assuming as key issues the reduction of land consumption and natural resources preservation. But this traditional kind of planning has sometimes worsened the environmental performance of many contemporary cities, rendering them incapable of adapting to the modern world’s rapid economic and social changes. This orthodox view has usually considered private actors as marginal entities focused only on securing their own advantages.

The aim of this paper is to show how some innovative public legal systems (i.e., “nomocratic systems” focused on “relational” rules: Moroni, 2010) and new private forms of social organizations (i.e., “contractual communities” such as homeowners associations, cohousing complexes, multiple tenants income properties, housing cooperatives, commons: Moroni, 2014) could foster truly sustainable processes for “resilient cities”.

2. The concept of “resilient cities” is a relatively new one, and still lacks a clear definition.

Generally, it is applied to a city or urban system with the ability to withstand a wide range of shocks and stresses. In this sense, such a “resilient city” is a living system characterized by a particular kind of spontaneous dynamic. The paper will therefore focus not on the city’s resilience as a “stretchable” physical system itself, but in terms of the city as a human self-organizing and self-evolving system.

3. In order to endow a city with an adequate level of resilience, it is necessary to rethink public rules and concede more leeway to private organized actors. The paper will discuss three crucial building blocks that give rise to an effectively resilient and self-reliant urban system. In particular it will investigate:

a) which urban planning system allows the city to be effectively resilient; the focus will be on a new urban and regional planning approach (“nomocratic planning”) that is centred on the idea of the “urban code” as a set of solely abstract and general end-independent rules (Moroni, 2010; Holcombe, 2013);

b) how private actors can self-produce services and infrastructures in a sustainable way by taking advantage of the phenomenon of urban land rent (Foldvary, 2011; Moroni, 2014);

c) what kind of facilities can be directly provided by private “contractual communities” thanks to new organizational arrangements and new technologies; here the focus is on a radical version of the “distributed energy” paradigm, and on new options for “on-site” water treatment (Foldvary and Klein, 2003).

These three elements can effectively produce social and economic empowerment, along with several interrelated advantages, such as: water and energy cost reduction, promotion of self-reliant communities (reducing the cost and impact of transportation also), development of new green production chains, etc.

## **UNDERSTANDING THE RELATIONSHIP BETWEEN LOCAL RESOURCES AND FIRMS’ PERFORMANCE: AN INVESTIGATION ACROSS ITALIAN TERRITORIES**

**Valentina Morretta, Centre for Economic and Enterprise Development CEEDR, UNITED KINGDOM**

In the free market economy, regions within the same country are often characterized by different performances, and the role of macroeconomic factors has been criticised as insufficient in the explanation of territorial disparities (OECD, 2001). While “exogenous” macroeconomic forces are essential in driving growth

and well-being, it is argued that “endogenous” factors are becoming increasingly important in determining regional competitiveness (Stimson et al., 2011) and that each region could find the basis for competitiveness from within its own territory, making use of material and immaterial assets which are unique or not easily found in other places (Tödling et al., 2011). These local assets may be comprised of local regional specificities, uniqueness, territorial identity, and localised tacit knowledge which, if suitably exploited, may become a source of competitive advantage for firms (Tödling et al., 2011).

Based on this idea, the OECD (2001) introduced the concept of “Territorial Capital” that “refers to the stock of assets which form the basis for endogenous development in each city and region, as well as to the institutions, modes of decision-making and professional skills to make best use of those assets”(OECD 2001:13). In this perspective, it can be argued that local resources continuously accumulate (or dissolve) in a certain place and over time in the form of both classic (e.g. physical capital such as private and public infrastructure) and atypical “hybrid” capital (e.g. social and cultural capital); therefore, territorial capital can be conceptualized as the product of sub-forms of capital derived from the spatial-temporal accumulation of local resources which can be determined by causality (natural capital), stimulated by local and/or extra local actors, intentionally or unintentionally produced (Camagni, 2008).

The aim of this paper is to critically examine whether and how different “local resources”, conceptualized as different forms of territorial capital, affect firms’ performances. The study is conducted across 20 regions and 110 provinces in Italy and it considers diverse economic sectors where regional firms operate.

The impetus for this research is primarily based on the fact that Italian regions appear to be well equipped with unique tangible and intangible territorial assets (for instance Italy has the greatest number of UNESCO World Heritage Sites in the world ) that if transformed into marketable products, services and experiences, could increase the competitiveness of Italian firms in the global market. Moreover in Europe, and in the Italian context in particular, there is a strong belief that territories are important for competitiveness and that regional development could derive, or at least be connected to, an effective valorisation of existing economic, social, cultural and environmental conditions (EU, 2011).

Whilst the majority of studies have focused on the impact of single territorial assets such as Human or Social Capital (Mason et al., 2012; Westlund and Bolton, 2003), this paper argues that the analysis of a single factor is not sufficient to provide a comprehensive explanation of variations in territorial and firms’ performance. Hence the impact of each local resource should be analysed in relation to the presence of a combination of other territorial capital’s components.

The paper combines a critical analysis of existing studies on territorial capital (Brasili et al. 2011; Capello et al. 2009; Camagni et al. 2011; Perucca, 2013) with an analysis on firms’ performances; in particular it investigates what combinations of local resources have a significant impact on firms’ productivity within different sectors and territories, through an analysis based on panel data.

Both tangible and intangible measures of territorial capital will be considered. Recent literature has emphasised the importance of intangible capital at the macroeconomic level (Capello et al. 2009, Camagni et al. 2011, Perucca, 2013) and at the industry level (Corrado et al. 2014). However, there is no evidence on how intangible dimensions of territorial capital affect firms’ performance and/or whether they provide additional benefits compared to the exploitation of tangible territorial resources. Moreover given the empirical evidence to date, we expect that different combination of intangible and tangible local resources existing in different localities can be crucial for firms’ productivity in diverse economic sectors.

The main source for company data is the AIDA dataset which contains comprehensive information on Italian firms collected and re-elaborated from their official financial statements. The sample includes about 100,000 small-medium and large enterprises across 20 regions and 110 provinces. Other sources of information include territorial variables downloaded from public datasets available at ISTAT (Istituto Nazionale di Statistica), Ministero dello Sviluppo Economico, Istituto Tagliacarne that will be used as proxies to quantify territorial capital.

The analytical framework is based on the estimation of a Cobb-Douglas local production function, augmented with different measures of territorial capital. This method has often been used for the analysis of knowledge spillovers (O’Mahony and Vecchi 2009) and ICT spillovers (Rincon et al. 2014) but not for the impact of territorial capital on companies’ productivity performance. The econometric estimation uses different panel



data methods to account for unobserved firm heterogeneity, common correlated effects and stationarity (Eberhart and Bond 2009).

This paper contributes to this area of research by improving existing studies on this topic analysing whether and how territorial capital is a determinant to firms' productivity. In particular this project is significant due to its potential to show possible directions for policy interventions and, at the same time, investigate local factors that might be crucial for entrepreneurial success.

*Role of Institutions in Regional Development*

## **THE IMPACT OF PUBLIC-PRIVATE PARTNERSHIPS ON SUSTAINABILITY: VALUE FOR MONEY OR SOCIAL VALUES?**

**Nikolai Mouraviev, University of Abertay Dundee, UNITED KINGDOM**

The article investigates challenges to public-private partnership (PPP) management in two ex-Soviet nations – Kazakhstan and Russia – through the prism of the PPP impact on sustainability. Sustainability can be viewed through the social values that the government attaches to partnerships. Many of these values, such as long-term postponement of privatisation in social infrastructure, are beyond the cost-benefit approach or the value-for-money concept. Likewise, transaction cost economics that suggests that a PPP should be formed only if it can provide the public service cheaper compared to the government in-house delivery, cannot serve as a reference point for the government decision whether to deploy a partnership. The reason is that PPPs in Kazakhstan and Russia enjoy extensive government financial support and PPPs often cost the government more than its own in-house service provision.

A traditional approach to performance management in which a project is assessed along three dimensions (whether it has successfully achieved the assigned tasks and whether they have been carried out on time and within the budget) is also unlikely to be useful for the assessment of PPP performance. This is because in a PPP tasks tend to change often during a lengthy project time (e.g., 15 to 30 years); project deadlines are often adjusted due to the task complexity and difficulties in partner collaboration; and cost overruns in PPPs happen frequently, particularly due to errors in budgeting and in those cases when risks, such as foreign exchange risk, materialise. The article argues that a qualitative assessment of PPP performance is required in order to appreciate social values that partnerships bring along. From the government perspective, it is critical to ensure that PPPs create and deliver social values as this would provide justification for the government efforts aimed at extensive PPP deployment in both Kazakhstan and Russia.

The study adopts a theoretical stance that multiple connections exist between a PPP and sustainable development including its economic, social and environmental dimensions. Hence, the article elucidates the PPP performance management framework through the prism of the PPP impact on sustainability.

Using a qualitative approach based on the interview data, the article asserts that the governments in Kazakhstan and Russia intentionally design PPP projects as low risk for a private partner, which means that the governments bear most kinds of risk. However, the government focuses on the PPP broader benefits to society. These benefits include the long-term availability of public services provided by partnerships; job creation and income generation; generation of additional business that supports the principal PPP activity; long-term positive impact on economic development at the regional and local levels; and enhanced collaboration and trust between the public and private sectors. The PPP benefits can be summarised as a set of positive externalities that, from the government perspective, outweigh the budget outlays and the government financial support to partnerships. The article concludes that having adopted the approach that focuses on the PPP broader benefits to society, the government supports this approach by certain risk management tools aiming to ultimately ensure society's greater sustainability. As most partnerships in Kazakhstan and Russia are small (in terms of projects' monetary value), they may play noticeable role in regional development and greatly contribute to sustainable public service provision in local communities as well as deliver social values.

**Olga Mrinska, UNITED KINGDOM**

Regional policy's core objective is to enhance the spatial connectivity, competitiveness and wellbeing of regions and territories, while weaving their diversity into the single fabric of country's space. Opening potential of people and territories while creating institutional framework for horizontal and vertical two-way communication channels among the regions are essential elements of the regional policy toolkit. The absence of those might lead to stagnation of regions' economic base, deterioration of social standards, reduced mobility and isolation of the regions from each other. The ultimate phase of unsuccessful regional policy or lack of thereof is spatial disintegration.

Ukraine lends itself to a very illustrious case of the European country where spatial disintegration is happening while we speak. And though external factors of current crisis in Ukraine are widely discussed in broadsheet press, online media and hotel conference rooms, there is very little discussion about the internal factors that contributed to economic and mental isolation of some Ukrainian regions and, consequently, to their estrangement from the rest of the country. And these internal factors should go beyond the "language problem", geopolitical preferences and geoeconomic realities.

The objective of this paper is to tell the story of unravelling crisis through the lens of regional policies and practices in Ukraine, change in governance structures and evolution of human capital. It argues that persistent ignorance of the necessity of active regional policy, which embraces both national-level policies and transfer of authorities to regional and local governments for developing and implementing their own socio-economic development policies, as well as combustive combination of rigid vertical of power with the laxity in selecting responsible local and regional leaders, led to faulty policies or lack of those. This ignorance is rooted in the lack of understanding of the causes and consequences of spatial isolation among political elites and weakness of civil service, which has been left alone to develop and deliver regional policy without much real authority or budget on their hands. Absence of active and influential civil society, until very recently, also added to the lack of accountability and transparency of regional and local elites, which forbade correcting the ineffective policies.

The paper is based on many years of field research and analysis, and interaction with the key Ukrainian policy stakeholders at national, regional and local levels. It also embraces the many years of experience of participating in the developing government strategic documents and legislation. It argues that over decades the developers and implementers of regional policy in Ukraine stubbornly ignored the fundamental issue – politeconomic context in which regional challenges should be addressed. They failed to embrace the multitude of powerful actors and their motives, they ignored the dynamics of relationships between the few very powerful actors, that have lots to lose from forsaking status quo, and multitude of less powerful and disintegrated actors, who might be the greatest winners if the objectives of regional policy are implemented and sustained impact is achieved in the majority of regions. Only acknowledging the political nature of regional policies could open the way for consensual actions and measures that would bring together the diversity of potentials and views about the development of different regions into a single policy framework that ensures coherence and integrity of Ukrainian space.

## **MAIN CHALLENGES OF WATER RESOURCE MANAGEMENT IN METROPOLITAN AREAS OF POLISH SECOND TIER CITIES**

**Karol Mrozik, Poznan University Of Life Sciences, POLAND**

**Piotr Idczak, Poznan University of Economics, POLAND**

The objective of the paper is to identify and analyse the main challenges of water resource management in metropolitan areas of Polish second tier cities, also cities outside the capital whose economic and social performance is sufficiently important to affect the potential performance of the national economy. Analyses were conducted on planning and strategic documents based on three Polish metropolitan areas: the Lodz Metropolitan Area (LMA) – localized in the Odra and Wisła river basin, the Poznan Metropolitan Area (PMA) – Odra river basin, and Wroclaw Metropolitan Area (WrMA) – Odra river basin. The paper aims to include an understanding of the processes taking place in peri-urban areas around the second tier cities (primarily loss of water retention capacity in the catchment as a result of the development of urban areas – extent of the process and changes over time). The main water management problems within the analysed metropolitan areas are:

- over-allocation of surface and ground-water resources;
- flood protection;
- drought prevention;
- discharge of untreated and insufficiently treated municipal and industrial sewage and cooling waste water;
- insufficient sanitation of rural and recreation areas;
- pollutants from agricultural sources;
- littering in river and stream channels;
- biological discontinuity of rivers and streams;
- changes in natural hydro morphological conditions of surface waters caused by hydraulic engineering structures and regulation of rivers and streams;
- loss of natural retention of catchments caused e.g. by compact building development of town areas, changes in land use in river valleys, e.g. from agricultural and forest to built-up areas.

In addition important issues for the analysed metropolitan areas are:

- occurring conflicts of interest users;
- inadequate environmental education and awareness;
- inadequate system of fees and subsidies;
- lack of sufficient funding of water management;
- lack of effective cooperation of institutions in issuing water permits and control of water management, competence and organizational problems hindering the efficient water resources management, and fragmented structure of water resource management;
- lack of an effective system for communicating and sharing data on water management, hindered flow of information, lack of coherence between environmental databases in different institutions;
- lack of organization receiving segregated waste collection points etc.;
- persistent incoherence and ambiguity of laws;
- lack of legislative solutions promoting environmental trends in the spatial planning.

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## **INSTITUTIONAL CHANGE ON THE ANGLO-SCOTTISH BORDER: CROSS BORDER COLLABORATION IN ECONOMIC DEVELOPMENT**

**Gail Mulvey, University Of Cumbria, UNITED KINGDOM**

**Frank Peck, CRED, University of Cumbria, UNITED KINGDOM**

The referendum on Scottish Independence in 2014 generated heated debate about a wide range of issues surrounding the relationship between England and Scotland at a variety of spatial scales. Though less prominent now in the media, the implications of the referendum still reverberate in the United Kingdom not least in terms of the unpredictability that now permeates national politics. Uncertainty is also a feature of regional change affecting relations between territories within the North of England and also interaction with neighbouring territories in the south of Scotland. In this regard, recent experience in economic development in the north of England and on the Anglo-Scottish border provides an illustration of the effects of symmetries and asymmetries that tend to characterise border regions and the factors that might enable or inhibit cross-boundary collaboration in policy making and delivery of economic development. Though the Anglo-Scottish border remains a sub-national regional boundary in the UK context, it is nonetheless the case that the border is increasingly characterised by contrast in institutional settings and policy frameworks.

Previous research on border regions in Europe has shown that the intensity and effectiveness of cross-border collaboration varies considerably and tends to be enabled by cross-border institutional linkages in research, education and technology transfer as well as complementarities in industrial structures and knowledge-bases which reduce the cognitive distance between policy actors either side of borders. On the other hand, it has also been shown that barriers are often created by low institutional capacity on borders, low levels of complementarity between territories, asymmetric institutional structures and the dominance of centralist political systems which reduce local autonomy in border regions. In the context of economic development, attention has been given to the ways in which national and regional boundaries vary in their porosity with regard to delivery of policy. An increasing emphasis has been placed on less tangible interactions including processes of innovation, regional and local public policymaking and the significance of knowledge-flows and learning across boundaries. This has given substance to the concept of cross-border regional innovation systems (RIS). The Anglo-Scottish border has witness intensified levels of differentiation arising from increased levels of autonomy in policymaking in Scotland. Simultaneously, there has been a radical reorganisation of structures for economic development at the sub-national scale within the North of England. These changes, involving the demise of regional development agencies (RDAs) and creation of local enterprise partnerships (LEPs) mainly at a sub-regional scale, have created new asymmetries between former regions in England. In the context of English territories adjoining Scotland, there are now significant differences in scale and capacity contrasting Cumbria LEP in the north-west with the North-East LEP which covers a much larger population and a more diverse and urbanised territory. The paper compares and contrasts the economies of Cumbria and Northumberland with the Scottish Borders and Dumfries and Galloway in Southern Scotland and considers the implication of institutional changes for collaboration in economic development.

## **EU-CHINA AND EU-BRAZIL POLICY TRANSFER IN REGIONAL POLICY: ONE-WAY STREET OR CUL-DE-SAC?**

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**Marcin Dabrowski, Delft University of Technology, THE NETHERLANDS**

**Laura Polverari, University of Strathclyde, UNITED KINGDOM**

This paper investigates the EU-Brazil and EU-China dialogue on regional development policy, as a field of international cooperation. Policy transfer in this area is still relatively under-researched and is a puzzling case for a number of reasons: first, regional policy is inward-oriented, as it targets the catching up of regions with prevailing national economic and social standards; second, as a place-based policy, regional policy is

intrinsically context-specific, as both policy responses and outcomes are connected to the unique situation of each given territorial reality; third, its distributive (and often redistributive) nature make regional policy reliant on complex multi-level governmental negotiations; lastly, its strategic goals, thematic scope and financial scale are largely affected by the national levels of economic development, which differ vastly between the Western world and the emerging economies. This background notwithstanding, knowledge exchange and policy transfer have successfully taken place between the EU and Brazil and between the EU and China since the mid-2000s. This has happened through institutionalized, concrete activities, which have delivered tangible outcomes on the regional policy frameworks of Brazil and China. This study discusses and compares the reasons for engagement in such unlikely policy learning effort; identifies the mechanism of policy transfer and their degree of institutionalization; and reflects on the conditions that have made this case of policy diffusion more or less successful, drawing comparative lessons from the two experiences. The study is based on semi-structured interviews, surveys, participant observation and informal exchanges during high-level seminars (EU-China, EU-Brazil) and analyses of strategic documents and legislation.

*Mega Events and Regional Development*

## **A COMPARISON OF THE MAIN EVENT IMPACTS BETWEEN ZIMBABWE AND THE UNITED KINGDOM**

**Rutendo Musikavanhu, Bournemouth University, UNITED KINGDOM**

This study explored the negative and positive impacts of events in both developing and developed nations, using the case studies of Zimbabwe and The United Kingdom, critically analysing event related impacts and demonstrating the differences and similarities that appeared in both sets.

The aim of this research was to critically analyse the event impacts between a developed and an emerging destination to demonstrate the different ways event impacts affect different societies. The findings in this research aimed to advance current scholastic knowledge for future studies. The key objectives were 1) To study the key impacts caused by events, 2) To establish the fundamental event impacts in emerging and established event destinations, 3) To define the social, economic and political differences that influence events in Zimbabwe and The United Kingdom respectively and 4) To create a framework that includes event impacts specific to developing nations.

All the objectives were achieved through the examination, presentation and discussion of the data gathered from the primary research using qualitative interviews as a research method, whilst cross referencing with related information from literature provided by the secondary research. Concisely one of the main findings was the discovery of a gap in existing event studies, clarifying that there are limited frameworks that are intended to gauge the scope of event impacts within emerging nations. Additionally, settling that events can result in negative and positive impacts, however this is determined by the implementation of the event, which is fundamentally subjective to social, political and economic impacts within the community.

The study lead to the author's current research question that seeks to understand the impact of mega-sport events on developing nations from the perspective of residents so as to contribute to the re-evaluation process of existing mega-sport event classifications and paradigms. Unfortunately a vast majority of relevant studies on social impacts centre on mega-sport event tourism in developed western countries whereas the hosting of mega-sport events has shifted to developing nations in the southern hemisphere therefore current research is missing important undercurrents affecting these areas. Resulting in a challenging and partial view of the application of these principles in developing nations, a theory-practice gap or research omission that is a key premise of this study that the author intends on investigating and providing recommendations on how to appropriately adjust key terminology to complement different social groups.

Essentially creating an opportunity to discuss, critique and validate methods on mega-sport events in developing nations, with the hope of contributing knowledge that can help set achievable and realistic standards measured according to the environmental issues affecting developing nations rather than the current foreign standards formulated in developed nations.

## **CENTRALIZED VS DECENTRALIZED TOURISM POLICIES: A SPATIAL INTERACTION MODEL FRAMEWORK**

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**Guido Candela, Department of Economics, University of Bologna, ITALY**

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The choice of centralizing tourism policies at the national level or, on the contrary, of decentralizing them at the local level is widely discussed in the literature, which highlights the related pros and cons. In fact, the simultaneous role of originator and attractor of tourism of each spatial unit may imply a range of complex and competing interests at various geographical scales. At any one time, organizations at the national, regional and local level are actively engaged in promoting tourism destinations in order to attract tourists. Nevertheless, potential competition/complementarity between regions in terms of their attractiveness factors may imply a range of complex and competing interests at various geographical scales. In particular, in a framework of regional competition, a central (national) policy may be necessary to offset or coordinate the clashing regional interests.

An increasingly important force of attraction for tourists (both domestic and international) is cultural tourism. For this reason, national and regional governments make great efforts to implement effective cultural tourism policies, for example to obtain an official certification for their historical/cultural attractions, like UNESCO's World Heritage Sites (WHS) list. The WHS endowment of the regions surrounding a tourism destination may have a negative effect on its inflows of tourists (Patuelli et al. in *J Geogr Syst* 15:369–402, 2013). Indeed, tourists consider, in forming their travelling choices, the WHS endowment of alternative destinations, generating a phenomenon of spatial substitution (competition).

This paper focuses on the choice between implementing tourism governance and policymaking at the central (national) or at the local (regional) level. The issue is raised by the following problem: (1) regional endowment (i.e., attractiveness factors) may positively influence arrivals to tourism destinations, providing a justification for local policies (e.g., lobbying towards the national government for obtaining UNESCO's WHS designations); (2) however, regional competition may reduce the positive direct effect, so that it may be necessary the intervention of the central (national) policy maker, to "compensate" or "correct" the local (regional) policies. The issue concerns the choice of how managing regional spillovers: regions could use their attractiveness factors to gain a competitive advantage over other regions, but at the same time they risk damaging the national interest to attract tourists and increase the international market share. It is therefore critical to correctly balance and coordinate the tourism policies between the national and regional levels in order to effectively manage the regional endowment to cater to the cultural tourism demand.

We stress that more profound insights into the problems and challenges of (de)centralized tourism policies can be gained by examining the national-regional choice, and in particular by using as a modelling framework, the 'normative' spatial interaction model.

## **MEASURING URBAN SUSTAINABILITY – FROM VISION TO PRACTICE. A CASE OF CLUJ-NAPOCA**

**Julia Nagy, Babes-Bolyai University, ROMANIA**

The subject of urban sustainability has become one of the most important elements and aims of the urban management systems but the progress in achieving results is not an easily measurable question. Despite the fact that rapid urbanization brings complex difficulties to the development process it also presents a lot of potential in terms of economic, social and environmental innovation and is able to offer the resources to create a stable and sustainable urban texture. We can constantly see a strong commitment to adapt solutions

for acting and developing in a sustainable manner on global and also local level. Nevertheless, our endeavors towards achieving this goal can easily downhill from this path and rather aggravate the so called 'dark side' of the urbanization process when hasty decisions are taken, incomplete, inadequate urban planning and management is performed and there is little public awareness. Policy as well as decision makers are reluctant to establish a clear and steady vision of a desirable path towards urban sustainability and implement initiatives which allegedly will lead to a sustainable future. However, despite the fact that the term reached its mature state, it became a core element of policies and urban development actions, in reality the concept is interpreted in numerous ways. This leads us to wonder about what is that we aspire for and how do we assess our progress? Therefore, the aim of this research is to examine the instruments and methods which influence the process of current urban planning in reaching sustainable development in the case of Cluj-Napoca. It researches the understanding of the concept from the perspective of policy making, it analyses several initiatives within the urban management which have sustainable development as their purpose and also investigates the ways of measuring progress in achieving economic, social and environmental sustainability. There is a special focus on the multiple visions formulated in the urban development policies, the understanding of the concept and also the development priorities from a governance perspective. Finally, the conclusions show that the strategic vision should be detailed not only by presenting objectives but also by actions which have as a priority the permanent and actual involvement of the community in the decision making process. Further, it highlights the importance to understand how the social, economic and environmental contexts interconnect. It is not enough only to be certain that our initiatives and actions are within the borders of sustainability, it is also necessary to be able to measure our progress and support our actions with actual data.

*Territorial Governance and Regional Leadership*

## **GOVERNING EUROPEAN MACRO REGIONS: SELECTED EXAMPLES FROM THE ALP**

### **Janez Nared, ZRC SAZU, SLOVENIA**

Contemporary spatial development challenges in the Alps, connected to climate change, demographic change, transportation, natural hazards, and other issues, refer to all spatial levels, from local to transnational, to formal actors and those not part of political establishment and governmental jurisdictions. Therefore, spatial planning may not only reflect the views of the government, but should connect all stakeholders into a partnership, providing a solid structure for sustainable spatial development through inclusion of actors, governance, and participatory planning.

In this regard, governance is related to overlapping processes and relationships between governing bodies that can also include external actors. The aim of governance is not to change the concept of government, but to create new, additional forms of integration and coherence. This is particularly promising for the Alps, where – according to the Alpine Convention's protocol on spatial planning and sustainable development – the preservation of the unique and sensitive Alpine natural environment must go hand in hand with human social and economic activities, and thus appropriate and diversified measures should be in harmony with the local population, political representatives, and businesses and associations. Putting them at the fore, local stakeholders are given a chance to determine their own social, cultural, and economic development, convinced that many problems in Alpine territory can best be resolved by the local and regional authorities directly concerned.

Governmental bodies are responsible for policy and decision making, but while doing this they face numerous situations, where decision-making powers are not clearly defined or where competences are overlapping. To this end the governance is a process where different decision-makers join their efforts in order to solve their common problems and to overcome the deficiencies of government by connecting various decision-makers. Following this main idea the RURBANANCE project (<http://rurbance.eu/>) defined four governance models and implemented more than fifty »development discussion tables« dealing mainly with three sets of topics: Institutional setting, Functionality and integrative planning, and Search for problem-centred solutions. All the implemented governance processes have followed a common logic: problem analysis, policy analysis, participative processes, visioning and policy readdressing. In this point participatory processes and

participatory planning played a crucial role, being a main tool for bringing stakeholders together and to bind them into common planning activities.

In this regard the aim of the paper is to present and categorize the governance processes in the Alps and to present the Alps as a potential model for a governance of a European macro-region.

*Economic Resilience of Firms and Territories A: Economic Determinants and Measurements*

## **RESPONSE TO AUSTERITY IN SEZs IN POLAND**

**Jarosław Nazarczuk, POLAND**

**Stanisław Umiński, The University of Gdańsk, POLAND**

The recent global financial crisis has revealed the significance of different types of linkages that occur between economic entities located in different areas of the world. These interactions, stemming from an openness to the global economy, foreign trade, foreign investment, credit sectors, changes in demand, etc., are seen as transmission channels through which shocks can pass through. As a result, economies that have become more entangled in different linkages of high significance to the national economy are seen as more vulnerable to economic crisis transmission.

Special Economic Zones (SEZs) in Poland, which are economically preferred areas, offer various amenities for investors that have valid permits to operate in them. These are, for instance, tax exemptions, fully equipped sites with the necessary utilities ready for investment, and law assistance in the investment process. Thanks to tax benefits, companies obtain strong competitive advantages, due to lower costs of operation, compared to the ones located outside the zones. This can result in lower prices of the commodities or services offered.

From another perspective, entities in SEZs are more export oriented; therefore, they are more subject to changes in demand on foreign markets. They operate mostly in selected branches of industrial manufacturing or rarely in services. These internationalized companies with high shares of foreign capital, in many cases, are also more dependent on capital flows between affiliates. That makes them more vulnerable to economic shocks transmission.

The paper aims at identifying the extent to which Special Economic Zones were susceptible to the negative impacts of the recent financial crisis. Therefore, we analyse in detail the vulnerability of these areas to the negative impacts of the recent financial crisis in comparison to the national economy; we also inspect their influence on the Polish economy. We have formulated a hypothesis that, due to higher openness to trade, SEZs were more susceptible to import negative impacts of economic shocks than the Polish economy on average. The analysis was conducted on (1) an aggregate level (SEZ vs. the Polish economy as a whole) as well as (2) with spatial reference to the location of specific entities that have valid permits for operation in SEZs in Poland. In the latter, we had to disaggregate some of the data to the poviats level, which corresponds to NUTS 4 level of administrative division. As a result of a thorough study of the volume of exports, the number of exporters/importers located in SEZs, the geographical and commodity structure and dynamics of exports/imports, etc., we have formulated conclusions concerning: (1) the degree to which economic entities located in SEZs are prone to transmission of economic shocks, (2) branches being vulnerable to external economic shocks, (3) the significance of SEZs influence on the aggregate economy, (4) and the spatial perspective of economic slowdown distribution in Poland with a particular reference to the location of SEZs.

We use econometric modelling (difference-in-difference approach) in order to analyse the scale of negative impacts of the crisis on entities operating in SEZs in relation to the areas without SEZs (in poviats). We intend to answer the following questions: (1) Were SEZs more sensitive to the negative impacts of the recent financial crisis than other areas of Poland? (2) What changes in economic situations were observed during the economic slowdown in SEZs compared to other areas? (3) What factors have determined the scale of reduction in output/employment/investment/exports at the local level?



Our study fits into a long-lasting discussion on the consequences of special economic zone operations regarding their influence on national and local export potential. Therefore, we present various aspects of regional differences in foreign trade in Poland apart from those aggregated for the national economy. We have also joined in the deliberations on further operations of special economic zones in Poland as well as other parts of the world, carried out both in the domestic and foreign literature, as well as ongoing debates on prolonging the existence of the zones and subsequent decisions of the government on their temporary operational extensions. We believe that our findings will allow some minor economic and regional policy adjustments towards recognized effects and the needs of companies running in Special Economic Zones in Poland.

*Economic Resilience of Firms and Territories A: Economic Determinants and Measurements*

## **FIRMS' DECISION-MAKING UNDER RISK AND REGIONAL ADAPTIVE RESILIENCE**

**Thomas Neise, University of Cologne, GERMANY**

Regional resilience as a mainly equilibrium-focused approach pays attention to the processes of regions recovering from economic shocks. In particular, structural crisis in industrial regions and economic recessions have led to the increasing popularity in the regional economic science. Hereby its strength lies on explaining the successful or failed recovering of regions through analysing for example GDP or employment rates. However, it is mainly a descriptive approach of regional economic development. In addition, the examining of why and how regions are evolving in this pattern remains mainly unclear. The reason for that is that regional resilience rests on the neoclassical paradigm of economic behaviour and the emphasis on the macro or meso level; thus it is not capturing fully the decision-making of economic actors. Further theoretical developments, such as the evolutionary approach of regional resilience, acknowledges the long-term development of growth trajectories and the importance of institutional structures. However, the concept disregards the micro level perspective and thereby the action pattern of economic actors and also falls short in putting attention to adaptation and adaptability to gain resilience. Altogether, the usefulness and novelty of regional resilience is heavily contested in economic geography.

Regarding to these shortcomings, this paper emphasizes on the complexity-focused adaptive resilience approach, developed by the evolutionary and institutional economic geography. Therefore, resilience is assumed as a path dependent and evolutionary process, which is characterised by the adaptation of actors in their institutional setting. Thus, resilience is evolving through the decision-making by actors to leave former successful trajectories in favour of alternative, related or new ones. Furthermore, the idea of decision-making under risk, developed by the behavioural economics as well as the insights of adaptation by the hazard and vulnerability research are integrated.

Hence, a revisited theoretical conception of adaptive resilience is provided to demonstrate the added value of regional economic resilience for economic geography. Therefore, the theoretical concept pursues a micro-level (firm approach) by putting emphasize on the firms' decision-makers and their perception and risk behaviour. Furthermore, the firms are assumed as parts of embedded regional systems with distinct institutional conditions and dependence on governance. Resilience is defined as a process of self-organization and self-change to (1) anticipate and cope with shocks, (2) adapt, learn and respond appropriately and (3) be proactive and self-determined, with the goal to evolve and grow in the face of the impact of shocks. Furthermore, resilience is understood as a "bounce forward"-mentality, in contrast to the "bounce back"-idea of the ecological and engineering resilience approaches. Thus, firms are not victims of shocks, but rather capable enabler to determine their own competitive adaptation and controller of change. Perturbations can provide opportunities to recombine, renew or emerge trajectories. Therefore, resilience is not the objective, but rather managing and enhancing adaptation, which has to be continually worked for and optimized. Furthermore, the concept puts attention to the exposure to natural hazards as shock elements in emerging economies of Southeast Asia, such as Indonesia. The concept assumes that adaptation to natural hazard shocks is reached by anticipating risks, learning, being proactive and consequently limiting the impact to hazards and bouncing forward to new created paths. These trajectories are (re-)created by firms' self-organising behaviour as part of a regional complex adaptive system. As determining factors the subjective risk behaviour and the decision-

making processes are assumed as tipping points of path creation or destruction. However, the conceptual frame should also contribute new insights to the recent discussions on economic shocks and structural changes in developed countries.

Altogether, the concept wants to gain further insights into the relation between firms' adaptation processes and regional development while looking at path dependent processes. It will contribute to the primarily unknown understanding of firms' behaviour in the face of the uncertain, evolving environment due to the socio-economic transformation of Southeast Asian countries. Therefore, the concept serves as a theoretical frame for further empirical research on the effect of the exposure to natural hazards on path dependent adaptation processes.

*Developing Rural and Peripheral Regions*

## **THE QUEST FOR LOCAL AND REGIONAL DEVELOPMENT IN SOUTH AFRICA: A REFLECTION ON LOCAL ECONOMIC DEVELOPMENT INTERVENTIONS IN THE COUNTRY'S PERIPHERAL AREAS**

**Etienne Nel, University of Otago, NEW ZEALAND**

In spatial, economic and social terms South Africa has one of the most unequal societies and economies in the world. Deep-seated and persistent historic economic differences between and within urban areas, between urban and rural areas and within the society at large remain some of the country's key development challenges. In response the South African state has actively pursued the twin objectives of promoting economic growth and also seeking to achieve social, economic and spatial redress, particularly in the country's peripheral regions, since the country's democratic transition in 1994. This has led to the parallel but often contradictory processes of, at one level, the institutionalization of a 'developmental state' grounded in the practice of state intervention and secondly, the active alignment of the economy with the requirements of the global market and global trading regimes. A key strategy in the range of interventions which are pursued is 'Local Economic Development' (LED) which all local and district (regional) local government are legally mandated to pursue. In parallel with the practice in other countries, LED has a focus on local government interventions, often in collaboration with other local stakeholders which seeks to both promote economic growth and address local development challenges. LED manifests both elements of the development state and the facilitation of the market, but how each is articulated depends on local institutional processes. Despite the 20 year track record which the country has in LED, achievements to date remain lackluster and government policy frameworks and guidance remains modest and often insufficient. A disjuncture exists in many smaller localities and in rural municipalities where staff and resource constraints, and a common focus on underperforming community interventions often occurs at the expense of the alienation of more business focused interventions, impeding broader progress. In the larger, better-resourced centres the active pursuit of city economic development interventions, similar to those in more developed countries, while achieving elements of growth, often underachieves in terms of re-distributive goals. This paper overviews the evolution of national, regional and local LED policy, before moving on to discuss common themes in the current suite of LED interventions across the country's nearly 300 local authorities, with a particular focus on the more peripheral areas. This is followed with an assessment of what has been achieved to date and the differing levels of success attained across the urban hierarchy and in peripheral areas more generally. Information presented was derived from interviews with officials across the country and from national reporting frameworks and statistical data sets. LED policy and strategy redress in the country is clearly imperative if the economic and social goals of the strategy and the government more generally are to be achieved in the country.

**ANALYSIS OF BUSINESS INVESTMENT PROFILE SUPPORTED BY THE PORTUGUESE NSRF 2007-2013.  
A CASE STUDY IN THE ALENTEJO REGION**

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This paper aims to analyze the business investment profile that was held in the Portuguese region of Alentejo with the support of the National Strategic Reference Framework (NSRF 2007-2013) of Portugal, which constituted the framing for the application of the European Union's policy is economic and social Cohesion in Portugal for the 2007-2013 period.

With regard to economic development and business investment, the NSRF 2007-2013 of Portugal privileged the support to the following areas: (i) production of knowledge and technological development; (ii) innovation and renewal of the business models and patterns; (iii) financial engineering instruments for innovation funding and risk-sharing; (iv) integrated interventions to reduce public administrative costs; (v) development of collective business actions; (vi) development of the information society; (vii) networks and infrastructures for regional competitiveness, and (viii) promotion of integrated actions for the economic enhancement of the least competitive territories.

Given that the NSRF 2007-2013 of Portugal did not present a commitment to a territorial criteria of support for enterprises, and the financial support available to support business and economic development were not regionalized, this paper tries to analyze to what extent the Alentejo region was able to capture business investments with support from NSRF, and to evaluate the extent to which business investments implemented in this region, with the support of the NSRF, contributed, or not, to change the profile of economic specialization of the region.

In order to achieve the defined objectives, and based on a case study methodology, were analyzed in a place-based approach, all business investment projects in the Alentejo that had financial support from the various incentive systems under the Portuguese NSRF 2007-2013, namely: (i) the Incentive Scheme for Innovation; (ii) the Incentive Scheme for the Qualification and internationalization of Small and Medium Enterprises; (iii) the Incentive Scheme for Research and Technological Development, and (iv) the Incentive Scheme for Local Support to Micro Businesses.

*Innovation in 'ordinary' regions and 'boring' sectors*

**ARCTIC OIL. ORGANIZATIONAL INNOVATION AND INTEGRATION OF SUB-CONTRACTORS**

**Trond Nilsen, Northern Research Institute Alta, NORWAY**

Extractive industries and regional development is highly relevant to a number of regions in the Nordic peripheries due to the increased extent of multinational corporations, and their importance for economic development. The process of globalization increases the need for knowledge on the interplay between regional- and inter-Arctic and more global processes and systems. Increased petroleum activity in the Norwegian part of Arctic waters, reinforces the need to explore this in more detail. After a long period with no petroleum activity in this area of Norway, the global industry has moved further and further north in order to explore new and promising areas. This has initiated the first phase of a build-up of a petroleum province containing MNCs entering the region of Finnmark for shorter or longer period. Lack of diversity in the regional economy, mismatch between demands from the oil industry and the supply from the region - combined with long distances to main suppliers and population centers – have contributed to a need for building local content close to the facilities in the Barents Sea. In order to achieve local content new procedures in MNCs procurement procedures are developed with the potential to connect MNCs and local firms. In this context, research on how procurement procedures in MNCs connects to innovation and how procurement procedures

facilitate or hampers innovation capabilities in Arctic regions is missing. This paper focuses on the often-neglected theme in economic geography and related disciplines by exploring how organizational innovation influence regional development, or more specific, how procurement procedures between MNCs and main contractors influence on integration of sub-contractors and their innovation potential. The intriguing global character of the petroleum industry composed as a multitude of economic relations across space brings in the perspective of Global Production Network as a relevant theoretical point of departure. The perspectives theoretical work on how globalization of economic activities influence the understanding of dynamics and development in a given place, and how places are being transformed by flows of capital, labor, knowledge and power, gives useful contributions to the empirical material. At the same time, GPN aim at explore how places are transforming those flows as they locate in place-specific domains. Still, the perspective lack empirical studies in order to develop further. This paper has its empirical data from two socio-economic monitoring research programs. It consist of quantitative data and first hand qualitative interviews of companies and four field development sites in Northern Norway. The cases involves phases of exploration, construction and operation of plant facilities for petroleum products. An overview of all contracts from two of these field developments are distributed by value, sector and geography and were analyzed in order to observe the `output` of procurement procedures. 68 interviews with representatives from oil companies, regional firms and stakeholders were conducted.

I argue that it is useful to include procurement strategies of MNCs into theories of Global Production Network to be even better able to highlight the complex relationship between globalization and local embedding. The results from this analysis indicate that emergence of new procurement procedures in MNCs represents organizational innovations. In addition, it facilitate spatial proximity between client and suppliers. Thus, organizational innovations affects the prospects for development by giving new firms access to supplier chains and parallel, lower thresholds for involvement in global production network. While traditional procurement procedures based on price based tendering create low potential for innovation for local and regional firms in emerging industrial regions, new and emerging procurement procedures facilitate regional innovation potential for regional firms.

*Economic Resilience of Firms and Territories A: Economic Determinants and Measurements*

## **ANCHORED CLUSTERS: SOLAR PV AGGLOMERATIONS**

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The study of geographical agglomeration of solar PV technology firms is still in its infancy. Yet, solar technology represents the next main cascade of innovation in renewable energy systems, as the rapid improvement of efficacy and efficiency of solar cells, as well as economies of scale in its production, will make it increasingly competitive with most other energy sources in a few years. Half a dozen countries are participating in the solar PV technology race. The United States is and has always been the undisputed leader, but several European countries, Germany in the first place, as well as several South East Asian countries (China, Japan, Taiwan and South Korea) and now entering the innovation cascade.

There are several theories about this geographical agglomeration of high-tech firms in a few metropolitan areas. Approaches based on Alfred Marshall's industrial district underline the market processes that push the firms towards areas were they might get knowledge and labour market externalities (Beaudry and Schiffauerova, 2009). Perroux had insisted on the fact that large systems integrators such as automobile or aircraft companies would attract suppliers of subsystems, parts and components (Niosi and Zhegu, 2005). More recently, Cooke (2004) elaborated the concept of regional innovation systems, where knowledge-producing institutions attract or spin out high-tech firms and create regional agglomerations. A close approach is that of Agrawal (2003) where anchor tenant organizations (usually large RandD intensive firms) modify their environment in such a way that they attract or spin off other high-tech firms. Feldman (2003) suggested that public research organisations could also play the role of anchor tenants. Yet other authors have insisted on the role of regional innovation policies to explain such agglomeration (Tödtling and Trippl, 2005). The vast majority

of this literature was based on biotechnology, information technology, and nanotechnology clusters (Baglieri et al, 2012).

We have downloaded and analysed some 4400 US patents on solar technologies, invented in the United States, Japan, Germany, Taiwan, South Korea and other OECD and emerging countries, to find out the spatial distribution of inventors. We also analyse material from government laboratories, research universities and the main companies working in this set of technologies. We also study documents from solar industry associations, governmental organizations and other relevant sources.

We found that with the exception of Silicon Valley, a major firm anchors all other clusters; only in Taiwan, government laboratories anchor the PV clusters. Silicon Valley is unique in the sense that its abundance of venture capital and technical entrepreneurs, particularly in microelectronics (and solar cells, the heart of the technology are semiconductors) has made it a unique fertile region in the solar PV sector. Conversely, New South Wales and Lausanne, where much solar PV novelty has been made in research universities, have been unable to create a cluster around them.

Our research also discovered that – while the scanty literature on anchor tenants paints them as being permanent or at least long-term elements of a cluster – anchors may leave a region or a sector and the cluster may survive due to the arrival of new anchors. Thus our research suggests that behind anchors there is a more permanent phenomenon: the inertia of the human capital pool. This finding can be also applied to software and other ICT clusters, where human capital pools more than sunk costs in large physical plants in industries such as aerospace, are the factor that contributes to the long-term resilience of the regional agglomeration.

*Innovation and Knowledge Economies*

## **FRAMING THE COMPLEX DYNAMISM OF MNCs, FDI AND REGIONAL INNOVATION CAPABILITY**

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**Arnt Fløysand, University of Bergen, NORWAY**

**Trond Nilsen, Northern Research Institute, NORWAY**

In this paper we develop a conceptual framework for assessing how economic globalization, seen as FDI and MNC activity, relates to the innovation capabilities of regions. We argue that current understandings of FDI and MNC activity largely treat interplays with regional contexts and their innovation capability in a static manner, and that analyzes of the output of such interactions is informed by an instrumentalist rationale. However, we argue for developing frameworks that capture the complexity of reciprocity between MNCs, FDI and regional innovation capability through framing it as dynamism characterized by both tangible and intangible outputs and processes. Informed by evolutionary economic geography and the Systems of Innovation literature, this paper argues for including narratives to our frames of reference when investigating regional innovation capabilities in light of globalization processes. This also implies looking at FDI as a complex consisting of capital, actors and knowledge. A conceptual framework is developed, which is exemplified by data from two very different Norwegian regions, Hordaland and Finnmark. The data presented reveals that narratives differ between inward and outward FDI in the regions, and that this has implications for regional innovation capabilities.

## **PATH DEVELOPMENT IN RURAL REGIONS – A CASE STUDY OF INNOVATION POLICY AND LOCAL AGENCY IN AGDER NORWAY**

**Roger Normann, Agderforskning, NORWAY**

**Mikaela Vasström, Agderforskning, NORWAY**

**Hans Chr Garmann Johnsen, Agderforskning, NORWAY**

In Norway, the Agder region is an example of a rural region with a less developed research and innovation system. It is in and around the old University cities; Trondheim, Tromsø, Bergen and Oslo we almost exclusively find the targets of the large national RandD and innovation policy instruments. While Norwegian industries are dispersed throughout the country, firms located in rural regions must therefore often find RandD partners outside of their regional proximity. In 2014, something happened that modifies this picture of a predominantly nationally oriented innovation policy in Norway. First, the Norwegian three-tier cluster program awarded the first Global Centre of Expertise (GCE) status for two clusters located in rural regions. Later the same year, these two GCE clusters in collaboration with predominantly regional research partners was awarded with Centres for Research-based Innovation (SFIs). In sum, these are large long-term projects in rural regions that could potentially result in significant changes in the regional economies.

The last 10 years have brought us many scholarly contributions for understanding processes of transformation of regional economies (Boschma and Frenken, 2011; Martin, 2010; Martin and Sunley, 2006; Neffke, Henning, and Boschma, 2011). However can case studies of the interplay between local agency, leadership and collaborative regional processes help us to understand how national innovation policies and instruments can stimulate change and processes leading to path development in rural regions (Isaksen, 2014; Isaksen and Karlsen, 2013)? This paper aims at addressing these debates from a bottom-up perspective and discusses how successful local strategy and action can occur also in regions that are more rural. Based on interviews with key actors and document studies we trace the evolution of key events and actors in the Agder region and interpret these in the framework of alternative forms of regional industrial path development that could lead to the transformation of regional economies and innovation systems (Isaksen and Trippl, 2014; Tödtling and Trippl, 2005).

## **GEOGRAPHY OF PUBLIC POLICY EXPENDITURES: EU COHESION POLICY IN THE CZECH REPUBLIC (2007-2013)**

**Jiri Novosák, Tomas Bata University in Zlin, CZECH REPUBLIC**

Geography of public policy expenditures is of immense importance when considering the equity and efficiency goals from the spatial perspective. What is the spatial distribution of public policy expenditures? A number of studies dealt with this issue from the perspective of ex-ante, politically defined, allocation criteria. However, the real, ex-post, distribution of public policy expenditures at lower spatial levels is similarly of high relevance when thinking on the balanced spatial development. In this regard, the resulting spatial pattern is influenced not only by political decisions on measures but also by absorption capacity and severity of development problems of particular territorial units. Thus, the goal of this paper is to investigate the main factors underlying the geography of public policy expenditures, using thematic operational programs of EU cohesion policy in the Czech Republic in the programming period 2007-2013 as a case study. The relevance of this study is supported by the fact that EU cohesion policy was the main development instrument in the Czech Republic in the time period of our interest because its NUTS 2 regions, excluding only the capital city of Prague, were eligible for funding from the most generous convergence goal. Consequently, the geography of EU cohesion policy expenditures is also closely related to the equity and efficiency goals of Czech regional policy.

Respecting the goal of this paper, the research was designed as follows. First, the geography of EU cohesion policy expenditures across 205 Czech micro-regions was considered. We run both global and local spatial

autocorrelation (LISA) analysis to search for the existence of spatial pattern in our data. The value of Moran's I indicates the absence of global spatial autocorrelation. The LISA results show the existence of some local spatial clusters and outliers of high and low allocation of EU cohesion policy expenditures. The features of these micro-regions are discussed. Second, linear regression model was defined to identify the relevance of the factors underlying the geography of EU cohesion policy expenditures at the micro-region level. Financial allocation per 1 inhabitant was used as the dependent variable in the model. Independent variables included characteristics of economic actors and political representatives, severity of development problems, and the definition of lagging regions according to Czech regional policy. Moreover, spatial variable related to micro-regional hierarchy was added. The OLS linear regression results show positive and statistically significant impact of the variables related especially to the quality of human capital and micro-regional hierarchy. The sign of other independent variables is as expected. However, their statistical significance is less conclusive. These include also the impact of the variable related to Czech regional policy. Consequently, we see a potential for increasing spatial coherence of EU cohesion policy and Czech regional policy through a wider use of financial instruments related directly to a territory.

*Alternative Spaces in the Urban Region: Translocal Movements and Communities in a Time of Global Growth Agendas*

## **NEW TYPES OF COMMUNITIES: PERSISTENCE AND DISCONTINUITY WITH MORE TRADITIONAL COMMUNITIES**

**Giampaolo Nuvolati, Università Degli Studi Milano Bicocca, ITALY**

Contemporary societies are characterized by strong transformations in terms of new types of human relationships, communities building, social cohesion, informal economy, social innovation, participation models. Although original patterns are clearly emerging mainly based on the individualization trends, on the globalization process, on the wide spreading of virtual networks, it is also necessary to point out that some aspects of such an evolution remain quite contradictory and confusing, asking for a new effort of definition. The objective of the paper is to enlighten persistence as well as discontinuity between new and more traditional communities. In urban sociology, the discussion concerning communities in rural and urban context was very strong starting from the '50 and '60 when Herbert Gans and Oscar Lewis in contrast with Louis Wirth e Robert Redfield, observed that many urban communities (mainly at the level of the neighborhood) were even more stronger and cohesive than rural villages. Moreover, Malvin Webber in 1963 in his famous article "Order in Diversity: Community without Propinquity" introduced the idea that places were losing relevance in generating communities. This issue was very important and preliminary to all the successive debate regarding the invasion of technological communication devices and the proliferation of virtual communities as dis-embedded communities. Nowadays some new phenomena, like social street, nimby movements, time banks, demonstrate that ICT should be considered as a first and crucial step not to undermine but, on the contrary, to reinforce and maintain strongly embedded relationships. Such findings depicts a quite complex picture we have to deal with in order to understand the evolution of the modern communities. In particular, a specific question remains nowadays still unanswered: are places simply the physical recipients of communities based on interests, or are they the origin of new communities based on people propinquity?

Although this paper do not try to solve this dilemma, it proposes a theoretical framework useful for investigating the constitution and evolution of communities at the spatial level. In particular – starting from the classical dichotomy proposed by Ferdinand Toennies: "Gemeinschaft vs. Gesellschaft" and crossing it with the more recent analysis of Anthony Giddens concerning the "Embedding vs. Disembedding" processes – the paper will focus on a set of people and characteristics to look at in order to classify old and new types of communities. In particular, a 2x2 table will generate four types of population: 1) traditional rural families, 2) neo-rurals, 3) urban citizens, 4) global citizens, and six types of potential communities: a) rural village, b) low territorial density network, c) neo-rural network, d) urban village, e) social street, f) internet community.

In the succeeding step, the paper will deal with prevailing features concerning the six selected types of communities, in terms of: specific interests, membership, duration, relationships, institutionalisation, nimby syndrome, and so on. This approach could be consider as a preliminary stage toward future research project

finalized to study communities and overlapping networks based on different interests and spatial configurations.

*Community Economic Development*

## **GLOBALIZATION AND LOCAL CONTENT IN EXTRACTIVE INDUSTRIES IN THE NORTH**

**Vigdis Nygaard, Northern Research Institute - NORUT, NORWAY**

**Trond Nilssen, Northern Research Institute, NORWAY**

This paper investigates the globalization of two extractive industries, petroleum and mining, in the northernmost region of Norway. We want to know more about how these industries, now owned by multinational companies, affect the local communities' economic development. Finnmark region is considered to be peripheral, situated high up in the North, bordering Russia, and with only 75 000 inhabitants. This is a challenge for both new industries (petroleum) and new ownership in old industries (mining) that need well qualified workers. Will they find people with the right competence in the region, and will they find local businesses that can serve as subcontractors to the industry? The geographical distance to known networks and transport costs involved by using "southern" suppliers, can serve as a driver for developing a local content policy. But this is not granted as the MNC can just as well bring their "old" networks, suppliers and workers can be flied in from the south or abroad.

Globalization is also a challenge to the local communities where workforce and businesses will need to adjust to the new opportunities in the resource industries to take advantage of it. We are interested in finding out how and to what extent local people and businesses has been enrolled in the globalized extractive industries. And secondly, we investigate what strategies enhance or restrain a local content that can contribute to the economic development and entrepreneurial growth.

Our focus is to study the local content experienced from the presence of these two industries in a couple of local communities. The local content experienced from the establishing a petroleum industry in the northern city of Hammerfest is relatively well studied, particularly to what extent local industries have managed to qualify as subcontractors. The local content of the mining industry is not so well studied, and particularly not how the switch from national to MNC ownership has affected the local content. This paper will introduce a new element by comparing the conditions for developing a local content in to different extractive industries. We think this can shed light on some structural industry specific differences between petroleum and mining and how they understand the concept of local content.

The first part of the paper will describe the development of petro- and mining industries in Finnmark region. The petro industry is new to this region, while the mining industry has long traditions. Nevertheless, multinational ownership of local mines has developed during the last 5 years, and introduced new challenges and dynamics in company-community relations. MNCs are attracted to this region by a stable and well regulated political and legal system and a relative good infrastructure despite the peripheral location and sparsely populated areas. We want to describe how and to what extent these global companies have built local and regional networks and developed a policy of local content.

The second part will investigate factors that restrain and enhance local and regional content by using a multilevel analytical method. On the global level, demand and supply and development of new markets, are essential. On the national level, regulative mechanisms within each industry are important. And on a regional and local level, competence, labor force and business structure are vital. This paper is based on data obtained by interviews with local representatives of extractive industries and their main suppliers in Finnmark.



## **SECURING SUSTAINED STAKEHOLDER ENGAGEMENT TO IMPLEMENT THE EU DIGITAL AGENDA IN REGIONS**

**William O'Gorman, Centre for Enterprise Development and Regional Economy, IRELAND**

This paper is based on an EU (FP7) Regions of Knowledge Coordination and Support Action project called eDIGIREGION. eDIGIREGION is a unique collaborative project that brings together a balanced blend of complimentary and experienced partners from four diverse European regions: - South East Ireland, Central Hungary, Bucharest-Ilfov and Castilla-La Mancha. eDIGIREGION's goal is to enhance regional competitiveness by exploiting regional strengths and smart specialisations to realise the key objectives of The European Digital Agenda. The project supports the development of high-potential research-driven clusters in the technology domains of The European Digital Agenda in the four regions, by increasing the level of interoperability among the triple helix of regional stakeholders (public agencies, research centres and universities, and industry) to define and action region-specific Joint Action Plans (JAPs) in each of the consortium regions.

The starting point for the preparation of these Joint Action Plans was to establish the "here and now" of each of the consortium regions. To do this it was necessary to engage the Triple Helix of stakeholders in each of the regions in a regional data gathering exercise. Bringing regional stakeholders together in the first place is difficult enough, but to get relevant stakeholders to commit, engage and sustain their engagement in the process from data gathering to implementation of the region's joint action plan is very difficult indeed.

This paper explores the initial phase of the process used, in each of the four consortium regions, to engage and retain the engagement of relevant regional stakeholders with the project to develop regional JAPs. The initial phase developed a process of defining and identifying the relevant stakeholders in each region; also it examined different methodologies for defining the key stakeholders based on their interests and motivations and the influence that they could have on the work of developing regional JAPs. This paper also presents a framework and methodology for engaging relevant stakeholders in the process, in particular engaging stakeholders at an appropriate senior level and also ensuring that these engagements could be sustained over the lifetime of the project. The framework and methodology were designed to ensure the active 'buy-in' and commitment of the regions' triple helix stakeholders.

The framework, methodologies and lessons learned from implementing this stakeholder engagement within the eDIGIREGION project are transferrable to other regions. Combined, they become an effective tool to assist the facilitation and sustained engagement of stakeholders in a regional process of developing and implementing Regional Innovation Systems (RIS) to embrace the EU Digital Agenda in their region.

*What Place for Climate Resilient Regions? Lessons Past, Present and Possible Future Trends*

## **DIMENSIONS OF HOLISTIC CLIMATE CHANGE ADAPTATION? A FRAMEWORK FOR ANALYSIS**

**David Olsson, Karlstad University, SWEDEN**

The implications of climate change are being felt in a wide range of areas, posing severe challenges to natural ecosystems, human security and human development across the globe. Moreover, the stress on social and interrelated ecological functions is likely to intensify in the future. Hence, improving the capacity for climate change adaptation is becoming an increasingly important concern. However, the concept of adaptation is contested, with several proposed definitions. For instance, some envision a fairly de-politicized pathway to climate adaptation, emphasizing technological fixes and functional persistence. Other definitions stress the need for more politicized solutions, entailing the need for reflexivity and change of human behavior and social organization. A common trait for most definitions is the weight put on a holistic approach to adaptation – although the meaning of the term 'holistic' differs depending on the definition of adaptation. Utilizing a multi-disciplinary and analytically pluralistic approach, this paper presents a normative analytical framework,

illuminating different aspects of holistic adaptation (or lack thereof) to climate change. More specifically, the aim is to contribute to the conceptual discussion of holistic adaptation by proposing an integrated analytical approach, scrutinizing different dimensions of holism with regards to climate adaptation. As such, it also has the potential to promote reflexivity and capacity building for climate change adaptation among practitioners.

The intended empirical point of departure is municipal management of water related issues in Sweden (municipalities conduct most of the water related planning in Sweden), and how this is related to climate adaptation in other policy sectors in the municipality, as well as other relevant actors in the municipality's river basin district (the intention is to strategically select an number of Swedish municipalities for the future empirical study).

The framework utilizes a typology, based on three properties, as its point of departure. The properties are: (1) degree of catchment based cooperation between actors in a particular policy sector, such as flood risk-management or water management (the concept of 'fit' or river basin management); (2) degree of inter-sectorial cooperation between actors in different policy sectors, i.e. between water management, flood-risk management, spatial planning and other relevant policy sectors (the concept of institutional interplay); (3) degree of perspective diversity in the policy deliberation process. For instance, do the policy deliberations merely focus on technical solutions (with narrow or broad considerations), or do they include deliberation of social and behavioral as well technical aspects (the concepts of politicization and de-politicization). The first two properties will mainly be examined utilizing institutional analysis, whereas degree of politicization will primarily be studied from a discourse analytical perspective. Combining the three properties and using these two analytical approaches, the framework will, arguably, be able to give fruitful insights to various combinations of three main dimensions of holistic adaptation (or lack thereof), i.e. (1) intra-sectorial cooperation, (2) inter-sectorial cooperation, and (3) perspective diversity. By categorizing municipalities into this typology it is possible to identify dimensions in their work with climate adaptation that is particularly lacking, and that could be improved or at least reflected upon.

*Cross-Border (Research)/Regions*

## **GENDER AND CROSS-BORDER COMMUTING IN A SWEDISH-NORWEGIAN CONTEXT, STRATEGIES, OBSTACLES AND POSSIBILITIES: POSSIBLE RESULTS AND CONCLUSIONS**

**Eva Olsson, Karlstad University, SWEDEN**

**Cecilia Möller, Karlstad University, SWEDEN**

Gender and Cross-border Commuting in a Swedish-Norwegian Context, Strategies, Obstacles and possibilities: Possible Results and Conclusions.

This study explores gendered commuting patterns in a Swedish-Norwegian border region. In Swedish Värmland, 5462 inhabitants commuted to Norway in 2009, of which a significant share (36 percent) represented commuters from Torsby, Eda and Årjäng municipalities. Cross-border commuting is here defined as work related mobility across a national border, including daily and weekly mobility. Few studies have explored gendered commuting patterns in border regions and how women and men's participation in cross-border commuting vary depending on distance, motives, experiences, possibilities and obstacles.

The purpose of this study is to analyse the patterns of cross-border commuting with a focus on women's and men's motives, strategies and conditions for commuting from Sweden to Norway. The research questions include; what differences and similarities of men and women's commuting can be distinguished in terms of age, family, income and other social factors? How do women and men experience the effects of their commuting on their everyday life, including participation in their family life, social relations and domestic responsibilities? The study is based on both quantitative and qualitative data, comprising a survey of cross-border commuters in Årjäng, Eda and Torsby municipalities as well as interviews with cross-border commuting women and men. One central question includes how women's and men's commuting patterns reflect existing spatial gender and intersectionality contracts. An intersectionality perspective is here used to study the interrelations between gender and other social variables such as class, ethnicity and age. These are

(re)produced and negotiated in a place specific and socio-cultural context, affecting relations in the family, the local community and the labour market.

The population at the border has advantages in relation to the population of the municipalities farther into the country. In the Swedish municipalities we investigated this is quite clear. They can cross the border and get higher pay for equal work "at home" without necessarily having longer traveling in either time or kilometres. This has obvious consequences for everyday life. An important question in this study is of course if men and women experience different types of consequences, or if they are experiencing the effects of impacts in different ways. The differences between men and women are particularly prominent within the family sphere. Almost as many women as men are married or living together with a spouse, but fewer women have children, and fewer women have children five years old or younger. A majority of both sexes also consider that commuting has very or somewhat positive impact on the social situation in the home. Interesting here is that there are slightly more women than men who believe this. In the interview study, women describe the higher wages as important markers of independence; single mothers describe the possibility to work part-time due to higher wages, while commuting a shorter distance. It facilitates their situation both economically and socially. As for married or cohabiting women's experiences of positive effects, they have similar experiences, with the effect that that they feel equal with their men. Not merely with the housework and responsibility for any children shared, but also economically.

Cross-border commuting however reflect gender coded occupations between women and men, where women's work within public services are lower paid compared to sectors such as construction work where men are overrepresented. Women spend less time on daily commuting compared to men, which can be related to their family obligations. This is evident also within weekly commuting. In the survey, men are highly overrepresented as weekly commuters, while none of the weekly commuting women have children in their household.

What are the implications considering class, ethnicity and age? Can we see differences between age groups? Can we see the differences between occupational groups? One example: Among the youngest commuters, although they are very few, one sees some differences between the sexes. The young men are working in typically male professions in Norway, while the young women have more transgender jobs, compared with older women. Is this a trend? Here we have further questions to answer.

*New Manufacturing, Creative Productions, Innovative Workplaces and Urban Space*

## **SHARING SPACE: LOCAL DECLINATIONS OF COWORKING SPACES IN ITALIAN CITIES**

**Carolina Pacchi, Dastu Politecnico di Milano, ITALY**

The diffusion of innovative workplaces such as coworking spaces across Europe and beyond has been connected in turn to the emergence of a new creative class at metropolitan level, to the reorganization of work forms in a knowledge-based economy, to the diffusion of a possibly radically alternative sharing or collaborative economy paradigm; these analytical perspectives have been thus moving within emerging social, economic and political dimensions, while much less attention has been paid to the spatial perspective, both at micro and macro level, to the urban effects, to the local dynamics of inclusion and exclusion, to forms of reuse and to the attribution of new meaning to parts of the city.

The aim of the paper is to open up a critical discussion on the relationships between innovative workplaces, such as coworking spaces, and their spatial dimension, in order to analyse the urban locations and local effects of such spaces.

The paper is organised in three parts: the first will impinge on literature on urban social innovation and the sharing economy to identify some relevant features and categories able to more precisely define the different typologies of workspaces generically defined as coworking; the second one will trace a broad picture of the evolution and diffusion of coworking spaces at national level, proposing to identify some specific features of the Italian case which differ from other European cases; the third part will look more closely, from a micro

perspective, to a number of coworking spaces in different Italian cities, with the aim to identify type of locations (central, semi-central, peripheral, different typology of buildings), use of spaces and functional mixes (work, culture, leisure, ...), relationships with/effects on public spaces, dynamics of inclusion and exclusion.

#### *Urbanisation and Cities*

### **TRANSGRESSION: AN ASSESSMENT OF LAND USE CHANGE IN THE LISBON METROPOLITAN AREA**

**Miguel Padeiro, IGOT – University of Lisbon, PORTUGAL**

Last decades have witnessed the growing interest for land use regulation. At this respect, public authorities have sought to reduce land consumption by defining rules and policies for curbing land use conversion. Among several types of policies, zoning-based local plans are still one of the most popular way to prevent excessive artificialisation of agricultural and natural areas. Alongside with plans, their evaluation has been a growing topic. In particular, the conformance approach aims to examine and quantify the differences between the initial plan and the real land use evolution. Land use change is then considered as non-conform when it does not respect what was previously established by the plan.

There are several types of inconformities. One of them might be called transgression, or transgressive land use change. It occurs when a given land plot is converted from its former natural or agricultural use to artificial land, although the plan had determined that there would be no land use conversion. Analysing transgressive land use changes is therefore of paramount importance in order to better understand the deviations between the plan and the reality.

This communication aims to evaluate transgression in the Lisbon Metropolitan Area (LMA). It is based on data exploitation of the 18 municipal master plans of the region, as well as land use maps and Census data. A quantitative approach and a logistic regression model are computed for the purpose of determining: i) transgression patterns in the LMA; ii) the factors of transgression.

#### *Labour Markets and Migration*

### **THE IMPACT OF THE ECONOMIC CRISIS UPON HIGH-TECHNOLOGY CLUSTER EMPLOYMENT; EVIDENCE FROM THE THAMES VALLEY ICT CLUSTER**

**Kye Parkin, University of Bath, UNITED KINGDOM**  
**Gregory Schwartz, University of Bristol, UNITED KINGDOM**  
**Phil Tomlinson, University of Bath, UNITED KINGDOM**

The Information Communication Technology (ICT) sector is no stranger to periodic crises (e.g. 1999-2001 bursting of the dot-com bubble). However, the recent global economic crisis has hit the sector particularly hard, due to its strong reliance upon the financial community as a customer (Sassen, 2006: 17-37) and as a key source of investment (Audretsch and Lehmann, 2004). As large financial institutions collapsed, tech firms lost some of their most lucrative contacts and accounts, in addition to having to scale back investment in research and development activities as capital and credit markets tightened (Chor and Manova, 2012). Austerity policies in Europe, prompted by the failings of banks, also meant that public sector spending on ICT fell (National Audit Office, 2013), with the government making it a priority to shift away from using larger suppliers (Cabinet Office, 2012).

The response of many large high-tech firms, as during the dot-com bubble (Benner, 2002: 49-75), was to embark upon wholesale global restructuring programs, involving the streamlining of product portfolios and the culling of global workforces. The regionalisation of transnational corporations (TNCs) into industrial platforms and clusters has meant that certain regions, particularly in higher wage economies, such as the US and EU,

were particularly badly affected. For example, by the end of 2009 job losses in Silicon Valley totalled around 90,000 (Joint Venture, 2010).

Drawing upon semi-structured interviews of entry-level, managerial and executive employees of TNCs in the UK's Thames Valley ICT cluster, this paper explores how the economic crisis has altered work and employment in the region. The paper makes three key empirical and one theoretical contribution.

First, that there has been a proletarianisation of intellectual labour in the ICT sector and, concomitantly, employment has become increasingly precarious. Workers are far less likely to be on full-time contracts than they were before the crisis, with organisations tending to exercise more caution when it comes to hiring, opting for fixed term contracts and/or contractor arrangements instead of FTEs (full-time equivalents). This has led to a growing sense of insecurity not only among workers experiencing cycles of redundancy and unemployment, but also for workers that have survived organisational restructuring who are now more fearful about job loss and face lower wages and benefits (English-Lueck, 2010).

Second, the fate of workers in regions across the world has become increasingly interconnected, and that of workers in the Thames Valley more stringent than before. On the one hand, many programming and customer support jobs in the Thames Valley were outsourced to regions in India and Poland in the wake of the crisis. On the other hand, given that many of the TNCs co-located in the cluster are headquartered in the US, where legislation surrounding employment and redundancy is more lax, workers in the Thames Valley have been required to take on more responsibilities and operate under greater pressure. This has meant that inter-regional competition for IT work has intensified, leading to a dynamic of labour competition already typical in key industrial sectors (see Christopherson and Clark, 2007; Greer and Hauptmeier, forthcoming).

Third, the paper considers how such factors contribute to the widening of the phenomenon of 'normalized intensity' of work at all levels (McCann, Morris and Hassard, 2011), with higher expectations of employees being a natural result of much smaller workforces and organisations being stuck in 'survival mode'.

Theoretically, the paper relates these findings to the recent discussion of 'regional resilience' [see CJRES, Special Issue 2010]. It questions whether or not such measures, typically assumed to strengthen 'resilience' by improving TNC positions, are in the long-term sustainable for the skill-base, incomes and development of regions, or whether, 'resilience' mirrors the political discourse of austerity (MacLeavy, 2011). The argument is that not only does this tend to justify suffering of a substantial section of the workforce in the name of 'self-sufficiency' while benefitting a shrinking global corporate elite, but that, structurally, the developments in the ICT industry mirror the maturation of other industries and capitalism as a whole: with crises contributing to monopolisation, on the one hand, and proletarianisation, on the other hand.

*Building Networks for Local Growth*

## **TECHNOLOGY-BASED AND GEOGRAPHY-BASED DIVIDES IN INNOVATION**

**Mario Davide Parrilli, Universidad De Deusto, SPAIN**

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In this paper, we join the debate on business innovation modes that originates from the wider literature on innovation systems. These specific contributions identify and study the impact of different innovation modes, particularly the mode focused on scientific and technologically-based innovation (STI) vs. the mode based on learning-by-doing, by-using, and by-interacting (DUI). Echoing the seminal contribution by Jensen et al. (2007) and a range of other studies, we confirm the importance of the combined STI&DUI interaction mode, which has a stronger impact on innovation output (technological and non-technological) than the two separate individual modes. Additionally, we propose a novel hypothesis on the effectiveness of firm's interaction modes. We argue that the independent STI mode has a stronger effect on technological innovation, whereas the independent DUI mode has a stronger impact on non-technological innovation. In addition, in line with

works on the geography of innovation, and innovation systems, we take a geographical approach to innovation as a means to determine the impact of regional vs. global DUI and STI interactions on technological and non-technological innovations. In this case, we expect that in diverse geographical locations, businesses tend to adopt specific interaction modes, which produce a differentiated impact on innovation output. This study is applied to a large sample of firms in the context of the Basque Autonomous Community in Spain.

## Introduction

In the current globalised markets, business competitiveness is ensured by advanced innovation practices that help firms acquire a competitive edge beyond what was guaranteed by the former cost competition and efficiency-led drive (Porter, 2008). Industry leaders are those that invest in significant R&D and innovation expenditures that position them one step ahead of their competitors. In contrast, the old low-road competition is no longer effective, and a large number of firms and territories that used to compete on those bases are now under pressure (Dei Ottati, 2009). The innovation effort is critical at the enterprise level but even more so at the system level (e.g. clusters and industrial districts, regional innovation systems). In fact, business innovation and success may be offset by others' business failures that give way to a "zero-sum game" for the territory as a whole (Parrilli, 2004). Local, regional, and national territories require a systemic approach to innovation to help them perform cohesively in a "positive-sum game" that includes higher growth, employment, and economic opportunities for the entire production system.

In this paper, we join the debate on business innovation modes (i.e., approaches to produce effective innovation outputs) that is derived from the wider literature on innovation systems (Lundvall, 1992; 2007; Jensen et al., 2007). These contributions identify and study the impact of different innovation modes, particularly the mode focused on scientific and technology-based innovation (STI) vs. the mode based on learning-by-doing, by-using, and by-interacting (DUI). Echoing the seminal contribution by Jensen et al. (2007) and a range of other studies (Isaksen and Karlsen, 2010; Aslesen et al., 2011; Chen et al., 2011; Parrilli and Elola, 2012; Fitjar and Rodríguez-Pose, 2013; Nunes et al., 2013), we analyse in particular whether the combined STI&DUI interaction mode has a stronger impact on innovation output than the two separate individual modes. Following this classification, this study proposes a novel hypothesis on the effectiveness of business innovation modes. We argue that the STI interaction mode alone has a stronger effect on technological innovation (i.e. product and process), whereas the DUI mode tends to have a stronger impact on non-technological innovation (i.e. commercial and organisational).

In line with the work of Fitjar and Rodríguez-Pose (2013) on the geography of innovation, we also attempt to determine the geographical scale of these business interaction and innovation modes (i.e. regional vs. global) and their impact on the range of innovation outcomes. Through this analysis, we assess the impact of the proposed technology-based divide in synergy with the potential effect of cultural idiosyncrasies on the geographical reach (global vs. local) of STI and DUI interaction modes. The latter is justified by the literature on innovation systems and the so-called "innovation paradox" from which the debate on STI and DUI modes originates (see next section). This study is applied to a large sample of firms in the context of the Basque Autonomous Community in Spain, a small region that borders France. Basques' cultural and production distinctiveness includes being the cradle and current repository of the national manufacturing industry as well as being a region in which the people speak their own language (*euskera*) and tend to develop thicker local interactions. This feature might generate a geographical and cultural approach to innovation in which the regional linkages are weighted and developed more than global linkages.

The remainder of this paper is organised as follows. Section 2 provides a theoretical discussion of the relevance of innovation modes for business innovation. In Section 3, we discuss the methodology applied in

this study. In Sections 4 and 5, we present the empirical evidence related to both the impact of innovation modes on different types of innovation and the effect of different geographical scales on innovation. Finally, Section 6 provides some concluding remarks and identifies further steps for research.

*Urban Tourism (Disentangling the 'Urban Character' of City Tourism)*

## **URBAN TOURISM(S): IS THERE A CASE FOR A PARADIGM SHIFT?**

**Cecilia Pasquinelli, Gran Sasso Science Institute, ITALY**

Tourism has been growing and diversifying over the past decade and, in a rapidly-changing global context, the travel industry has been transforming. While the number of international tourist arrivals will increase by 3.3% yearly on average until 2030 (UNWTO, 2012), recent analyses of global travel trends show a rise of city tourism, with a significant increase in the volume of city breaks by 47% in the period 2009-2013 (IPK International, 2013). Cities are not only the main destinations or major focal points of travellers' itineraries; they are also the origin of most global travellers (Ashworth, 1989; Ashworth and Page, 2011). Accordingly, global tourism development is closely intertwined with the trajectories of urban transformation and urbanization. Besides the urban population, which is expected to grow by 61% by 2030, a 'temporary' and oscillating population including visitors impacts on the urban fabric. For this reason, urban tourism is considered to be a key factor in city development and urban economy (UNWTO, 2012). This statement is at the core of the Istanbul Declaration (2012) with which several countries agreed that "tourism is a key resource for cities and local residents" because it contributes to local income as well as to the maintenance of urban infrastructures and the provision of public services.

If the relation between travelling and cities is so close, why do "those studying tourism neglect cities while those studying cities neglect tourism"? (Ashworth and Page, 2011, p. 2). There is general and growing agreement that tourism has been considered a negligible element in the process of urban and economic development; and only recently has it been taken into account as a driver of urban change. Indeed, urban tourism remains an immature field of research and practice. This immaturity has led to biased viewpoints promoting either simplistic descriptions of tourism as a panacea for all development problems, or extremely critical interpretations of the tourism phenomenon. In fact, many negative effects have put an end to cities' honeymoon with urban tourism (Novy, 2014), with the emergence of anti-tourism urban movements claiming dwellers' right to the city.

The academic debate on urban tourism lags behind the reality of global travel. A need for a paradigm shift has been recently affirmed at the 3rd Global Summit on City Tourism held in Barcelona in December 2014, and titled "New Paradigms in City Tourism Development. It is time for the academic community to face a shortage of tangible research results in the field and tackle key questions, including: Do changes in global tourism and urban transformations impose a paradigm shift in urban tourism studies? Why and how should the study of tourism be intertwined with urban studies?"

This paper reviews the international literature on urban tourism, the purpose being to highlight emerging analytical perspectives on the role, meaning, and importance of global travel for towns, cities and mega-cities. It discusses a shift in perspective (and the extent to which we can speak of a paradigm shift, as recently suggested), in order to contribute to compiling an urban tourism research agenda. This would provide a tool for those scholars who, drawing on different backgrounds in social science, are engaged with disentanglement of the urban character of city tourism and with analysis of tourism as a lens through which to observe urban (economic, physical and social) transformations. The 'shift of perspective' is discussed according to four distinct - yet closely interrelated - domains emerging from the literature review: Travellers' Needs, Preferences and Tastes, City Tourism and the Urban Fabric, the Political Economy of Urban Tourism(s), Tourism Management and Planning, and City Images.

The paper argues for a shift in perspective in the study of urban tourism so as to catch up with fast-changing global tourism flows and forms. The main findings suggest that urban tourism should be 'measured' not only in terms of its own economic performance but also in relation to its connections with broader urban economies.

Besides direct economic impacts, urban tourism should be analysed by focusing on its contribution (positive or negative) to definition of the soft and hard conditions enabling urban processes of value creation and enhancing urban competitiveness. Second, urban tourism and its relationships with city change should not be isolated from the study of broader dynamics of urban change; in fact, urban tourism should be analysed as supporting infrastructure, rather than as an exclusive driver of change. Third, urban tourism should be analysed in relation to potentials and pitfalls in promoting local strengths, e.g. cultural, scientific, entrepreneurial, educational, productive endowment, as well as in relation to its capacity to promote the city as an urban model of quality. Fourth, city tourism should be analysed as a 'gateway to the city', by examining the practices that build global connections, accessibility and reputation, and contribute to positioning towns, cities and mega-cities in global networks.

*Developing Rural and Peripheral Regions*

## **SPECIALITIES IN THE INSTITUTIONALIZATION OF HUNGARIAN LEADER LOCAL ACTION GROUPS**

**Csaba Patkós, Eszterházy Károly College, HUNGARY**

Bottom-up socio-economic rural development programs are globally spread. In the EU the 25 years long history of the LEADER program is declared a success story by official evaluations and many independent authors as well.

In parallel with the enlargement process countries of the former Communist Block also started to establish LEADER-like programmes. In the 2007-2013 period LEADER local action groups became regular actors of the post-socialist rural landscape. Hungary was one of the forerunners in LEADER establishment in Eastern Central Europe. Although LEADER principles were respected in the implementation process, some contradictory phenomena also had an effect on LAG formation.

In our article institutionalization is interpreted according to the theory of Anssi Paasi. Some anomalies will be highlighted concerning the institutionalization process of three generations of Hungarian action groups. Accordingly four phases will be examined: territorial form, symbolic shape, institutional constellation and established role.

Beyond basic statistic data relating to the size/population/number of LAG members/ etc. of different action groups, additional information were gathered from the text of integrated rural development plans. Through text analysis some details of symbolic shape could be highlighted.

Results can contribute to the reading of local governance in a post-socialist and highly centralized country. Recent processes of CLLD development (2014-2020) in Hungary could harness some achievement of the project.

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*Role of Social Networks in Regional Development*

## **REGIONAL COMPETITIVENESS AS SOCIAL PROCESS: INSTITUTIONS, SOCIAL NETWORKS AND COGNITIVE FRAMES**

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**Borut Rončević, School of Advanced Social Studies, SLOVENIA**

Recognition of the importance of social process is longstanding in regional studies and has formed the basis of much theorising surrounding the underlying factors that influence regional competitiveness. Social dynamics,



for instance, are central to such concepts as innovative milieu and industrial districts as well as regional clusters and regional innovation systems. More recent discussions of the nature of regional innovation have continued the quest to understand the social context that underpins economic relations in terms of territorial knowledge networks, regional spillovers and knowledge domains. In this paper, we reflect on these ideas and explore the relevance and usefulness of recent sociological approaches to the economy based on the concepts of cognitive frames and social fields. The first part of the paper considers the theoretical basis of these ideas. This is followed by some reflections on the policy dilemmas associated with attempts to influence such social processes.

Sociological approaches to analysis of economies have tended to emphasise the influence that social structures exercise on individual action. Recent discussions have focused mainly of three social forces – the influence of social networks, institutions and what have been called “cognitive frames”. By and large, globalization renders obsolete old debates on the most appropriate modes of societal steering (markets vs. states vs. networks) and encourages a search for new concepts which explain the influence that social settings exercise on economies. At the meso level, concepts are needed that address the ability of a social setting to continuously (re)produce technological and social innovations within the framework of regional systems of innovation. These systems have been characterised as “social fields” that like markets, can be studied as arenas of interaction for the exchange of ideas and technologies.

The concept of the “cognitive frame”, however, adds nuance to the notion that innovation occurs through social networks. Such frames have been defined as “cognitive shortcuts that individuals use to help make sense of complex information”. As such, this concept focuses on how individuals interpret or represent the world they inhabit and, critically, how selective simplification occurs involving filtering which determines what information is acted upon and that which is apparently ignored. Cognitive frames, of course do not exist independent of institutions and social networks as there is a complex interaction between these three levels of analysis. Recent theoretical developments have drawn attention to this concept in seeking to understand the factors that cause social fields to alter over time which occurs partly in response to shifts in cognitive frames. This implies the need for in-depth analysis of these ‘invisible sets of forces’ that contribute towards effective local adaptation and response to global trends.

The paper also considering the implication of the concept of cognitive frames for policies designed to influence social actions that partly underpin the competitiveness of regional economies. Institutions, social networks and cognitive frames have in the past been repeatedly confirmed as relevant in determining a variety of outcomes such as levels of inward foreign direct investments, regional innovation and technological progress. Institutions exert their influence by limiting permissible scope of actions, encouraging some and discouraging others. Social networks position individual and collective in social space, limiting ties with specific nodes and encouraging others. Most interesting, however, we explore the possibility that “cognitive frames” provide useful insight into the way in which individuals absorb knowledge that leads to action and how this vital process may be influenced.

*Alternative Spaces in the Urban Region: Translocal Movements and Communities in a Time of Global Growth Agendas*

## **INTER-MUNICIPAL TEMPORARY SPACES**

**Michael Thyrrstrup Pedersen, Aalborg University, DENMARK**

In the era of post-industrialism traditional industrial cities and societies find themselves in a phase of transition, in which a restructuring of their economies and livelihoods is taking place. This transformation includes a move towards economies based to a higher extent on human capital and focused more towards the culture and experience economy. In this society, mainly dominated and structured by neo-liberal thoughts, place based competition – and competition in general – is on the rise. In the context of Danish cultural policy and planning the rise of new cultural experience spaces has occurred in the past decades, thereby adding incentive to place based competition in the area of local and regional cultural policy. The spaces in scope here,

are municipalities collaborating on the matter of culture – initiated by the Ministry of Culture – in a new cultural governance level called Culture Regions.

The empirical input will consist of investigations in two phases and scales. Firstly, the empirical focus is targeted towards the general development of cultural regions by the Danish ministry of culture. Secondly, the focus is upon the development of the Cultural Region of East Jutland Growth Alliance (Randers, Viborg, Silkeborg and Horsens), which is four municipalities collaborating in a new spatiality on the matter of culture. The main methodological approaches taken in this paper are analysis of strategies and policy documents and qualitative interviews with main actors.

This paper will provide some examples, in a Danish context, on how culture has been instrumentalised and how some municipalities are coping with the increasing competition. Due to a neo-liberal turn towards the marked and focus on growth, the overall development has increased competition aspects in society in general. The struggle to be seen, heard and to perform is also a part of the reality of the municipalities and their planning departments. The uncertainties of the post-industrial society, has turned development towards the finding of new resources – to provide stability and goods to consume and ensure welfare. Many concepts have been connected to economy, on a theoretical basis, to recognise the new resource. One of the more popular has been knowledge economy, in which the concept of culture becomes a key element, whereas, culture (and experience) are often used as a lever to obtain growth. The spatial expressions of an inter-municipal collaboration between four Danish municipalities in different scales will be investigated.

*Tourism and Regional Development*

## **THE INTERCONNECTION BETWEEN CREATIVE INDUSTRIES AND TOURISM**

**Margherita Pedrana, European University of Rome, ITALY**

Since the concept of learning region and milieu innovateur, the relationship between territories and innovation has been analysed. In specific contexts such as industrial district also social interactions and social capital help in understanding the successful or unsuccessful result in terms of economic output and innovation. One of the fuzzy words used in this context is also creativity. It has been addressed as the solution to many urban and regional problems (Landry, 2000, Unesco, 2008 and Caves, 2000). Creative industries are the innovative cluster in a specific area and they are one of the factor for successful economic areas. Also in the study of Florida, 2002 the importance of creativity, from the point of view of the creative class, is underlined in order to understand the role of creativity and innovation in cities.

The main purpose of this paper is first of all to define creative industries, starting from the regional and local economic development literature. After the definition of what we understand with creative industries, we will match the two features of a territory, in order to understand how creativity, innovation and tourism may co-exist on a specific area and help in urban and local economic development. In order to understand also socio-cultural features we will use a proxy of social capital. We want to map tourism destinations in Italy and their relationship with creative industries and social capital, in a single model. The aim of the paper is to understand whereas all destination may be creative and which are the condition to create or recreate the virtuous circle of development of a tourism destination. This may be important not only for new destination but also for mature ones.

The results show that the presence of creative industries is correlated with tourism specialization of a region. Moreover, some of the social capital dimensions are connected with tourism specialization.

The paper is organized as follows. First of all, definitions of creativity, creative industries and social capital are presented. Secondly, the model of analysis is discussed, with the main hypothesis. Thirdly the main findings are showed. Finally, some conclusions also from a policy point of view are drawn.

**Violeta Pereira, University of Brasília, BRAZIL**

**Cláudia Andreoli Galvão, University of Brasília, BRAZIL**

The joint action of inclusive public and private institutions, supported by community participation in the formulation and implementation of government actions may result in the consolidation of trust between the various social, public and private actors, contributing therefore to the largest economic effectiveness of clusters which will result in greater economic and social development. The institutions also play an important role in the search for consensus among the members of a territory, interacting with the functioning of markets and improving economic performance, and providing technological support and information. Inclusive institutions may be the way to avoid the economic failure of territories.

Putnam compares the economic success of Northern Italy with the failure of the regions further south. His thesis for these differences is the institutional performance. Some regions have been efficient and prosperous governments and others do not. The prosperous regions have high social capital resulting in more democracy and more positive economic results. In the communities of successful regions there are strong norms of reciprocity and dense networks of civic engagement, which encourage voluntary cooperation. Best forms of government will be achieved by means of secondary associations, which, in turn, will stimulate civic culture of accountability and high expectations in relation to government actions. The civic regions have intense networks of civic engagement and reciprocity. These networks are the capital for good government. With similar arguments, Acemoglu and Robinson point out that the Brazilian rise since the seventies was a consequence of building inclusive political institutions which consequently resulted in economic institutions also more inclusive.

The main objective is to discuss the role of federal, regional and local institutions in clusters and verify their contribution to the development of clusters. After that, discuss governance in clusters, in other words, the role of civil society and institutions in the development of clusters. Search also whether the local governance allows for the establishment of cooperation within the clusters, and helps to integrate external institutions to expand their available resources. Finally, analyze local relations between companies and institutions as key for upgrading local capacity.

The main working hypothesis is that the institutions at national, regional and local levels have a significant role in helping the productive sector to innovate and grow, promoting development and access to development institutions.

The study was conducted through a literature review, which sought to know the various theoretical approaches on the role of institutions in the development of clusters.

It became clear through this study that to encourage the formation of networks of cooperation between enterprises and other institutions of clusters becomes crucial for this system to take advantage of the resources available on the site or in larger areas, via the provision of public goods, local and regional.

**Linda Persson, Karlstad University, SWEDEN**

Background

Examples of counter urbanisation can be found in many parts of the world. Mainly this counter urbanisation takes place in popular rural areas close to larger cities or easy access to transport. There are however examples of counter urbanisation into 'unpopular' rural areas, such as in the Swedish county of Värmland.

Large parts of Värmland are rural and sparsely populated. In these parts of Värmland, and other similar parts of Sweden, migration is mainly consisting of local inhabitants moving from these rural locations to more densely populated areas. Contrary to the general trend two more or less distinct 'waves' of in migration can be seen in these parts of rural Värmland. The first one took place mainly in the seventies as Swedish urban citizens sought a more environmentally friendly lifestyle closer to nature, the so called green wavers ('gröna vågare' in Swedish). The second wave is still ongoing but this time the in migration largely consists of people from densely populated areas in other European countries, such as the Netherlands and Germany, seeking a new life in rural Sweden. The reasons for migrating can of course vary, but common themes discussed and argued are work opportunities (of course) and amenities. Although the reality of amenity migration is more complex, a 'simple' way of defining amenity migration is "the movement of people based on the draw of natural and/or cultural amenities". Cultural amenities or the "coolness-index" is often portrayed as the way to attract talent. On the other hand a Swedish study of migrants show that work or career opportunities was of a much higher importance for the choice to move to a new location than amenities such as culture or outdoor activities.

The Dutch/German migrants/immigrants focused on in this paper have moved to localities with a low economic development, a lack of jobs and declining commercial and public services. It seems unlikely that neither opportunities for work nor the cultural amenities, depicted as important for regional development, are the main motivations for their decision to move. These European immigrants are seeking something else. There are studies from other areas (for example Launceston Australia) which have found that the desire for a better quality of life and a slower pace of living was important motivational factors for in-migration of cultural class to rural areas or smaller towns close to nature and outdoor amenities. These migrants wished to free themselves from the rat race in the city. Although being close to nature, the example of Launceston still has the cultural amenities of a medium sized city. So what's the story of these people who cross national borders to settle in seemingly 'unpopular' rural locations? At a first glance they do not seem to fit the common explanations for migration.

#### Purpose and research questions

The purpose of this study is to examine how international immigrants in rural areas describe their life and lifestyle. What are their reasons for relocating to a rural area, and has there been a change of lifestyle since migrating?

#### Data and methods

Data for this study will be gathered through qualitative interviews with immigrants of Dutch and German descent in the Värmland region of Sweden. The sampling will be done using the snowballing method. After the first few respondents are identified by word of mouth in the researchers extended network of where to find immigrants from these countries, the respondents referred to other prospective respondents.

Interviews will be conducted with approximately 10-15 informants. Interviews will be unstructured to semi-structured, where the aim is to ask as few questions as possible to allow the informant to tell their story but a simple interview guide is set up to, if needed, help the interview answer to the purpose of the study. The interviews will be transcribed and analysed through qualitative content analysis.

#### Results

By this time of abstract submission no interview for the study has been conducted yet. One short 30 min interview was conducted with an immigrant from a major German city, for a PhD course in qualitative methodology, and served as a pilot study for this project. That interview clearly showed that important factors for this informants' choice to relocate to rural Värmland was the landscape (i.e. the forest and the lakes), the scenery around the purchased house and the absence of neighbours close by. It seems that the qualitative interviews will work well to answer the research questions of this paper.

## **EMBEDDEDNESS OF ORGANIC PRODUCERS ENROLLED IN AFNS: A COMPARISON BETWEEN TWO EUROPEAN REGIONS**

**Salvatore Pinna, Università degli studi di Cagliari, ITALY**

Based on the significant literature about the concept of embeddedness in the Alternative Food Networks (AFNs) research, this study identifies the main dynamics, in two regions of Europe, which influence and lead the challenges to the so-called conventional food systems.

The concept of embeddedness was defined for the first time as the degree to which economic activities are constrained by non-economic institutions in pre-industrial society. Later, a new paradigm was developed, demonstrating that this concept can be applied even in market societies. Embeddedness is used as a tool to identify different behaviour styles of farmers in many researches about AFNs. Some authors have systematised rigorously how these type of studies must be conducted; four dimension have to be considered: i) how farmers understand the relationship between farming practices and environmental benefits; ii) the application of these practices; iii) how producers exchange information with the customers, and iv) how customers manage the previous three dimension so as to make their own decisions. Moreover, different types of embeddedness have been described in agri-food studies: ecological, spatial and social embeddedness are considered in this paper.

With a comparison between two European regions (Sardinia and Community of Madrid), this case study identifies different styles of embeddedness among organic producers (whether or not supervised by a control body) and highlights differences and similarities, with a particular focus on their position about the control system organisation. Information has been provided through semi-structured interviews, where farmers were asked about general topics, feeling free to deepen the aspects they prefer. The verbatim transcription and the analysis with the codification method have been used in order to make an abstraction representation of the main concepts, which a theoretical framework describing the analysed phenomenon has been built upon. Within the model description, the four dimensions and the three types of embeddedness described above have been used as a theoretical guide. In order to collect enough data, snowball sampling technique has been used, along with the saturation method that indicates when interviews could be stopped. Farmers were asked to name people they know who, in their opinion, could provide more information about the topics discussed. For every interview, codes describing the main ideas were generated. Saturation is reached when the current interview is not adding new information.

As a result, farmers have been divided into categories according to their degree of embeddedness, described through the main themes that came out during the interviews, some of which are consistent (for example visions about innovation and tradition) and some others are not (for example ecological and economic visions). Every farmer has been included just in one category according to her/his main preference, which does not imply the absence of a positive attitude towards other categories.

The analysis of the categories could be useful for policy makers and specialists in organic agriculture (including the control bodies) and AFNs, because it helps them to understand the different motivations that boost the will to start and conduct alternative ways to produce food, considering the importance of this type of farming in the new CAP 2014-2020.

## **EU COHESION POLICY AND URBAN SAFETY: THE “LOCAL” DIMENSION OF CRIME IN A SOUTHERN ITALIAN NEIGHBOURHOOD**

**Pasquale Pizzimenti, Mediterranea University Reggio Calabria, ITALY**  
**Carmelina Bevilacqua, Università degli Studi Mediterranea di Reggio Calabria, ITALY**  
**Claudia Trillo, Università degli Studi Mediterranea di Reggio Calabria, ITALY**  
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Sustainable urban development should substantially contribute to pursuing 2020 European Union targets for a Smart, Sustainable and Inclusive growth. However, many European urban areas, especially in lagging-behind regions, are still plagued by criminal activities that challenge citizens' safety and security. Urban safety and security issues, indeed, are considered among the most important sources of underdevelopment of European Regions. Since 2000, European Commission has been encouraging local administrations to fight these phenomena through the European Cohesion policy, in particular, on one hand, through the implementation of urban regeneration initiatives, on the other, through the re-location in the market of properties and assets confiscated to the organized crime. In Southern Italy, several urban contexts are affected by the lack of urban security and safety due to the presence of criminal organizations, considered a major cause of poverty and social distress. These dynamics negatively affect the development of new economic opportunities.

A research project, conducted within a European broader research program on urban safety and security, sought to focus on the relationship between urban blight and urban unsafety, by investigating a neighbourhood located in the municipality of Reggio Calabria (Arghillà). Drawing insights from observations conducted in this neighbourhood over a four years period with a qualitative approach, the researchers tested the potential of the new European Cohesion Policy for the 2014-2020 programming period in tackling urban safety and security issues. In the case of Arghillà, the loss of trust in public institutions and the limited cooperation across the local communities, not properly integrated with ethnical minorities, exacerbate urban blight and unsafety. However, criminal activities are not properly connected with micro-criminality, rather with structured and controlled criminal organization. The researcher tested whether or not the current European Cohesion Policy has the potential to tackle the complex issue of eradicating blight and unsafety within urban context dominated by structured and controlled criminal organization. After a brief introduction on the topic and a synthetic picture of the social, economic and environmental context, the researcher analyse the options provided by the Regional Operative Programme (Calabria) that hold the potential to contribute to reduce, and hopefully eliminate, the critical conditions that facilitate the presence of crime in spatially isolated urban areas. In those deprived areas, indeed, only targeted strategies strictly place-based might have positive effect on the social, economical and environmental assets. In facts, evidence show that in this kind of blighted urban areas, the combination of economic decline, social exclusion dynamics, physical decay of the built environment, easily attracts crime activities. Through the discussion of the case study, the study show what actions in the field of urban regeneration hold the potential to contribute to fight urban blight and unsafety, by giving specific attention to the opportunities included in the European Structural Funds (ESF/ERDF) programs in terms of urban regeneration and capacity/partnership building processes.

## **THE CHALLENGE OF INTEGRATING POLLUTION AND CLIMATE CHANGE RELATED FACTORS INTO A COUNTRY RISK ANALYSIS FRAMEWORK**

**Christian Ploberger, Independent Researcher (China and East Asia), AUSTRIA**

This paper argues in favour of integrating climate change related risk into a country risk management framework and the related challenges of doing so. It is further emphasized that integrating environmental and climate related risk into a country risk analysis should help to increase the awareness of the challenges these risks pose for local, national or regional development and thus should help to address related challenges to development at an earlier stage of development.

Since the impact of climate change can undermine a country's development strategy and negatively impact on the living conditions of a population, thereby carrying implications for political stability, climate change should be interpreted as a fundamental political risk and therefore be integrated as a regular feature of political risk evaluation. Even so, it should be recognised that the potential impact climate change can have will vary with the specific location in question, consequently its impact can vary with regard to the local, regional, national, international and global level<sup>2</sup>. This in turn will have different implications for development prospects at various levels with potential negative impact on the livelihood of the population concerned, the existing infrastructure. It may also undermine a company's business strategy by reducing the prospect of arriving at the strategic goals identified within an organisation and in various instances could also contribute to endanger the physical existence of a company's assets, consequently impacting on investment behaviour with regard to specific locations.

Traditional political risk analysis focuses on subjects such as political stability, political systems, state-market interference, market access, legal regulations and property rights, the quality of infrastructure; to name but a few examples. Hence, political risk analysis focuses on the actual political situation of a particular country, on a country development path and prospects, to evaluate the risk for investment and business operations. As such adding the potential impact of climate change and environmental related challenges will additional insight into the developmental challenge a particular locality is facing. It is also emphasized that a lack of perception contributes to a systemic failure of integrating climate change related risk into a political risk framework, after all, there has to be acceptance of a particular risk before one can assess its impact.

Yet, the specific impact of a local environmental issue may not only carry local or national implications but may also regional wide consequences as well. Take the example of the Kosa (sand storms) in Northeast Asia or the Haze in Southeast Asia which exemplifying two good examples in this regard. In both cases specific local environment issues negatively impact on a wider region generating potential serious and destabilizing regional-wide effects which could negatively impact on regional political cooperation and development. Though it is also worth pointing out that regional co-operation in addressing specific environmental issue (if such a cooperation can be established) may contribute to a regional integration process as well.

Consequently, it is argued that though climate change related risk should be treated as a particular risk category, their impact should not be evaluated in isolation but in the context of a local, regional or national development perspective that forms parts of the political risk framework one have to evaluate when investigating the development prospect of a specific locality and a particular state. It is further argued that risk analysis and risk management does not solely concern identifying risk but equally in identifying economic and business opportunities as well, and the impact of climate change provides a good example for that.

*Developing Rural and Peripheral Regions*

## **IMPACTS OF PARTICIPATION IN LEADER PROCESSES – DIFFICULTIES IN MEASUREMENT AND FINDINGS FROM EVALUATION**

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**Petra Raue, Thünen-Institut of Rural Studies, GERMANY**

**Gitta Schnaut, Thünen-Institut of Rural Studies, GERMANY**

As one part of the European Agricultural Fund for Rural Development (EAFRD 2007-2013), the LEADER-approach is one possibility to bring forward rural development. LEADER is a participatory funding instrument in rural areas. Different stakeholders come together in a Local Action Group (LAG). In the last funding periods there was steady increase in the number of LEADER-regions in Europe, and, at least in Germany, it is already evident that this gain will continue.

One objective of LEADER is to bring public, private and civil organisations together to create cooperation. LEADER is also viewed in the context of regional identities to foster a common "sense of place" and a related mobilisation and the commitment of local actors. A general assumption for LEADER is that there is an added value because of a better identification of local needs and solutions, more commitment of stakeholders and a

greater scope for innovation. Further possible benefits are the pooling of local resources, networking to allow mutual learning and an integrated approach to address complex economic and social issues.

Although LEADER is commonly called a bottom-up approach, it has to be pointed out that there is a high influence through a superordinated framework of funding regulations. So more precisely LEADER is neither "top-down" nor "bottom-up", but can be classified as a "down up"-approach. A key issue of participation is to involve very different kind of actors. Therefore organisational structures must be build, which are able to connect actors with diverging interests or institutional background. The composition of actors might differ thematically, for example from agriculture, tourism, nature conservation or the local trades and handicrafts. Another distinguishing feature to be taken into account is the sector: the state, the private sector or the civil society.

The key question for this presentation is, which impacts result from the different modes of participation in LEADER-processes. Impacts might occur in different fields: on the one hand effects on the working process and functionality of the LAGs and on the other hand there should be an impact on modes of cooperation, innovation and the socio-economic rural development itself. Especially for the second aspects there are severe challenges in measurement of the impact.

From the literature different problems of participation in the context of LEADER are already known: So local political power coalitions could weaken possibilities for broad participation. This can be termed a "closed shop". Especially often reported are problems like a dominance of the public sector. In the last funding period in most federal states there was an influence of public actors, because of cofinancing rules. But municipalities are also seen as valuable partners in achieving the LAG objectives; however, it is difficult to define the inflection point at which municipalities become too dominant and come into conflict with the rationale behind the LEADER approach. A key aspect for explanation is the composition of LAG boards. Because of a "maximum 50% regulation", there is no dominance in numbers possible. Although there is no domination of representatives of public authorities, the LAG composition is characterised by a biased representation in relation to gender, age, education, main occupation and native country. The inclusion of individuals with very similar socioeconomic characteristics can even provide effective steering, but does not support the creation of new solution strategies, for which heterogeneity would be advantageous. The linkages to the public are relatively weak and involve only small parts of the rural population.

Such observations are often based on several case studies or single surveys. To get more evident insights about impacts of participation a research approach is useful, which include different sources and a high number of cases. Therefore findings of the evaluation of Rural Development Programs (RDPs) in seven federal states in Germany with more than 100 LEADER-regions are used as empirical basis. Thereby we used a mixture of qualitative and quantitative methods. Main instruments have been four surveys using written questionnaires: two for members of the LAG's (in the years 2009 and 2013), one for LAG managers (2010) and another one for project beneficiaries (2012), as well as an analysis of funding documents/ funding data and more than 100 personal interviews with project initiators, LAG managers, LAG members and government employees at different levels of responsibility. To include the impact of different regional circumstances and organisational structures there is a detailed operationalization for this.

Results to be discussed in the session are the linkages of the set-up of the LAG and participation structures to different outputs like satisfactions of different kind of stakeholders, creation of innovative solutions or the performances in project implementations.

*University Technology Transfer- The Globalization of Academic Innovation (Closed Session)*

## **UNIVERSITY TECHNOLOGY TRANSFER IN RUSSIA**

**Tatiana Pospelova, Lomonosov Moscow State University, RUSSIA**

This chapter discusses the current state of Russia's efforts to develop technology transfer. Since 2008, Russia has focused on knowledge-based economic development as part of its desire to overcome its dependence on



exports of raw materials, such as oil, which can cause economic instability when either the price falls due to changes in the value of the national currency or world demand fluctuates. Universities have been at the center of changes related to technology transfer, and the Russian experience may offer some lessons for other transitional economies.

*The Future of Leadership Research in Urban and Regional Development in Europe*

## **LEADERSHIP IN NGOS AND IMPACT OF THE EU COHESION POLICY**

**Oto Potluka, Centre for Philanthropy Studies, University of Basel, CZECH REPUBLIC**

The EU Cohesion Policy is one of the policies where the partnership principle is an official requirement. The member states have to implement it whilst EU provides framework for its implementation. This policy covers the main fields of activities in which the non-profit organisations (NGOs) are interested in (employment, social inclusion, environment protection, social entrepreneurship, informal education, training, etc.).

Of all the EU countries, the NGOs in the Czech Republic have the lowest ability to change public policies (TNS Opinion and Social, 2012). This provides a unique opportunity to study the main causes of barriers when NGOs attempt to change policies. Therefore, the aim of the current study is to analyse the various barriers between the NGOs and the political decision process in a country where the NGOs' possibilities to influence it are the lowest. Thus, study of partnership principle implemented in such an environment puts light on the most hidden barriers. Obligation of the participation of NGOs on policy-making given from the supranational level allows us to compare the results with a standards applied to all EU member states as the Czech public administration could not avoid it.

From this perspective, the main research questions of this article are the following: What are the determinants that explain the success and failure of NGOs in participation on designing of programmes in the EU Cohesion Policy? What are the managerial consequences within the civil society sector?

The current study is based on a combination of information and data collected via official documents, in-depth interviews (53 NGOs and 8 managing authorities) and a focus group. This research design allows a collection of information from both the public administration and the NGOs sides of the partnership. It also enabled us to match the interviews with information from official documents such as records of the meetings of the monitoring committees, different versions of the programming documents, etc.

The form of fulfilling the partnership is according to the interviewees impersonal. A number of issues could be discussed and explained, but this requires either time or an intense discussion (e.g. whole-day meeting). Moreover, it is not clear for many of the NGOs' representatives how is being dealt with their comments. They feel that their comments were received and accepted by the public administration, but then nothing happened. Some working groups even succeeded in persuading managing authorities to widen the pool of potential final beneficiaries by NGOs (in the programmes financed by the ESF). On the contrary, reallocations of support to priorities of NGOs were rejected.

NGOs entered into the partnership process when there were already existing programming documents. Thus new representatives did not have much time to understand and get a chance to influence the focus of upcoming programmes.

It was partially caused by the fragmented civil society sector. Representatives of the National coordination body contacted bona fide representatives of ANNO which was thought to be the representative of self-government of the non-profit sector. However, information has not been shared with other NGOs. This caused delays of the partnership process by several months.

These problems resulted in a lacking long-term plan including the possibility of NGOs to plan their participation. As a result, many of the representatives of NGOs do not even know how their work will continue when the programmes are approved by the European Commission.

The main obstacles for successful implementation of the partnership principle in the Czech Republic are the following five issues.

The first and major problem creates the vast fragmentation of the civil society sector in the Czech Republic, which impedes building of priorities and joint actions of the sector. Thus, many partners miss the added value of efficient cooperation.

The second important issue concerns the low capacities of NGOs representatives in partnership, who work at their own expenses – they work in their free time and cover the financial costs for the meetings from their own sources. Thus, if they do not see any successful results of their attempts, they simply leave the partnership or stop being active. In turn, the partnership gains a formal, inefficient shape.

Thirdly, the fluctuation of representatives of civil society sector due to the reasons stated above prevents a functional partnership. However, the fluctuation also concerns the public administration due to the common changes in the managing authorities due to political reasons. Fluctuations result in a loss of the previously established personal contacts the partnership not only becomes not only unsustainable, but it also needs to be rebuilt.

The last problem is the timing of the partnership. Late beginning and an insufficient time in the partnership to consult priorities lead to a low quality of outputs.

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*Comparative Policy Approaches in the Regional Development of the Low Carbon Vehicle Sector*

## **THE USE OF HYDROGEN/NATURAL GAS BLENDS AS LOW CARBON FUEL IN ROAD TRANSPORT. A CASE-STUDY IN REGIONE LOMBARDIA (ITALY)**

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**Vincenzo Moccia, Istituto Motori CNR, ITALY**

**Andrea Gerini, Centro Ricerche FIAT, ITALY**

**Silvana Di Matteo, Regione Lombardia DGA, ITALY**

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The EU has set out an ambitious strategy (by Regulation EC 443/2009) to reduce CO<sub>2</sub> emissions from road vehicles: for new passenger cars requires a fleet average emission of 130 gCO<sub>2</sub>/km to be fully achieved by 2015 and for 2020 a target of 95 gCO<sub>2</sub>/km. Region of Lombardy in Italy, by Mygas Project (2009-2013), has tested a intermediate solution towards a low carbon sustainable mobility: a 20 vehicles Panda fleet fuelled with hydrogen/natural gas blends (hydro-methane, HCNG, up 30%vol H<sub>2</sub> in Natural Gas). Centro Ricerche Fiat (CRF) has delivered the experimental fleet; the project also included the construction of a HCNG refuelling station in Milan. Hydro-methane is cheaper than pure hydrogen and it can be easily refuelled in vehicles powered by natural gas (NG); NG technologies represent a significant opportunity to make the H<sub>2</sub> carrier enter the transportation sector.

Due to the hydrogen properties the HCNG blend, in comparison with natural gas, has higher H/C ratio, higher combustion velocity, and less ignition energy. This means that the combustion will result more complete, fast and stable.

The aim of this experimental fleet was to provide the necessary data to verify the advantages in terms of both environmental performance and energy consumption.

This paper is aimed to illustrate some results obtained, within Mygas project, in activities carried on at Istituto Motori of National Research Council of Italy.

The FIAT Panda fleet was fully monitored during a twelve months period out of the 3 years fleet use: several parameters were investigated in order to assess the effect of the hydro-methane on an everyday usage. GPS data were inferred along with the typical engine ECU parameters (inlet manifold pressure, injection time, fuel volume injected, car speed, etc). The overall distance covered, travel time and total CO<sub>2</sub> emission of the fleet were obtained. The average speed was about 40 km/h with a autonomy of about 180 km by using the blend at 30% H<sub>2</sub> in volume. The entire fleet has overcome more than 440.000 km without any direct issues related to the use of the natural gas/hydrogen blend.

The emissive behaviour of a sample of this fleet was investigated over chassis-dynamometer tests. Type-approval and real driving cycles were executed in order to measure the vehicle performance in terms of drivability, exhausts emissions and fuel consumption related to the use of conventional fuels and HCNG blends.

Apart from the natural reduction in CO<sub>2</sub> tailpipe emissions, CO and HC emissions and engine efficiency also take advantage from the H<sub>2</sub> fraction. NO<sub>x</sub> emissions tend to increase with hydrogen content in NG but, with some adaptations to the software of engine control and to the calibration dataset, it's possible to control them. Nevertheless an adaptation of the storage/injection system materials is needed to guarantee full compatibility to hydrogen.

*ESPON Session: The European Territory in the Future*

## **WHAT SHORT TERM TERRITORIAL INVESTMENT FOR THE EUROPEAN LONG TERM FUTURE**

**Maria Prezioso, University of Rome Tor Vergata, ITALY**

A huge number of geographical and economic theories and applied researches' experiences inspire the adopting of common (semi-standardised) processes for sustaining long term territorial development (employment, inclusion, GDP growth). It appears like a urgent European Union need in order to stabilise appropriate territorial integrated strategic investments overcoming shock and sectorial measures of austerity (Junker plan). At the same time, it seems the unique solution for having to react to a pseudo global financial and economic war (gloeconomic and geopolitical play at no summa zero), focusing resources to maintaining the status quo.

Starting from a critical review of literature positions, the paper discusses what modelling the European policy action should follow in order to not invalidate the efforts implemented by austerity measures. Multilevel experiences (benchmarking at different geographical scales) from several 2013 programs (mainly ESPON, URBACT, ENPICiBMED) are resumed to demonstrate this thesis.

In order to assess and to measure this aim, territorial cohesive capability is considerate the main vehicle for transforming European challenges in common geopolitical goals. So the paper considers the Europe 2020 pillars and flags as a first turning point to be related to the territorial regional capability of transforming its diversity in cohesive and competitive development.

Some words will be spent about the real compliance between Structural Funds objectives, declared priorities of investment, territorial regional capability, including complex and multidisciplinary variables as cohesion, sustainability and subsidiarity confidence in this evaluation.

Example of place evidence and economic-social trends from countries, regions and cities are mentioned and compared for fixing the distance among symbolic expected priorities and real potentials at the short time. At this scope the 2020 political addresses by government declarations and obligations, the regional potential attractive capital, the city potential public and private investments are illustrate with particular regard to the Italy position in the Southern of Europe future.

The dissertation in the whole pays particular attention to relate the significant of European territorial evidence with the European policy and funds (e.g. the programming for internal areas distinguished respect to the inner

areas ones). This permits to better clarify the different impacts and effects produced from European addresses when the national/regional interpretation does not take in account the relationship between territorial evidence and programming obligations that should increase employment and income.

Finally, a set of feasible recommendations are launched on the short time providing viable, flexible, proper, effective and resilient answers to existing needs of territorial investments.

These are due because expectations of citizens in front of the current period of economic stagnation. The strategic investment, in principle, should help territories (mainly cities) in having major perspective to realise a territorial regeneration accessing to mainstreaming financing linked to the new Structural Funds, which define the perspective horizon of long term European challenges.

They imply joint capitalization, which means not just a(nother) prêt-a-portrait concept, and triggers a multifaceted approach ("quick and dirty" ideas / solutions). Drawbacks so far relate to fragmented territorial intelligence and the need for a certain critical mass willing to get involved. We mean the creating models for strategic integrated sustainable planning by addressing the efficiency of technology across various sectors (energy, climate change, public services, accessibility and transport, etc.) in different typologies and dimension of territory. It means supporting territories with the development of ambitious and innovative challenges embedded in comprehensive territorial agenda.

*Tourism and Regional Development*

## **TO SLAY OR FEED THE DRAGON: THE DILEMMA OF A CHRISTMAS MARKET!**

**Liz Price, University of Lincoln, UNITED KINGDOM**

**Farhan Ahmed, University of Lincoln, UNITED KINGDOM**

**Martin Elliott-White, University of Lincoln, UNITED KINGDOM**

**Heather Hughes, University of Lincoln, UNITED KINGDOM**

'German-style' Christmas Markets have become increasingly popular and widespread in the UK since the city of Lincoln introduced its German Christmas Market in 1982. Although tourist historic cities are not unique in their exploitation of such events, in heritage settings these markets have become a leitmotif, often designed to maximise economic impact whilst playing on the myth of 'Christmas past'. The perceived authenticity of such events, and their attraction, is often linked to the spatial qualities of historic quarters and public spaces. However, large visitor numbers in confined public spaces mean that management and control of such events is not only an organisational challenge, but also growing expense, leading many city stakeholders to question their value and viability. Moreover, such issues have become the focus of stakeholder consultation at a time when economic austerity both constrains public and private sector involvement and encourages risk aversion. This paper seeks to add to the relatively limited literature on the economic value of Christmas Markets as well as inform contemporary event practice. Building on a mixed method design, empirical evidence is presented from visitor and business surveys, secondary sources and semi-structured interviews with key stakeholders. The case of Lincoln highlights the problems associated with apparent success and how these are managed, the need to evaluate and disseminate event outcomes and the importance of strategic vision.

## **WHERE NEXT FOR INCUBATORS AS A REGIONAL INNOVATION POLICY TOOL?**

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Incubators have featured in various approaches to innovation policy across Europe and beyond. However, they have achieved different levels of success. There are countless examples from around Europe, and indeed beyond, of policies that aim to foster the birth and growth of innovative knowledge-based firms, often focusing on the knowledge and IPR generated at the interface between universities and industry. Particularly popular have been policies that develop a physical infrastructure to enable collaboration, in particular science parks and incubators (Etzkowitz et. al., 2005; Massey et al, 1992; Phan et. al., 2005; Vedovello, 1997). Studies have found a variable success of these strategies; some science parks and incubators are held up as examples of successful innovation interventions (Casper and Karamanos, 2003; Longhi, 1999; Etzkowitz et. al., 2005). Cooke and Morgan are more critical of the proliferation of these approaches across Europe, describing the physical presence of science parks and incubators in weaker regions as “cathedrals in the desert” (Morgan, 1997).

However, we see a number of new trends emerging, whereby incubators are becoming often less focussed on the very physical and infrastructure based approach, towards more participatory, agile, and socially based approaches. In this paper, we use case studies of approaches to incubation across Europe in recent times to illustrate this move from a more traditional to the next generation of incubators. We discuss how new forms and models of incubation are emerging, often still in conjunction with universities but taking an approach that is less premised on pushing out technological innovation in a linear fashion but is more interactive, participatory, and systemic in its view of embedding incubators in the local environment and making them more relevant to local populations, rather than just a fairly narrow elite of innovators.

Some empirical examples from different European regions are employed to illustrate this shift and the emerging models of incubation in different places, which look quite diverse and suggest that incubation as we know it is changing and evolving. No longer can we see the homogenous roll-out of very similar looking incubators across Europe, and there are more local and specialised approaches to incubation emerging in line with the predominant policy rationales at the current time. This paper intends to situate itself as a call for further research into the emerging models of incubation across Europe, and indeed beyond. There is a recognised need to better understand how these types of policies are functioning and employed to support innovation and economic development, and how to increase their effectiveness and improve policy outcomes.

### *Role of Institutions in Regional Development*

## **STRATEGIC PLANNING NETWORKS FOR LATVIAN LOCAL AND REGIONAL DEVELOPMENT**

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**Andris Jaunsleinis, Latvian Association of Local and Regional Governments, LATVIA**

The aim of research is analysis of innovative approach to facilitating development by strategic planning networks. For this aim several methods of policy analysis are used.

There are contradiction between theoretical doctrine about development programming process and reality.

Traditional is up to down approach, stipulated by legislative system about development planning. Such doctrine in theory and legislation leads to opposit actions in practice - applying by local and regional authorities the “principle of menu”. According to that principle local long-term development strategies and middle-term development programs will include all imaginable “good goals” and “good actions” in order to correspond any intention of centrally supportable investment.

In all governmental documents one can find recommendation to establish local priorities and act in accordance to those, in reality local and regional policies gather activities far beyond budgetary limits. Opportunities to implement local policy mainly depend on luck during lobbying. Ranging of local or regional priorities in the conditions of centralised sectoral investments is not important, because sectoral interests of central government ministries differs from local interests.

In the conditions of increasing concentration and centralization alternative approach is necessary. Particularly, it is connected also with leadership of Latvia to implement austerity policy. Perspective of national government involving in the facilitation of economic development is miserable. Substantial part of local governments disagree with austerity, they are going to be more involved in development measures directly and indirectly. There is necessity to support such tendencies by self-governments association.

Latvian Association of Local and Regional Governments (LALRG) facilitates introduction of innovative approach. Tool for that approach is introduction of marketing strategy process in the management of local government. Project "Smart governance and performance improvement of Latvian municipalities" (2013-2016) develops experience of Norway Local Governments Association of bench-learning. Basic elements are cooperation networks and creating of data base for facts and indicators performance analysis.

The main benchlearning instrument is the cooperation networks of the municipalities. The networks thematically are related to the main LALRG activity groups, supplementing the existing political and administrative structure of LALRG. The goal of the benchlearning within each network will be taking over of the best practice from other organizations adapting the relevant experience to the specific circumstances of the respective municipality. It is not less important to learn from mistakes made by others and avoid them in the process of the changes of an organization.

Benchlearning will be based on the evidence provided by the benchmarking data base. The benchmarking method is a governance process in which organizations evaluate their procedures and activities comparing them to the best practice in the organizations of similar type. The benchmarking becomes a point of reference to improve performance of a municipality.

In Latvia (and also other states), the attempts to govern municipalities or state administration institutions based on evidence encounter a significant problem – it is hard to measure approaching (not approaching) the outcome. The data of statistics or budget hardly describe the goals which the politicians of the municipalities or the state strive to achieve. Mostly, measurable criteria can be applied to the outputs at the best, but the results of policy (outcome) and impact of the policy can be described very rarely.

Latvian approach introduces several innovative elements:

- strategic approach during discussions in all networks,
- four large interest groups (residents, entrepreneurs, guests and civil society organizations for developed local governance products, prices, place and promotion),
- applying methodology to such functional elements as
- policy making and policy process organization,
- regulation,
- administration,
- services providing,
- public and private infrastructure running,
- facilitating of private sector activities,
- local government entrepreneurship,
- support functions for all above mentioned activities.

Substantial element of proposed approach is establishing of single period for strategic planning, budgeting and local government elections. The best common cycle is the period of European Parliament elections - 5 years.

In situation, when national government works according to traditional one year budgetary cycle, but national planning period differs from cycle of political responsibility, introduction of new approach for particular municipalities and regions is great challenge. Therefore different opportunities, how to introduce project or

program budgets, how to choose between dividing to middle term development budget and short term operational budget or fully apply middle term development budget will be under discussion.

The activities of the project will facilitate seeking for innovative solutions and implementation of such solutions in each involved municipality. It complies with one of the three EU 2020 priorities – innovative growth – as it is the municipalities that can plan and facilitate local innovations best (provided that there is appropriate information base) thus ensuring innovative variety.

*Critical Studies of Urban and Regional Development*

## **DIFFERENT ECONOMIC MODELS OF INNOVATIVE PROCESSES IN EUROPEAN REGIONS: HOW REGIONAL GROWTH IS CREATED**

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**Dariusz Majerek, Lublin University of Technology, POLAND**

The aim of this article is to find real causes of regional growth related to innovative processes within different regional circumstances. We are interested in finding groups of regions with similar economic models of innovative processes leading to growth. Based on previous findings, we assume that there will be at least a few models that differ in the number of variables, number of links, the strength of the links, and thus the growth dynamics and the level of regional economic development. Our purpose is not only to find correlations between variables and growth but also to assess how much time is needed to achieve a given change in the development level after changing separate independent variables. Therefore, we are going to discover and describe all the processes taking place in different regions aiming at increasing regional development and put them on a timetable. We will thereby be able to create economic models for different groups that can be analysed qualitatively in further research using case studies.

To achieve this complex target, we have planned a multi-stage research process. First, we chose number of independent variables related to 1) employment, measuring the employment share of relevant groups of industries in the economy, including high-tech manufacturing and knowledge-intensive services; 2) human resources, measuring the percentage of citizens with different educational attainment relevant to the knowledge economy and the percentage of people with tertiary education working in science and technology occupations; 3) activity, measuring the involvement of females and tertiary-educated people in the labour force and the number of long-term unemployed people as a percentage of total unemployment; 4) technology, concerning RandD expenditures as a proxy for investments in creating and absorbing technology, the share of RandD by government and universities and research institutes, and the number of patents; 5) economic performance, measuring the effect of technological change on labour productivity in industry, knowledge-intensive services, and investments in new machinery as measured by gross fixed capital formation. We will choose the largest possible and most accessible set of variables in order to obtain the best picture of the functioning of innovation processes in the regions under survey. The initial time interval of the variables will cover the years from 1994 to 2013.

In the next step, we will compare the changes in pairs of variables over time. We will use both correlations and shifted correlations between each pair of the variables. We will examine the course of one variable over a 1 to 5 year time span to find the highest correlation with the second variable. Once we find this in shifted correlations of the given pair, we can say that one of the variables was a cause or an effect of the other, depending on the character of the shift. In addition, we can estimate the interval of time between this cause and effect. Thus, it will be possible to say that, for example, three years after a given change in one variable, we can expect a specific change in the second variable. However, we will choose only correlations of pairs that are statistically significant and have values above a certain predetermined threshold for our analysis to reduce the size of the models and focus uniquely on the key processes.

In the third step, we will conduct cluster analysis for each pair of variables to find groups of regions having similar correlations between the two variables.

In the fourth step, we will compare all the clusters created by one pair of variables with clusters from other pairs and try to find patterns. We will identify clusters that are similar as far as regions included in these clusters are concerned. These comparisons will allow us to define groups of regions that have similar shifted correlations between variables – processes taking place in these regions aiming at growth.

The findings of this survey will be crucial for determining factors enhancing the development of different regions. We hypothesise that regions belonging to a given group are similar not only as far as the causes and effects of innovative processes are concerned but also as far as the characteristics of regional economy are concerned, including the structure of the economy and level of development. Thus, in further research we can identify paths that can be taken if a region wants to accelerate its growth. To do so, it will be crucial to describe conditions for each group of regions for passing from one model to another, such as from a model of less-developed regions to that of more-developed regions.

*Innovation and Knowledge Economies*

## **KEY ENABLING TECHNOLOGIES AND SMART SPECIALIZATION PATTERNS. EUROPEAN EVIDENCE FROM PATENT DATA**

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**Sandro Montesor, Kore University of Enna, ITALY**

Set by the European Commission at the core of the policy-agenda for “ensuring the competitiveness of European industries in the knowledge economy” (EC, 2009; 2012), the group of six technologies it identified as “key enabling” (i.e. KETs) – industrial biotechnology, nanotechnology, micro- and nanoelectronics, photonics, advanced materials, and advanced manufacturing technologies – has surprisingly not found much scope in the academic discourse. With the exception of the “Feasibility study for an EU Monitoring Mechanism on Key Enabling Technologies” (EC, 2011) – Feasibility Study hereafter – little can be found on the scientific rationale for giving KETs a prominent policy role, and the proof of their relevance still seems to lay in the oven. Such a research-policy mismatch also characterises the recent prioritisation that KETs have found in the mounting debate on S3, with explicit policy recommendations for monitoring (e.g. in the S3 Platform and in the Eye@RIS3 observatory) and supporting their development (e.g. in Regional Operational Plans). In the realm of regional studies, the lack of attention for the role of KETs appears to us even more unfortunate, given a substantiating economic geography approach to S3, in which the role of KETs is for us amenable to consideration. To be sure, plugging KETs in this approach is for us more than desirable to find an actual, and possibly more specific, case for their claimed entrance in the S3 “policy-mix”.

In this paper we move a first, but twofold step in this still unexplored direction. On the one hand, from a theoretical point of view, we try to move further a simple commodity-related relevance of KETs – as “significant [inputs] of future goods and services” (EC, 2012) – and recognise for them some more articulated characteristics that could potentially impact on the development of S3. On the other hand, from an empirical point of view, we test for this potential role by extending the patent-based data and methodologies through which, in regional studies, S3 have been related to the construction of new RTAs (Colombelli et al., 2014; Essletzbichler 2013). These are the main bits of value added of the paper, from which original results and policy implications also emerge about the case for supporting the development of KETs in the search of S3.

From a methodological point of view, we will address the previous research question by referring to the notion of “proximity”, and by assessing it in relation to an abstract space (Boschma, 2005), and especially the technological space. In particular, following Hidalgo et al.’s (2007), we will build up proximity index within a network-based conceptual representation of the technological space of a region, in which each technology is a node that is characterized by a specific set of linkages with the other nodes in the network. (Hausmann and Klinger, 2007; Hausmann and Hidalgo, 2010).

The proximity index is based on Balassa’s Revealed Technological Advantage (RTA) metrics, which provide information on the relative technological strengths (or weaknesses) of a given geographic entity (Soete, 1987).



We investigate the extent to which the emergence of new technological specializations is shaped by past regional technological specialization in one or more of the six KETs (Ro-cKETS) identified by the expert group appointed by the European Commission (EC, 2013). In order to identify KETs, we follow a “technology-diffusion approach” – addressing the economic sectors in which KETs developing and exploiting organisations are active – and build up a matrix, which cross KETs patent applications and economic sectors. In doing that, we identify KETs patents looking at their IPC codes, using a conversion table put forward by a recent “Feasibility study for an EU Monitoring Mechanism on Key Enabling Technologies” (2012): whose definition is still on-going, but whose application has been already tested though in alternative research realm (Vezzani et al., 2014).

As far as the prospected econometric strategy is concerned, a linear probability estimator will be used as a baseline, and its results eventually compared with those obtained with a binomial generalized linear model (GLM) and the GMM system estimator. In doing that, special attention will be paid to the possible spatial correlations of the relative errors and to the possible endogeneity of the regressors.

By crossing regional data on patent applications, in KETs-mapped classes of the International Patent Classification (IPC), with a number of regional economic indicators, we test our hypotheses on a panel of 28 European countries over the period 1980-2010. KETs show a positive impact on the construction of new RTAs, pointing to a new “enabling” role for them. KETs also play a negative moderating role on the RTAs impact of the density of related pre-existing technologies, pointing to the KETs capacity of making the latter less binding in pursuing S3. Overall, a new case is found for plugging KETs in the S3 policy tool-box.

*Role of Institutions in Regional Development*

## **ALTERNATIVE HISTORIES, CRISIS AND REGIONAL DEVELOPMENT**

**Marissa Quie, University of Cambridge, UNITED KINGDOM**

Mark Carney, Governor of the Bank of England, recently launched an unprecedented attack on the policies of austerity warning that the failure of wealthy states to help poorer countries risks trapping the Eurozone in ‘another lost decade.’ The election of Syriza in January is emblematic of profound dissatisfaction, not only in Greece but across Europe. The message is unambiguous: persisting in the dogmatic course of austerity is not only wrong for Greece but dangerous for the entire European Union. Greece may be exceptional in the size of its debt burden but its expressions of alienation over the economic crisis that has damaged many poorer countries of the EU are not unique. If Greece is compelled to default on debt payments and even abandon the Euro, the economic repercussions would destabilize Europe shattering the assumption that there is no retreat from the Europe and fuelling anti-European sentiments that propel the growth of far-right parties.

Austerity policies propagated by the ‘troika’ of the European Commission, the European Central bank and the International Monetary Fund have exacerbated omnipresent centre/periphery cleavages. No individual nation state – not even Germany, often viewed as the architect of the policy – has the power to challenge the power of the ‘markets’. Collective European institutions which ought to be productive in this effort have been largely ineffective and oriented towards the short term. In this context, how could the paradigm for European development be reconfigured to generate a more inclusive and sustainable trajectory?

Was the project to create a multinational economic and political entity at the western flank of the geologically combined supercontinent of Europe and Asia flawed from the start? Debates surrounding the current crisis employ Europe as a constant frame of reference - but what exactly is ‘Europe’? For the Germans and the French it is essentially understood as the Eurozone. Beyond this, Europe generally means the European Union. ‘Europe’ is also interpreted through the prism of Enlightenment values. According to the European treaties, Europeans share fundamental values, such as democracy and human rights, and are committed to promoting these values both inside and outside the EU. This normative European *acquis communautaire* was reinforced by the ‘Copenhagen criteria.’ Membership requires that candidate countries have achieved stability of institutions guaranteeing democracy, rule of the law, human rights, respect and protection of minorities and the existence of a functioning market economy. Nonetheless, consensus about fundamental values and how to promote them remains open to question.

Could a spatially wider and temporally deeper frame of 'Eurasia' be instructive? How might Eurasia's past be reinterpreted in accordance with the present crisis? Jo Guldi and David Armitage claim that the spectre of the short term haunts our time. Europe's politicians are trapped in truncated electoral cycles. Ferdinand Braudel tells us that landscapes and panoramas are not simply realities of the present but also in large measure survivals from the past. Rather than focus on the crisis at hand his concept of the 'longue durée' compels us to stand back and reflect on a wider and deeper picture. In parallel, Jack Goody's anthropological conceptualization of 'Eurasia' develops an important counter narrative illustrating commonalities and differences across time. Goody criticizes the teleological models that underpin the artificial separation between Europe and Asia which are prevalent in the social sciences. He recalls the ways in which advantage has alternated between different parts of Eurasia over millennia. Similarly, John Tosh, in 'Why History Matters' (2008), calls for an 'applied history,' one that is attentive to both continuity and difference. Neustadt and May (1986) note the 'future has nowhere to come from but the past'. However, 'what matters for the future in the present is departures from the past.' These perspectives allow for an uncovering of connections transcending the discrete categories of nations and cultures to illuminate long chains of interdependencies and the flows of knowledge, technologies, goods and materials that tie people together.

Could an expanded consideration of Europe that reconnects with the rest of the super continent, shaped not only by the ambivalent histories of Marxist- Leninist socialism but by older precepts that market must be kept in their place if communities are to grow and prosper be constructive in addressing today's crisis? Can we connect the experiences and legacies of socialism and social democracy with the deeper histories of the wider continent of Eurasia? How can making these connections help us to understand the crisis of contemporary capitalism and address the needs and aspirations of European societies?

*Innovation and Knowledge Economies*

## **LEARNING IN A SOCIO-SPATIAL CONTEXT: THE IMPACT OF SOCIAL CAPITAL, REGIONAL IDENTITY AND LEADERSHIP ON REGIONAL INNOVATION PERFORMANCE OF ECONOMIC PERIPHERIES**

**Garri Raagmaa, University of Tartu, ESTONIA**

**Jaan Looga, University of Tartu, ESTONIA**

This paper reflects a recent turn in the 'learning region' concept towards a wider socio-spatial context. 'Learning region' has been an expanding research field among regional scientists, economic geographers and economists as well as policymakers since the mid 1990's. Lately, it has been criticized for overemphasizing a proximity factor and conceptual fuzziness. In fact, a significant and increasing part of knowledge is processed globally through modern communication technologies. As knowledge is distributed globally and innovation networks are increasingly globally linked then it's unrealistic to conceptualize learning only as a regional phenomenon

However, learning may still have a regional dimension because social contexts are spatially embedded: people are largely spatially sticky and are in that way depending on regional norms, values and other forms of social capital. The lion's share of knowledge used in daily practices is not codified and is spatially sticky. People are spatially sticky as well: most people act and work within their urban regions and in even more spatially bounded work and home based communities. Certainly, virtual communities can be added to these, but most of the Facebook contacts are also created within existing personal networks. The internationally active science community should realise that most 'common people' have no good reason for daily international interaction. People live and learn in a space or, more correctly, in 'places' where closer and more regular interactions take place. And they have, usually without acknowledging this fact, spatial consciousness of different spaces where they act with other people and where local buzz and learning also take place.

Learning that takes place within these bounded places is important for companies, which are themselves established collective spaces. People, not institutions that are learning. These firms, this means their workers are and usually have to act in close interaction with other people, firms and more or less institutionalised social groups and communities nearby. And there is always some local, regional and national authority setting

rules and carrying out policies with the aim of changing existing structures. Whether public leadership is forward looking or just tries to maintain the status quo is of vital importance. It is also important whether the place (region) has a common spirit and goals it wants to achieve and whether the intraregional networks are more inward or outward looking.

Looking at innovation performance, it seems that the presence of regional higher education institutions (HEI) has a remarkably positive role. Thus, an important prerequisite for local learning is the availability of a local knowledge infrastructure that includes locally embedded so-called knowledge gatekeepers (these can be either business mentors, civil servants, development agency officers or researchers at local HEIs) able to explain and interpret global processes and opportunities.

We intend to analyse the impact of following socio-cultural factors: social capital, regional identity and leadership to the regional innovation performance. Region's collective personality or identity binds people together but such place embeddedness of people may have dual impact: on the one hand it helps to empower regional economic stakeholders for innovation, openness and glob(c)al connectivity but, on the other hand, it might be also used to justify marginalization from global processes and self-closeness. The identity and social capital formation is a unique, locally specific process. It may benefit cooperation and innovative networking between economic actors and breed trust but it may also lead to institutional lock-in and interpersonal antagonism. Thus, particularly in economic peripheries, there is a need for new dynamic leaders who are able to cope with constantly changing circumstances, interpret globalisation and orchestrate leadership process for change and improved economic milieu.

Beyond thorough conceptual discussion about the above factors in regional learning process, we going to analyse a questionnaire based face to face interview (that included also qualitative part) results with enterprises and knowledge gatekeepers of 13 Estonian regions outside old university centres. The survey measured regional (1) innovativeness, (2) social and (3) human capital, (4) regional identity and (5) leadership qualities. We attempt to combine this material with Community Innovation Survey regionally interpretative results as well as ERDF enterprise development and innovation grant data of the 2007-13 period.

*Urbanisation and Cities*

## **CAN POLICIES LEARN? THE CASE OF URBAN RESTRUCTURING IN EASTERN GERMANY**

**Adam Radzimski, Adam Mickiewicz University, POLAND**

Urban policies have increasingly attracted the attention of the academia in the last years. However, a crucial question still remains to be answered: what can be the contribution of public policies to the resolution of problems that cities are facing these days? On the one hand, urban policies have already reached a high level on the political agenda. On the other hand, the literature gives plenty of empirical examples of policies that did not work in a proper way. So, there seems to be some discrepancy between the expectations that are related to urban policies, and the evidence of policy results.

Under these circumstances, there is definitely a need to better understand the ways in which policies are implemented. An empirical observation is that policies do not always lead to the outcomes they were intended to achieve. More specifically, policies may partially or fully fail to meet the intended objectives, and/or they may lead to results that have not been expected. However, in our view, it is a too simplistic approach only to classify policies either as "successful" or "failed". We believe that it is essential to stress the fact that policies gradually change over time, evolve, and adapt to changing conditions. Nowadays policies are often implemented over a timespan of several years, and it is difficult, if not impossible to predict all the important conditions that may affect a policy at an early stage. We are convinced that "learning by doing" is a crucial element of the policy implementation process, which should not be overseen in the analyses.

In this paper we would like to address this issue using the example of urban restructuring in Eastern Germany. Since the German reunification that took place 25 years ago, a complex strategy has been implemented in Eastern Germany with the purpose of equalising the conditions of living throughout the whole territory.

Initially, that strategy was not actually concerned with urban issues. In fact, as argued by some authors, the regulations introduced in the 1990s that included in particular generous tax benefits for new housing construction, had the actual effect of supporting suburban growth. On the contrary, cities were facing the process of economic and demographic shrinkage. It appears that the policymakers were not well aware of the possible spatial effects of the regulations that were introduced with the purpose of stimulating economic growth.

A significant change took place on the turn of the centuries when housing vacancies became a serious problem in Eastern Germany. That was a problem that actually hardly anyone expected, as by the end of the socialist period the country was characterised by a shortage of housing. However, new housing was produced in the 1990s on such a scale that not only the demand has been met, but also excess was created. The problem with housing vacancies was the direct impulse for the introduction of a new policy that was aimed at the restructuring of cities in Eastern Germany. In fact, housing vacancies were just one issue in a constellation of problems, but in a certain period they attracted particularly much attention.

The new policy was named “Stadtumbau Ost”, which can be translated into English as “Urban Restructuring East”. The main objective of this policy was twofold: firstly, to reduce the scale of housing vacancies, and in that way to stabilise East German housing markets that were characterised by a large oversupply, and secondly to strengthen the residential attractiveness of cities that were facing the process of shrinkage. It has been the political intention to treat both parts of the policy as equally important, and particularly it has been stressed many times that the measures aimed at qualitative changes in the urban space should not be neglected. However, in the course of policy implementation it turned out that the process of improving the condition of East German cities is a more tricky issue than it was expected to be.

In our contribution we would like to look at the process of implementation of “Stadtumbau Ost”. This policy, which has been initiated in the year 2002 and is continued until the present day, has undergone several important changes over time. We are particularly interested in answering the question, whether these changes can be seen as a part of a rational learning process. Our methodological approach is based on the analysis of official documents, including in particular legal acts and policy reports, and the review of the existing literature on the subject.

*Sustainability - Climate Change, Environment and Energy*

## **AN ANALYSIS OF THE METHODOLOGICAL ISSUES AFFECTING THE SUSTAINABILITY RATING OF 25 MAJOR CITIES IN QUEBEC**

**Juste Rajaonson, University of Quebec in Montreal, CANADA**

In this paper, we analyze the methodological issues that influence the sustainability rating of 25 major cities in Quebec. These methodological issues are generally acknowledged in the literature. However, their magnitude and the extent to which they affect the sustainability assessment of cities using indicators are subject to two opposite points of view. On the one hand, several authors argue that methodological issues are playing a central role in sustainability assessment, which may affect the reliability of the assessment outcomes and lead to erroneous political interventions. These issues are related to: i) the choice of indicators; ii) the quality of the data used to measure sustainability; and iii) the method used to compute these indicators. On the other hand, there are authors who do acknowledge methodological issues, but suggest that their role is relatively limited. From their point of view, methodological constraints are inevitable, yet their effects are insignificant on the key trends in the sustainability assessment.

The paper aims to contribute to this debate through a sensitivity analysis, which addresses the effect of using different methods to assess sustainability on the rating of 25 major cities in Quebec. First, we describe the main methodological features in sustainability assessment, including: i) the choice of indicators; ii) the quality of the data used to measure sustainability; and iii) the method used to compute these indicators. Second, through a review of the properties of different methods used in the normalization, aggregation and weighting

of indicators, we aim to verify the assumption that methodological factors have a relatively limited impact on the sustainability assessment of cities.

Our approach consists of four steps. We first select a set of indicators based on two criteria: i) their recognition in the literature, demonstrated by their use for several years in many local experiences, and ii) their measurability, based on data available for 25 major cities in Quebec and the opportunity to observe their evolution over time. Once the indicators are identified along with their respective values, the second step is to review their descriptive statistics. This will help to understand the structure of the data and to identify the main trends for all 25 cities studied as well as their respective categories. The statistical description of the indicators is followed by a third step, which consist of ranking the cities according to the indicators' values. These values are calculated using different combinations of: i) standardization; ii) weighting and iii) aggregation of indicator methods. Integrating these methods gives a total of 41 possible ways to assess the sustainability of the cities and allows obtaining 41 rankings of the 25 Quebec cities based on the sustainability indicators. Finally, the fourth step is to construct a correlation matrix of these 41 rankings and interpret the correlation coefficients. As results, we observe a higher percentage of cities that tend to maintain their relative ranking comparatively to those that tend to move up or drop down, regardless of the approach adopted. This would suggest that there are other more important reasons beyond the methodological issues that explain why some cities remain sustainability leaders, and justify the importance of developing of a research agenda on the potential drivers of better urban sustainability performance.

*Economic Resilience of Firms and Territories A: Economic Determinants and Measurements*

## **ECONOMIC CRISIS AND INNOVATION: DO REGIONS MATTER?**

**Ruth Rama, CSIC, SPAIN**

**Adelheid Holl, IPP-CSIC, SPAIN**

Drawing on a large sample of Spanish manufacturing and service sector firms, this paper analyses the changes in firms' innovation expenditures that have taken place since the onset of the 2008 crisis and the relationship between such changes and the location of the company. Spain is characterised by important regional heterogeneity and regions vary greatly in innovation performance and also in regional innovation and technology policies. Our results show that the crisis has not had the same affect on firms' innovation expenditures across regions. The Basque Country stands out in our analysis. Even after controlling for sectoral differences and detailed firm level characteristics, firms with RandD employment in the Basque Country show a significantly lower probability of having abandoned innovation activities and a somewhat higher probability of even having increased their innovation effort. This regional effect has been especially important for small and medium sized companies.

*Innovation in 'ordinary' regions and 'boring' sectors*

## **XYLOFUTUR, AN EXAMPLE OF LOW TECH CLUSTER IN A COMPETITIVENESS POLICY**

**Lucie Renou, LATTS, FRANCE**

**Gilles Crague, LATTS, FRANCE**

Public action in favour of innovation is facing a dilemma. Should government intervention support the « best » in order to improve international competitiveness? Or should it support the « latecomers » in order to balance the national territory? In Europe, it seems that the EU heads of state and government made the choice of competitiveness. They proclaimed in March 2000 the so-called Lisbon strategy, which aims to turn the EU into the “most competitive and dynamic knowledge-based economic area in the world” by 2010. How do the Member States react to this injunction?

In France, the public policy on competitiveness clusters constitutes an interesting response that we propose to analyse in this paper. The aim of the competitiveness clusters policy is to boost the production of innovations

in specific territories by fostering proximity between industry and research. At first, the French government wanted to support only fifteen clusters, chosen as the jewels of the national industry. It wanted to focus aid on those industries and to encourage them to develop collaborative innovation projects and national competitiveness. However, the State has not resolved the dilemma yet. The French public action seems to hesitate between specialization and planning, between international competitiveness and national balance. Indeed, in 2005, it approves 71 clusters (not 15) in different sectors (including the least innovative sectors) and regions (including the least dynamic regions) and affords them access to public funding. At the same time, however, we observe that 20% of the “best” clusters monopolize 80% of funding allocated to collaborative innovation projects. We therefore consider that among those French clusters some are stronger or brighter than others. In this context, how do « ordinary » or « boring » clusters overcome these difficulties? The present study is focus on this question.

In this paper, we analyse the case of Xylofutur, the smallest French cluster(1), which is part of 80% of the clusters sharing 20% of funding. It was approved in 2005, in the wood sector –that we consider as a « boring » sector, as a low tech sector- and in the Landes region (in Aquitaine) – that we consider as an « ordinary » region, as a mostly rural area. Xylofutur was approved for its relevance in terms of employment and of the need to modernize its industrial structure, more than for its dynamism in terms of innovation. Does Xylofutur benefit or suffer from this policy?

Three main results emerge from our study:

- The wood sector has been approved as a cluster and supported by the State and its national program. This is the State that seems to stimulate low tech sectors. Our study shows that Xylofutur suffers from a lack of political and industrial support in the region, as if local authorities prefer to focus their funding on high tech clusters.
- At the same time, we observe that Xylofutur receives poor scores in national evaluations and has access to a few resources.
- However, the French policy seems to have a positive impact on companies and industrial structure in the wood sector.

This paper draws on PhD research started in 2011 on the impact of competitiveness clusters on a region. The research approach is inductive: it started on the ground and reoriented the questions in relation to what was found there (Glaser and Strauss, 1967). It is structured around a survey carried out at three levels:

- at national level, on the implementation of a competitive cluster policy (focusing on what a competitive cluster ought to be, from the legislator's point of view);
- on seven clusters and especially their operational team in order to understand how they are built and how they evolve, and to compare them to one another;
- on the local political and administrative systems of the clusters studied to further insight into the context of each cluster.

This study is based on: sixty semi-structured interviews that were part of seven precise case studies (including the biggest cluster Aerospace Valley and the smallest Xylofutur); the analysis of documents produced by the actors studied (the State, regional authorities, clusters); and press reviews. This qualitative method furthers our understanding of the dynamics and power relations between the actors, which can be perceived only with a detailed analysis of particular cases.

(1)The French Law 2004-1484 of 30 December 2004 defines competitiveness clusters as "clusters of business firms, higher education institutions and public-or private-sector research organizations grouped together in the same territory, for the purpose of working in synergy to implement economic development projects for innovation".

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The objective of this paper is to analyze the dynamic performance of South Italian firms over the past decade to test the role of the innovation processes and the strategic business choices.

With data obtained from the archives of the financial statements of Italian companies (AIDA Bureau Van Dijk), we define the “virtuous” firms if the company's performance exceeds the average values of the variables before and during the crisis in terms of profitability, productivity and growth: the ROI (return on investment) as an indicator of profitability, value added per employee for the labor productivity and change in turnover as an indicator of firm's growth.

We have obtained some interesting evidence of the relationship between the variables that define the virtuosity, including a positive relationship between the profitability and the labor productivity.

At the regional level, there is a close link between the index of virtuosity and macro-variables describing the economic, social and environmental dimensions of the provinces in which they are businesses. In the Northern provinces of the country with the stronger size of the economy and society dimensions (in terms of structure, performance and strategies) also firm's average virtuosity is higher.

With a direct survey to 800 companies of the four Convergence Regions (Campania, Puglia, Sicilia, Calabria), representative in terms of size, sector, location, we deepen the relations between virtuosity and structural characteristics and strategy of the companies in terms of: internal and external organization (human capital, location, relationship with the local system, belonging to a group and external networks); market strategies and investment; innovation strategies; use of incentives.

Specifically we identify the following evidence: “virtuous” businesses in terms of profitability, productivity, sales growth and market share did not reveal significant differences in structural terms, by year of constitution or average size; the relative share of medium-large companies is still higher; variables related to the organization, the market strategies, investment and innovation reward virtuous businesses significantly; virtuous companies are more likely to reveal multi-regional location, group membership or networks, high internationalization level, significant investment and persistent over time, diverse indicators of innovation.

It was then conducted an econometric analysis to identify the determinants of the virtuosity of firms in the Convergence Regions. As an expression of virtuosity were used two types of variables: binary indices (or dichotomous) that divide businesses into virtuous and non-virtuous and continuous quantitative indices that assign to each firm a measure of his virtuosity on the basis of profitability, productivity and growth (in sales and / or the size of the markets). These analyses bring out some elements that can significantly influence the virtuosity and the performance of enterprises, in particular: the realization of significant; the level and the growth of corporate investments; the entrepreneurial quality; the human capital of the company, measured by percentage of graduates; the product innovations; the presence of business service quality in the territory of location of the company; the firm size; the technical / scientific system in the area of activity of the company.

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The debate on regional competitiveness has expanded increasingly in recent decades, showing a gradual transition towards models of analysis and measurement more oriented to the multidimensionality and sustainability framework.

Analyzing the rich literature, from methodological point of view, it is observed that:

- the lack of a well-established theory of territorial competitiveness makes the used indicators in general little tough, especially if you have to express a conceptual and empirical synthesis;
- the first fundamental distinction is between indicators of target (output) and driver factors, often not considered in the empirical contributions;
- if the composite indicators of competitiveness have to take into account the multidimensionality of the concept, they show problems of aggregation across different dimensions and robustness checks necessary to limit the arbitrariness inherent in the choices of the functions of synthesis;
- the rankings of competitiveness should be built between homogeneous groups of countries or regions, considering the different models of territorial development;
- the rankings are likely to lose sight of the ultimate goals of competitiveness; they would be more appropriate to focus on strategic issues (target variables) of the different regions and not limited to the assessment of the relative scores and placement of synthesis;
- a good indicator of regional sustainable competitiveness must take into account both the multidimensionality of welfare (economic, social and environmental) and its persistence over time (future generations).

From these theoretical and methodological aspects, we propose a new approach to regional competitiveness, sustainability-oriented, with the following characteristics:

- the construction of an composite indicator of sustainable competitiveness, which takes into account both the multidimensionality of this complex concept and its persistence over time; we use an aggregation of the target variables, that we name territorial virtuosity
- the development of indicators that measure the territorial resilience (ability to respond and adapt to shocks), broken down into the three spheres of sustainability (economic, social and environmental). The representation of resilience uses a systemic approach (Holling, 2001; Walker, 2002; Resilience Alliance, 2007) so that the components that feed resilience are those that promote the heterogeneity of territorial system structure, the availability of resources and the ability to the strategic adaptability, represented by some indicators (human capital resources, biodiversity, innovation capacity, etc..).

This work aims to verify, through a study on European regions over the last decade, the scheme defined. We use a multivariate technique of dimensional reduction and then propose a system of indicators and composite indicators, which allow to get a synthetic and complete evaluation of the phenomena investigated, and a comparison among regions.

**Mark Robinson, Taylor and Francis Group, UNITED KINGDOM**

You've had a paper accepted for publication in a scholarly journal – congratulations! However, the work doesn't end there. There is lots that you can do, making the most of your networks and subject knowledge, to



complement marketing by the journal's publisher. This session will include a series of practical suggestions for helping to raise the profile and impact of your work; from the most effective ways to use social media to recording your own video abstract. We will also explore the benefits of using Kudos - a new web-based service that helps researchers to maximize the visibility of their published articles ([www.growkudos.com](http://www.growkudos.com)).

*Economic Resilience of Firms and Territories A: Economic Determinants and Measurements*

## **ARE TORINO "TECHNOLOGICAL AUTOMOTIVE DISTRICT" AND BRESCIA AUTOMOTIVE CLUSTER RESILIENT LOCAL SYSTEMS OF INNOVATION?**

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In the contemporary context of economic stagnation, the concept of resilience has risen to prominence into several disciplines, and has entered policy discourse.

This study aims to empirically measure and compare the degree of resilience of Torino's "technological automotive district" with the one of Brescia's automotive cluster.

On one hand, Torino automotive district experienced a huge transformation during the last three decades. In particular, during the 60s and 70s, Fiat represented the industrial heart of local economy and the largest Italian firm. In this context, all the local automotive suppliers were Fiat dependent subcontractors. Torino industrial structure radically changed during the 80s. Fiat partly dismissed its hegemonic role within the local economy. Thus, in the 90s the ensemble of the automotive suppliers was for the first time defined as a 'system', in order to highlight the new structural interdependencies among all the firms within this area. Nowadays this industrial system is worldwide known as a "technological automotive district" (Bianchi et al., 2001).

On the other hand, the province of Brescia, is the second largest producer in Italy of cars and cars components, after Turin. The presence of an agglomeration of small and medium sized companies within this local system is linked to the presence of the Società Anonima Officine Meccaniche, better known as "OM", now "Iveco".

Within this context, measuring and evaluating local systems' resilience is neither easy nor straightforward. Resilience, indeed, is a complex and multifaceted concept that has been, analyzed by several disciplines: ecological science, psychology, management, physic and engineering. It is commonly used to describe how an entity or a system responds to shocks and disturbances.

The meaning of 'resilience' has been the subject of a lively debate, also, among economic scholars. In the recent economic literature, indeed, there are several ways of defining economic resilience.

According to mainstream economists, resilience takes the meaning of "engineering resilience". This stream of research focuses on the stability of a system near the equilibrium or the steady state.

For other scholars, instead, resilience assumes the meaning of 'ecological resilience'. It refers to "the capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity and feedbacks" (Walker et al, 2006).

Recently, a new conceptualization of resilience emerged in the literature: the so called "Adaptive resilience". It is defined as "the ability of a system to undergo anticipatory or reactionary reorganization of form and or function so as to minimize impact of a destabilizing shock." (Martin 2010). Therefore, resilience is composed by two key elements. The first one is represented by local economies' capacity to absorb the shock. The second one includes local agent ability to transform, through innovations, the industrial and organizational structure of the place where they live and work. In this context, one of the main sources of innovation lies on entrepreneurial action. Creating a new venture the entrepreneur disrupts the existent equilibrium and enhances local economy transformation.

In this context, a resilient place would be one that is always able to reorganize its structure hit by the shock and, at the same time to take advantage from the disturbances to improve local economy performances creating a new sustainable path of growth.

The present paper uses this peculiar definition of resilience to empirically evaluate and compare the level of resilience of Torino “technological automotive district” with the one of Brescia automotive cluster facing the international financial downturn of 2008.

This study uses Aida database by Bureau Van Dijk. It includes firms from Torino and Brascia that belong to the automotive industry. Moreover, the dataset is composed by observations from 2007 to 2012 for all the companies.

Obtained this index the research also, aims at comparing the results in order to understand which local system is relatively more resilient. Moreover, this study wants to find out which are the characteristics that prompt firms ability to be relatively more resilient to a shock. This question is investigated by regressing the indicator of resilience on each firm main features.

The preliminary results of the empirical analysis are in line with the previous literature. Brescia, the local system relatively higher in entrepreneurship capital, results more resilient than Torino to the global financial downturn of 2008.

Our results can bear some important implications for local industrial development policies. A high level of entrepreneurial capital can be a good predictor of : the local system dynamism, it propensity to share and to exploit knowledge and of the presence of a creative and skilled workforce. All these elements are essential to create and recreate a resilient local system.

*Innovation in ‘ordinary’ regions and ‘boring’ sectors*

## **UNLOCKING THE POTENTIAL OF DESIGN IN INNOVATION IN LOW AND MEDIUM TECH SECTORS: EUROPEAN DISCOURSES, POLICIES AND PRACTICES**

**Patrícia Romeiro, CEGOT, Universidade do Porto, PORTUGAL**

Over the past few decades innovation has been considered a driver for growth and competitiveness by the European Union (EU). However, despite the discourses advocating a broad approach to innovation, the EU policies and strategies have been in practice focused on scientific and technological knowledge. Only recently this institution began to develop and support more structured initiatives that explore the potential of other types of knowledge (e.g. symbolic) and other kind of innovation (e.g. organizational, process).

In this context, Design has been increasingly identified as one key element in innovation policies by the EU. Concerning the links between Design and other economic sectors there is some evidence that: i) companies that strategically invest in Design tend to be more profitable and grow faster, ii) Design is important to both technology-intensive industries, and traditional, craft-based sectors not so concerned with Research and Development (RandD) or technology, and iii) the incorporation of design practices is less dependent on size and sector than RandD. But if Design is already an important driver of innovation in some sectors, either as an in-house or as an external service, much of its potential contribution is still locked. In fact, some reports had pointed that some barriers have been constraining more strength collaborations between Design services and companies from other sectors.

Considering these ideas, we are particularly interested in improve academic knowledge about i) how Design and innovation have been understood in the EU discourses and what strategies have been developed, and ii) what can be done to refocus EU innovation policies in order to increase its contribution to unlock the potential of Design in medium and low tech sectors and SME.

Although economic geography has been vastly contributing to innovation theory, the links between Design sector and innovation has been set aside. Knowing more about the barriers and challenges affecting the Design

sector and innovation policy can be particularly relevant in the context of medium and low tech sectors, in small and medium enterprises, and in less developed regions.

*Role of Institutions in Regional Development*

## **WHAT ROLES FOR UNIVERSITIES IN NEW “LOCAL GROWTH” DIMENSIONS? INSIGHTS FROM THE EMERGING “GROWTH HUBS” PROGRAMME**

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The current approach to economic development and business support in England is increasingly oriented around local growth and cities. Indeed, measures such as the “city deals”, Regional Growth Fund, and the establishment of Local Enterprise Partnerships following the previous abolition of Regional Development Agencies, under the present government, have ushered in this approach, which has been heralded as a “return to local growth”. At the intersection of these three dominant themes in the current governance of economic development (RGF, LEPs and City Deals) is the “Wave 2 Growth Hubs Programme”, which is funding and facilitating the development of fifteen growth hubs in the second tier cities of England. Growth Hubs are relatively new structures, which are being developed at the local level to meet the specific business needs and capabilities. They address local growth in the post RDA and Business Link environment, and aim to link up local growth hubs across the country with existing central provision for business support services through the Department for Business Innovation and Skills. As such, Growth Hubs can be seen as an interesting mixture of national and locally based approaches to economic development, and as a national network of local network-based approaches. The programme is being delivered by Lancaster University, and so provides an interesting example, and quite a novel approach to the usual central government owned approaches to encouraging business growth and economic development.

Although varying from place to place, there are some common elements and structures across the different growth hubs. One such common element is the presence of universities in the local configurations, but to a greater or lesser extent and with varying roles. This paper explores this presence of universities in growth hubs; what roles they are taking within the local growth networks, and what duties they are being asked to perform. There is a multi-level dynamic here whereby a university is involved at the heart of the delivery of the programme nationwide, but also at the local level various universities are involved in the management, delivery, or activities of the growth hubs. What forms these involvements take, how they vary from place to place and why are the issues addressed in this paper. It finds that whilst all local growth hubs involve universities at some level, some are much more centrally involved than others, reflecting the different roles and relationships between universities, government, and businesses in different localities. In essence, we see a range of different “triple helix” structures evolving on the ground, very much influenced by the factors of place, histories, cultures, and institutions in the different parts of England. As such, a one-size-fits-all model for the involvement of universities in local growth networks is found to be of limited use and relevance. Some universities are found to be more strongly connected to their local growth networks than others, and universities of different sorts are found to play different roles.

The empirical basis of the paper is document analysis, examining the policies and structure documents of the various growth hubs, as well as the central (UK level) policies to explore what roles universities are expected to play in local economic growth, and how this is being translated into actions “on the ground” in the fifteen different growth networks. As such, as discussion is presented of how the roles of universities in economic development terms are shifting with the inception of the local growth agenda, and what is being expected of universities going forwards. Universities are increasingly expected to have a positive impact on their local economies and to engage in wide range of “engagement” activities, so it is important to better understand what forms these activities may take, and what potential there is for universities to make a positive impact in the sphere of local economic growth networks.

## **IMAGINING THE IDEAL CITY – PLANNING THE GENDER EQUAL CITY**

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Focusing on imaginaries of the ideal city is an important method to illustrate the power of ideas, imaginations, representations and even visions, and how these dimensions influence the way cities are organized and lived. In this paper we argue that a current and important city imaginaries in a Swedish context, is connected to and presented as the gender equal city. Here; the gender equal city becomes the symbol for the open, tolerant, bustling, safe city, a city aiming to attract the middle and the creative class. However, at the same time the imaginary of the ideal, gender equal city are highly ambiguous. This ambiguity will be discussed throughout this paper.

Based on present planning projects in Sweden, we will in this article study how imaginaries of the gender equal city is presented, filled with meaning and used in place marketing with the overall ambition to discuss the possibilities and pitfalls of what we call the gender equality planning strategy. The aim of the paper is to discuss the possibilities for changing gendered power relations, as well as other power relations related to class, race and sexuality. The material consists mainly of two case studies with a focus on planning projects aiming at creating equal cities, such as improving accessibility in public space, gender aware analyses of the city's symbols and decorations etc., and includes analyses of interviews, policy documents and media reports. The theoretical framework draws on the discussion of politicization and de-politicization (Mouffe 2005) in relation to neo-liberal forms of rule where place-making and place-branding are rationalities that risk moving conflicting dimensions in society outside both planning and politics overall.

### *Spatial Planning and Infrastructure*

## **BUSINESS TRAVEL DECISIONS AND HIGH-SPEED TRAIN: AN ORDERED LOGIT APPROACH**

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One of the persistent analytical issues in the economic geography of transport relates to the assessment of the contribution that transport infrastructure makes to the economy. Two main analytical approaches have been developed over several decades in response to this issue (Lakshmanan and Anderson, 2002). The first is based on a microeconomic point of view, which describes the direct impact of a new infrastructure on firm's production function. This approach emphasize the cost and benefit analysis neglecting the firms' behavioral change (i.e. in terms of travel or relocation). On the other hand, a second approach, based on macroeconomic modeling, focus on the general and territorial implications generated by new infrastructures (e.g. Mera, 1973; Aschauer, 1989 and Nadiri and Mamuneas, 1996).

The aim of this paper is to offer a midway approach based on the real observation of firms' behavior in terms of business travel, considering an improvement in high-speed transport infrastructure.

The building of a new infrastructure is always a good opportunity to see how firms' behavior changes in reaction to an accessibility improvement. Indeed, nowadays, doing business means face the increasing interconnection and globalization of our world. In this context, business travel has become a quite common and diffused practice, which generates billions of dollars in revenues and has impact on GDP and employment (UNWTO, 2012; Doyle and Nathan, 2001). By business travel, we mean a work-related travel to an irregular place of work (Aguilera, 2008).

In the economic literature, a lot was done on the high-speed trains' (HST) impacts (Blum et al., 1997; Banister, 2007; Gutiérrez, 2001; Vickerman et al., 1999). In particular, if we look at the impact on business travel, some

studies have found that HST increase the number of face-to-face contacts between the cities connected (Willingers et al., 2007). However, nothing was found in the literature on measurement of this growth and on the characteristics of the involved firms.

Therefore, the purpose of this research is to study the impact on business travel of the new high-speed railway line project, called Alptransit, which will link Lugano, a small city, with Zurich, one of the major economic pole in Switzerland. Thanks to this infrastructure, travel time between the two cities will considerably decrease from about three hours to less than two hours.

In order to investigate this issue, an on-line survey was conducted with firms located in Ticino, the Swiss Canton that includes Lugano. The resulting sample reflects the economic structure of the canton in terms of firms' sector, age, dimension and organizational structure.

Since the analysis is based on a future situation (firms' hypothetical behavior), we have identified the discrete choice models as the best econometrics technique for our purposes. For that reason, an ordered logit model is applied, in which the dependent variable is represented by the self-assessed probability to travel more to Zurich for business reasons, thanks to Alptransit.

Considering business travel literature, that underline the fact that not all workers travel, but professional status and hierarchical position are significant factors that influence the business travel characteristics (Aguilera, 2008; Welch et al., 2005), we specify four models, one for each employees' categories: CEO and upper management, administrative staff, sales personnel and specialists.

In the econometric analysis, we control for the current spatial distribution of firm's productive relations, firm's spatial organizational structure, firm's spatial structure of current business travels, current transport mode used for business travel and firm's characteristics (sector, age and size). Those independent variables are selected on the bases of the past economic literature about this issue (Aguilera, 2008; Beaverstock, 2009; Cristea, 2011; Jones, 2007) and on the correlation with the dependent variable. Moreover, in order to capture more heterogeneity in the sample, we extend the framework of ordered models, allowing some parameters to be random distributed (mixed ordered logit).

Finally, we want to underline that our research is very important not only for businesses, but also for spatial planning and railway infrastructure projects.

*The Geography of Finance*

## **DETERMINANTS OF BANK BRANCHES PRESENCE IN LOCAL AREAS: THE CASE OF ITALY**

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**Laura Barbieri, Università Cattolica del Sacro Cuore, ITALY**

**Mariarosa Borroni, Università Cattolica del Sacro Cuore, ITALY**

**Mariacristina Piva, Università Cattolica del Sacro Cuore, ITALY**

A critical choice for a firm starting a business is where to locate its headquarters and branches. Even though the evolution in information technology has reduced the importance of geographical location, physical proximity to the customer still remains a crucial element for safeguarding competitive advantages and providing better services. This is true in particular for the banking sector, where the quality of service is widely influenced by the interaction between customer and bank officer.

Literature on spatial competition dates back to the first decades of 20th century with the seminal work of Hotelling (1929) and, later, with the "city around the lake" model by Salop (1979). In these papers distance is seen as a source of transport cost for the customer; closer branches minimize these costs and maximize the utility for the client. In a different sense, distance can be seen as an "implicit cost" for the bank: when it is not physically present in a specific area, it must rely on hard information, losing the opportunity of exploiting soft information, directly collected from the customer. This is the basic framework that supports the competitive

advantages of the relationship banking approach. Moreover, a wide stream of literature has focused on the link between finance and growth, suggesting that the presence of financial intermediaries can boost the development of a specific area: effective financial institutions and markets can overcome market frictions introduced by information asymmetries and transaction costs, fostering economic growth through several channels. Finally, some papers have shed light on the reasons why banks choose a specific territory (i.e. the metropolitan area of Antwerp in Huysentruyt, Lefevere and Menon, JBF 2012) for the expansion of their branch network.

Our paper is more close to this latter approach: in particular, our study focuses on the determinants that explain the presence of bank branches in a specific territory disentangling the importance of socio-economic features of local areas from the competitive condition of the banking market. Using a wide dataset of economic and social variables (annual data from 2003 to 2012, sources ISTAT and Bank of Italy) referred to Italian provinces (NUTS3 level) and municipalities, where available, we construct a panel econometric model, which allows us to analyse the attractiveness of different areas for the banking system.

In comparison with previous papers, our work expands the geographical scope, considering a whole country instead of single cities or regions, and investigates a peculiar time span for the Italian banking sector. The Italian case is relevant in an international comparison, because provinces and municipalities present very different macroeconomic conditions, orographic structure, economic development and infrastructural facilities. This allows us to explore different environments that however share a common legal and cultural framework, limiting the drawbacks usually present in cross country comparisons. Furthermore, the period under investigation follows the intense MandA activity that involved the Italian banks in the late nineties, but it is not anymore affected by the boost of branch opening that took place immediately after the liberalization process started in 1991.

The policy implications of our paper are threefold.

Firstly, suggestions are given to the local policymakers interested in evaluating the degree of attractiveness of their territory for the financial sector.

Secondly, the banking system can extract information about the local market features that explain the dynamics observed in the branch presence during the past decade.

Finally, results are relevant for countries that are switching from a government-planned approach to a liberalization process of bank branches opening.

*The Geography of Finance*

## **EXPLAINING SUCCESSFUL CROWDFUNDING. AN ANALYSIS OF ITALIAN WEB-BASED CAMPAIGNS**

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**Fania Valeria Michelucci, Politecnico di Torino, ITALY**

In several developed countries the on-going financial crisis has left a significant gap in public resources to social policies of welfare. This fact, together with an evident change in the most pressing social needs, is leading to a redefinition of the way in which public services are organized and delivered. In this scenario, the non-profit sector is achieving a more and more innovative role, also adopting attitudes that are typical of the profit sector. Web-based crowdfunding platforms, in particular, are more and more used for financing programs fostered by actors of the third sector (NGOs, associations with a social, humanitarian or charitable mission, etc.). However, despite its increasing success, crowdfunding by the non-profit sector is a poorly investigated issue. In particular, the factors and dynamics at the basis of successful funding campaigns still remain largely obscure. Moving from these assumptions, the paper presents an exploratory study on web-platforms supporting non-profit crowdfunding with the aim of investigating the main success factors of this kind of initiatives. The hypothesis is that there is a correlation between the success of the crowdfunding

campaigns (campaigns that succeed in gathering the expected target capital in the budgeted timespan) and some main variables that describe the projects and the proponents. The main success (or failure) variables proposed by the literature commonly refer to social capital, project quality, geography, financial roadmaps and risk, project board features, social information, and marketing. However, the vast majority of these studies considers almost exclusively reward-based profit projects and it focuses on just one platform. Almost none of them analyse different types of projects from multiple platforms. Also, very little efforts have been spent to investigate the dimensions that influence successful crowdfunding in the case of non-profit initiatives. After exploring the existing literature in search for these explanatory factors, the paper focuses on the case of the Italian web-platforms of crowdfunding describing their state of the art. In Italy, indeed, the Italian Ministry of Education, University and Research (MIUR) has recently launched the document “La via Italiana alla Social Innovation”, in which crowdfunding is strongly recommended as an alternative to both equity and debt to support the start up of social initiatives and ventures. Moreover, we had the possibility to get access to the data of the Italian Observatory on Crowdfunding, that collects information on the main Italian web-based platforms of crowdfunding since 2013. As a next step, the paper explains the methodology adopted for the construction of the database and its analysis, with a description of both the model and the variables involved in the estimates. Finally, the obtained empirical evidences and their implications are discussed in search of some emerging explanations of the rate of success of non-profit crowdfunding campaigns.

*EU Regional Policy and Practice*

## **SPATIO-TEMPORAL DIFFUSION OF PRIVATISATION POLICIES AT THE LOCAL LEVEL**

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In recent years, within the ongoing debate regarding public vs. private management, research into explanatory causes of local public services privatisation has expanded. Review articles from Bel and Fageda (2007, 2009) provide an overview on the subject. One conclusion suggests that pragmatic reasons are more important than ideological or political ones in the decision to privatise local public services. Others imply that poor financial situations within the local government or difficulties in providing complex services within highly populated municipalities are factors likely to increase the prospects of privatisation.

Most studies surrounding this topic present a limitation in the form of analysing local governments' decisions by isolating the immediate location. Possible influences on local policies by the closest surrounding municipalities traditionally are not taken into account. Exploring the mechanism of policy diffusion at the local level – from a social scientific perspective – can provide a greater understanding of the incentives involved in local policy decisions (Shipan and Volden, 2008).

A fundamental question in economic geography is how to explain the economic spatial changes over time, for this purpose the geographers have used quantitative methods. The conceptualization of space and time continues to be a challenge for New Economic Geography models (Garretsen and Martin, 2010). Our research contributes to verifying whether the spatial diffusion phenomenon of policies occurs at the local level and, more specifically, if it affects the decision of local public services privatisation over time. Studies on privatisation policies diffusion at the national level can be found in the scientific literature (e.g. Meseguer, 2004 or Schmitt, 2011); however, as far as we know, the diffusion of local public services privatisation has not previously been analysed. Our research applies to the urban water management privatisation in southern Spain. We speculate whether, in addition to factors traditionally taken into account, local governments' decisions to privatise water services are conditioned, at least in part, by the policy adopted in other surrounding municipalities. For this, we have used a spatio-temporal panel data. The new spatial econometric techniques offer the possibility of using panel data with spatial and temporal dimensions. Recently, the use of these techniques has grown (Autant-Bernard, 2012). The main contribution of our research consists of analysing the diffusion phenomenon of local privatisation through the estimation of a STAR model with a binary dependent variable and panel data (usually, local public services privatisation use cross-sectional data).

Results confirm the existence of spatio-temporal diffusion effects in local privatisation. Moreover, we obtain evidence that suggests the main mechanism of policy diffusion is imitation.

*Building Networks for Local Growth*

## **NETWORK POLICIES TO STRENGTHEN THE REGIONAL INNOVATION SYSTEM. THE CASE OF INNOVATION POLES IN TUSCANY 2011-2014**

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In the last fifteen years, network innovation policies have been increasingly adopted as levers to enhance regional systems of innovation. The main objective of this paper is to model the outcome of a regional policy which aimed to strengthen the regional innovation system through network policies. As a first phase of a counterfactual analysis, in this paper we present the case of the Tuscany Region innovation policy in the period 2011-2014, when the Region promoted 'innovation poles' and "technological districts". In particular, the 12 poles of innovation funded by the Tuscany Region policy had to support the demand for "qualified services", helping businesses to be aware of their needs and their critical issues and to network them with suppliers (university, research centers, KIBs) able to solve them. Starting from the assumption that the ultimate goal of those policies is to support innovation activities of the manufacturing and services companies of the region, the research questions we set for modeling that network policy were:

- ☐ There is a significant clustering of the 12 poles on the basis of the common characteristics, such as the network configuration, the channels they adopted in promoting memberships, the production sector, KET's?
- ☐ Which are the type of agents and their relative importance in terms of intermediation in the network of networks across the poles?
- ☐ What are the parameters by which to assess the many different activities of the twelve poles? The Region has provided a set of well-defined variables for the evaluation of the performance, are they effective, or worth to consider other metrics?
- ☐ To which extent do innovation poles have changed the networks of relationships between the companies members of the poles and between those companies and the research system (public and private)? Did they support the ability of those companies to create the conditions, relationships and skills necessary to an effective improvement of the competitiveness of Tuscan innovation and knowledge economy?
- ☐ To which extent the funds granted to support the poles' activities have been effective for the actual improvement of the system of innovation in Tuscany?
- ☐ What are the key factors on which the Region must act to improve the regional innovation policy?

To answer these questions, in this paper we present the results of a network analysis based on an original database created with information on the 4000 companies and more than 100 among university centers, laboratories and KIBS involved in the 12 innovation poles, drawn by the official monitoring documents (submitted twice a year to the regional administration), combined with information obtained from 23 interviews with representatives of the poles and with business associations.

With regard to the case of the Tuscany innovation policy, this paper provides a framework to analyze (a) the multidimensional network among the many types of agents involved (poles' managers, member companies, business incubators, service centers and research centers); (b) the activities of the poles and the supply of qualified services by the poles, as well as (c) the performance indicators.

In the last part of the paper, the results of our empirical analysis are confronted with the main strands of the literature on innovation networks and the issues for the counterfactual analysis are laid down.



## **THE ROLE OF NEW ENTREPRENEURIAL FIRM FORMATION IN REGIONAL INDUSTRIAL DEVELOPMENT**

**Jan Ole Ryppestol, University of Agder, NORWAY**

Evolutionary economics argues that economic development and growth take place as a result of an evolutionary process (Nelson and Winter 1982, Nelson 2008). It further argues that the context is not perfectly understood by the actors (Simon 1955). Therefore economic actors individually respond to the range of contextual threats and possibilities presented to them. Based upon this premise, business success is a result of the entrepreneur's ability to learn from previous actions (Lall 2000) as well as to innovate (Nelson and Winter 1982).

Industries consist of a critical number of firms that offer products or services which are close substitutes for one another (Porter 1980, Hitt et al. 2009). By introducing new firms to the region, entrepreneurs play a vital role in forming the regional industrial structure (Gardner 1983, Aldrich and Fiol 1994) and creating the potential for future economic growth (Nelson and Winter 1982).

However, path dependency theory argues that new firm formations are not geographically located randomly, but claims that historically formed social norms, cultural traditions, embedded routines, and regional industrial infrastructure favour some entrepreneurial firm formations over others (Martin 2010, Stam and Bosma 2014:328). As a consequence of this process, industry paths are formed (Martin and Sunley 2006) and regional economic specialisation takes place (Stambach 2010).

Path dependency theory further argues that regional industries could face a negative lock-in situation if industry paths are not renewed (Boschma and Frenken 2011) or extended (Martin and Sunley 2006) and that creating new industry paths are important in securing long-term regional growth (Martin and Sunley 2006, Tödtling and Trippel 2013, Isaksen and Trippel 2014).

Every new firm formation contributes to the development of the industry structure. A new firm could contribute by reinforcing existing industry paths (Martin 2010) or by extending them (Martin and Sunley 2006, Martin 2010), or the firm could contribute by leading the way for a new path to be created (Martin and Sunley 2006, Martin 2010, , Martin 2012, Tödtling and Trippel 2013, Isaksen and Trippel 2014).

We know that each of these contributions is important and extensive (Schumpeter 1934, Kirzner 1973, Martin and Sunley 2006, Boschma and Frenken 2011, Martin 2010, Asheim et al. 2013). However, existing literature does not offer a critical analysis of the characteristics common to firms supporting the various regional industrial development paths.

This paper seeks to close this knowledge gap. Based on a conceptual formulation of two dimensions, those of innovation and growth intention, I derive a path development firm typology. This new firm typology could be useful for policy makers in order to foster and nurse a healthy regional firm portfolio as it maps the new firm's contribution to existing industry paths. The typology classifies new entrepreneurial firms as Path Reinforcing Companies, Path Extending Companies and Path Creating Companies.

## **THE 3 R'S OF OLYMPIC LEGACY, ANY ROOM FOR 'C'?**

**Debbie Sadd, Bournemouth University, UNITED KINGDOM**

The word regeneration featured prominently in the official documentation of the London 2012 organisers, the International Olympic Committee, various books, articles and journals, especially in relation to justifying the hosting of this and other mega-events. Yet, who were the 'community' who were to benefit from the regeneration through the site construction in East London from 2005 to 2012? Based around a series of

qualitative interviews undertaken in the planning of the Games with key groups impacted by the Games (using Freeman et al's, 1997 definition of stakeholders), the research sets out to identify groups of people bound together as 'communities' who have been impacted by the site developments. Furthermore it investigates how their voices were heard, or not within the planning stages to truly benefit from the regeneration, or not?

London 2012 intended to transform the lives of the communities adjacent to the site in East London through the social, physical and economic changes, based around 'regeneration' keeping the same social classes and improving the facilities and infrastructure for their benefit. However, experience from past Games has highlighted that often the ex-athletes village properties' become sort after accommodation, appreciate in value very quickly and become occupied by middle class residents, thus causing a renaissance of the area rather than regeneration (Mace et al, 2007). In addition there is often also social rejuvenation relating to reversing the decline of an area without specifying for whom the improvements are necessarily intended.

It is the impacts on the original communities and the identification of who are the local community or communities in general that needs to be discussed further within any urban regeneration planning. This is in order to identify the legacy that comes from the hosting of the developments and in this case the 2012 Olympic and Paralympic Games. This is an area that is under researched as to what exactly is meant by using the word community.

*Critical Studies of Urban and Regional Development*

## **'THE DEMONSTRATOR REGION': A CRITICAL REVIEW OF THE CONSTRUCTION OF REGIONS AS LIVING LABS FOR SMART POLICIES**

**Line Säll, Karlstad University, SWEDEN**

There seems to be a never ending flow of new concepts and policies stemming from innovation research of how to improve regional competitiveness and prosperity in times of globalisation and competition. A relatively new approach to region building and policies for innovation and growth in a European context are 'large scale demonstrators'. This paper presents and discusses results from an ongoing research project on this subject. Model demonstrator regions can tentatively be understood as a policy concept for a large scale experimental approach to the transformation of regional societies. The approach has a radical ambition. In a guide book published by the European commission (2012) it is stated that the largeness of 'large scale demonstrators' are not to be confused with the financial size of the projects, but in terms of its experimentation and expected impact on transforming the structure of regional economies and societies.

By analysing policies stemming from the European union (EU) and demonstrator regions in the EU the paper primarily address three aspects of the concept 'large scale demonstrators'. The first part concerns the relation between 'large scale demonstrators' and associated concepts such as 'clusters', 'smart specialisation' and 'regional innovation systems'. How do they relate, and what – if any – is new with this approach? The second part address 'demonstrator regions' as expressions of ideas of regions as laboratories for experimentation. The experimental activities in living labs are situated in 'real-world' contexts and not in laboratory settings. Hence as the activities for smart and better policies are configured in transformatory projects 'demonstrator regions' illustrates how regions could be reconfigured – politically and economically – through a laboratory approach. The third part discusses and analyse how regions are constructed as political spaces in this discourse: the performative function of constructing regions as laboratories (Lagendijk, 2001). The analytical focus is both on what is said and what is not, absent presences' and their political effects.

In the paper it is argued that the construction of regions as laboratories for experimentation has important political consequences (Law and Mol, 2001). The analysis address how regions are constructed as political spaces (Massey, 2005) and how inhabitants and regional stake-holders are interpellated. Further, the analysis address how political processes are constructed and what actors are, and are not, addressed as agents of change. The advocates for the demonstrator approach argues that this strategy is about 'doing it better' without falling in the trap of copying 'best practice' where the regional circumstances and preconditions are not at place. To conclude the approach is compared to a previous analysis of 'clusters' as policy tools for regional innovation and growth (Säll, 2012; 2013; 2014). From this comparative analysis it is suggested that

'large scale demonstrators' could be seen as a strategy of handling the political demands of hegemonic groups on long term policy commitments for cluster funding and regional prioritations.

*On Regionalism within International Law: A Themed Panel*

## **A SCHMITTIAN MODEL OF REGIONALISM?**

**Michael Salter, University of Central Lancashire, UNITED KINGDOM**

Classic Grossraum theory as devised and refined by the realist tradition of international law and relations, e.g., Schmitt, Carr and Morgenthau, sets out the idea of a demarcated and internally integrated regional space, made up of a voluntarily created association of individual member states, and operating within defined spatial borders. Members' overall regional security is guaranteed by a "leading state" with protectorate responsibilities contained in founding treaties. A Grossraum is integrated by adherence to a common political idea or ideas, which are defined polemically against a counter-principle perceived of as threatening to the integrity of the overall regional. Its core principles would have to include a prohibition of foreign extra-regional intervention as part of a far wider commitment to an anti-imperialist defensive orientation that harmonises with the prospect of a wider pluralistic and multipolar international ordering achieved in part through law and a shared material interest in securing equilibrium by means of a balance of power; that is, a new model of an inter-Grossraum order. This theory promotes at least six different levels of analysis relating to different strata of legal regulation, and can be seen as a pluralistic counter-principle to Western Unilateralism and cultural-economic imperialism.

There are various difficulties and ambiguities with this classical model that can, perhaps be best highlighted through attempts to test out this theory of regionalism in relation to specific case studies capable of both challenging and potentially revising it in a constructive manner. For example, is the desired equilibrium best pursued through a hermetically sealed form of regionalism where only the absolute minimum of inter-regional or transnational activities is encouraged? Or is some overlapping membership more helpful in securing a necessary balance between regional entities helping support their peaceful coexistence? In addition, what are the constitutional challenges facing any Grossraum in terms of internal governance, the role of regional bodies with executive law-making and law-enforcement functions? Also how can the difficult issue of minority representation be best addressed, especially where the homelands of minority groups cross regional borders? Should regional integration be defined in terms only of cultural traditions, or are material aspects and "public interest" more important in practice?

*Urbanisation and Cities*

## **LONG-TERM URBAN GROWTH AND SOCIO-ECONOMIC DYNAMICS - A SOUTHERN EUROPEAN PERSPECTIVE**

**Luca Salvati, CRA, ITALY**

The present study investigates the relationship between an indicator of urban growth (per-capita built-up area) and selected socioeconomic and territorial variables in a Mediterranean urban region (Attica, Greece) over 50 years (1960-2010) testing the importance of various drivers of change through a Multiway Factor Analysis.

Multi-temporal analysis appears as particularly suitable to assess the role of factors such as population density, economic structure, socio-spatial indicators, distances from the main urban centers, land protection regime, municipality surface area, elevation, climate and soil characteristics in distinct expansion waves including both compact-dense urbanization and dispersed expansion along Athens' fringe.

Per-capita built-up area at the municipal scale declined in Attica showing a non-linear trend over the whole period reflecting the different expansion waves in Attica. In 1960, all municipalities around Athens showed a

high per-capita built-up area which increased progressively; in 2010 the highest value concentrated on marginal, rural municipalities far away more than 30 km from the central city. Multiway Factor Analysis identified urban functions such as mixed land-uses, multiple-use buildings, vertical profile of settlements as the variables most associated to urban growth.

Policies for sustainable land management and urban containment should consider both local and regional factors shaping land-use efficiency by promoting self-contained expansion and protecting more tightly forest land from dispersed urbanization. The multiway factor analysis is a promising approach reflecting the increased complexity of urban growth patterns and may anticipate future urban trends and land-use patterns.

#### *Labour Markets and Migration*

### **LOW-SKILL EMPLOYMENT IN SPANISH LOCAL LABOUR MARKETS**

**Mabel Sánchez-Barrioluengo, INGENIO(CSIC-UPV), SPAIN**

**Davide Consoli, INGENIO (CSIC-UPV), SPAIN**

Both scholars and policy makers acknowledge the crucial influence of technological change on the transformations observed in the organization of employment over the last three decades. One widely debated phenomenon among others is the polarization of labour markets, that is, an increase in the demand for occupations at the top and at the bottom of the skill distribution accompanied by sluggish or negative growth of employment for middle-skill workers (Acemoglu and Autor, 2011). The widespread adoption of Information and Communication Technologies, in particular, has accelerated the substitution of workers in mid-skill 'routine' occupations (e.g. clerks and production workers) consisting of physical and cognitive activities that can be executed on the basis of codified instructions. On the other hand, computer capital exhibits strong complementarities with high-skills occupations that involve problem-solving and personal interaction (e.g. scientists, managers and professionals) (Autor et al., 2003). Lastly, a broad range of occupations requiring physical dexterity and adaptability are intensive in non-routine manual tasks and are not prone to substitution by machinery (e.g. truck drivers, security guards, waiters and cleaners). These jobs at the bottom end of the wage scale have survived automation and hold the lion share of employment growth (Autor and Dorn, 2013).

While these broad labour markets trends are common to several countries (Goos et al., 2014), the expectation is that they unfold in peculiar ways within specific institutional contexts. That is to say, there is no single top-down path to economic development, and the contribution of human capital to growth and competitiveness is contingent to the particular circumstances of the attendant local economy. Accordingly, there is demand for country-specific evidence that elucidates the extent to which the changes ascribed to technology are amplified or hampered by particular characteristics of local institutions.

The present paper enters this debate by proposing an empirical study of the evolution of employment in the Spanish local labour markets. It builds on and contributes to existing literature on job polarization by:

- (i) Disentangling the structural changes of employment in Spain;
- (ii) Gauging how these effects play out across different geographical areas.

The empirical analysis is based on data of the Population and Housing Census Survey of Spain over three decades (1981-2011). Building on recent work on this topic (e.g. Autor et al, 2003; Autor et al, 2014), occupations are assigned to one of the three categories: non-routine manual jobs (NRM), routine jobs (ROU) and non-routine cognitive (NRC) jobs. We find evidence of employment polarization with positive changes in the employment share of NRM and NRC occupations accompanied by falling demand for ROU occupations. In particular, our results confirm substitution between workers and office machinery throughout the period. A key contribution of the paper is the detailed account of a significant (about 8%) growth of employment in service occupations between 1981 and 2011 which stands in contrast with the decline of other low-skill occupations in construction, transportation, mechanics, farm, mining, production and craft which declined of about 9% over the same period. The growth of NRM employment is of interest for three reasons. First, this category accounts for the highest share of part-time jobs (as high as 50% of all NRM employees in 1991).

Second, service jobs entail an average wage gap of about 50% compared to similarly low-educated occupations. Lastly, the educational distribution among NRM workers is similar to ROU workers.

When grafted onto the local dimension, we find that the increase in service occupation employment is relatively stronger in provinces with the highest shares of educated workers –that is with at least college education. We use OLS and first-stage-estimates to gauge the effect of cognitive, demographic and social characteristics of local labour markets on this phenomenon. We find that the share of ROU employment in the previous decade is a robust predictor of the growth of NRM jobs. We also observe that lagged unemployment levels have a negative association with low-skill service employment, which suggests the prominence of structural factors rather as opposed to a business cycle effect. Yet another striking result is that low-service job growth was higher among provinces with stronger HC creation capacity. These results are robust to the inclusion of instrumental variables that take into account the long-term pattern of industrial specialization of each local labour market.

We expect this analysis to be of interest for both scholars and policy makers on two counts. First, it frames the ongoing debate on human capital creation in the reality of the opportunities and the constraints of labour markets. Second, it adds novel empirical evidence to a burgeoning area of research.

*Labour Markets and Migration*

## **THE IMPACT OF SECTORAL STRUCTURES ON INTERREGIONAL MIGRATION IN RUSSIA IN CONSIDERATION OF THE COMMODITIES SECTOR**

**Sascha Sardadvar, WU Vienna, AUSTRIA**

**Elena Vakulenko, National Research University Higher School of Economics, RUSSIA**

Over the past 15 years, Russia has experienced relatively high economic growth rates combined with interregional convergence. This development is accompanied by an increasing share of the exploitation and processing of natural resources (referred to as “commodities sector” henceforth) both in production and exports. At the same time, total population in Russia has decreased. Nevertheless, some regions’ population numbers increased, while others – especially but not necessarily peripheral regions – displayed negative net migration rates with respect to internal migration (Guriev and Vakulenko, 2013).

Studies conducted on internal migration in Russia show that distances play an important role when considering migration between Russian regions (Vakulenko et al. 2011). In addition, Sardadvar and Vakulenko (2015) show that internal migrants in Russia react differently with respect to changes in socio-economic variables. In particular, they show that migrants react quickly to changes in economic growth, but slowly – if at all – to changes in income. On the one hand, this result seems surprising – after all, theory (Greenwood 1975, Borjas 2010) underlines income differences as a main motivation for migration decisions. On the other hand, a number of studies on internal migration in different countries has shown that income and wage differentials are less important as suggested by theory (see, for example, a study for Spain by Bentolila and Dolado (1991), for Italy by Biagi et al. (2011) and Etzo (2011)). An explanation which is also taken up by Sardadvar and Vakulenko (2015) relates to migration as being induced by the expected wage of a particular migrant rather than current difference in average income.

In a seminal paper, Crozet (2004) develops a new economic geography model which explains migration behaviour by the regions’ market potentials. In his model, each potential migrant’s objective function is dependent on a destination region’s real wage, its employment probability, and the distance between source and destination regions. The real wage in turn depends on the sectoral structure, size, and location of a region. Crozet (2004) derives an econometric specification of the gravity-type which is tested for internal migration in Germany, Great Britain, Italy, the Netherlands and Spain. He finds that total employment has a positive effect on in-migration in each case, while the effect of wages on in-migration is negative in Germany, the Netherlands and Spain. In addition, the size of the service sector attracts internal migrants in Germany, Spain, Great Britain and Italy, while the industrial sector has a positive effect in Great Britain, the Netherlands and Italy, but a negative effect in Germany and Spain.

The aim of this paper is to build on Crozet's (2004) theoretical foundations and to test its predictions for the Russian economy. We apply a rich data set on realised migration between 78 Russian regions over the period 2000-2012. In addition to employment in the agricultural, industrial and services sectors as applied by Crozet (2004), we pay special attention to the commodities sector in order to account for the special role these industries play regarding employment in Russian regions as well as Russian exports. We expect results that explain the importance of a region's sectoral structure on migration by controlling for macroeconomic variables, geographical attributes, and global demand for commodities. We are especially interested in the effect and magnitude of the commodities sector in Russia's Asian regions with respect to migration.

Our augmented gravity-type equation corresponds to a panel econometric specification, where the dependent variable is the share of region  $i$ 's migrants who move to a particular region  $j$  in the year  $t$ . Explanatory variables include employment in the sectors agriculture, commodities, manufacturing, commercial services and state services, economic condition variables such as income, unemployment and employment rates,. Furthermore, variables that capture geographic conditions such as the distance between two regions, a common border between regions, population and area sizes are included. The specification will be estimated for samples including (i) all 78 regions, (ii) 26 Eastern regions and (iii) 52 Western regions.

The paper is structured as follows. After the Introduction, the second section briefly surveys the Russian economy and the special role of the commodities sector. The third section discusses Crozet's (2004) model, its implications and our econometric adaptation for Russia. After that, the results are presented and discussed. The final section concludes.

*Europe 2020 Strategy and the Role of the Regions*

## **THE EUROPEAN GROWTH AGENDA UNDER SCRUTINY: TOWARDS GOVERNANCE AND STRATEGIES FOR SUSTAINABLE GROWTH**

**Stephan Schmidt, University of Basel, SWITZERLAND**

Renewing and scaling up the Lisbon strategy for the EU "to become the most dynamic and competitive knowledge-based economy in the world by 2010 capable of sustainable economic growth with more and better jobs and greater social cohesion and respect for the environment" (European Commission 2010a) the EU-commission adopted a new overarching policy agenda titled as "A Strategy for Smart, Sustainable, Inclusive Growth" (European Commission 2010b) in 2010. It defined five goals:

- 75 % of the population aged 20-64 should be employed.
- 3% of the EU's GDP should be invested in RandD.
- The "20/20/20" climate/energy targets should be met (including an increase to 30% of emissions reduction if the conditions are right).
- The share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree.
- 20 million less people should be at risk of poverty.

José Manuel Barroso (European Commission 2010b) stated in his preface: "To achieve a sustainable future, we must already look beyond the short term. Europe needs to get back on track. Then it must stay on track. That is the purpose of Europe 2020. It's about more jobs and better lives. It shows how Europe has the capability to deliver smart, sustainable and inclusive growth, to find the path to create new jobs and to offer a sense of direction to our societies."

The European growth agenda (EGA) is expected to trigger innovation towards smart, inclusive, and sustainable growth. Whether and to what respect it is effective has not yet been empirically clarified. There is especially little knowledge on the impact of the EGA "on the ground", i.e. on business units in relevant industrial sectors. It is crucial to know drivers and barriers within the existing policy regimes and the related policy arrangements to develop policy recommendation – knowledge that is so far insufficiently available.

However, the economic crisis has had far reaching consequences for the EU's ability to follow a development pathway directed to accomplish the EGA 2020 goals. Whether it is already back on track is questionable. First, there are considerable diverse and disbanding developments in different regions. Second, it cannot be taken for granted that crisis management and the EGA really converge. It is necessary to contribute to a better understanding of the contexts of growth in Europe in general and of innovation in particular referring to national arrangements including political, legal, social and cultural aspects as contextual factors. The paper strives to lay a basis to a better understanding of these contextual factors to overcome barriers for fostering innovation in general and innovation towards a smart, inclusive, and sustainable Europe in particular.

Those contextual factors in question are centered on political, i.e. policy instruments as well as vertical (e.g. labour market regulations) and horizontal (e.g. national) institutional settings. The paper will thereby focus on innovation and the related topics. It will provide a framework to investigate the following issues:

(a) A better understanding of the effectiveness of the growth strategy by analysing business strategies and outcomes of enterprises in three selected industrial sectors (automotive, renewables, recycling) whether they suffice criteria for smart, inclusive and sustainable growth (employment, job quality, inclusiveness and inequality).

(b) A better understanding of the effectiveness of the growth agenda by revealing drives and barriers for sustainable growth within the different policy regimes and the related policy arrangements (differences across sectors, specific national regulations);

(c) An elaboration of governance recommendations on the national and European level for establishing durable foundations for growth and employment;

In addition the paper will take into account the set up for sectorial and cross-sectorial comparisons including successful and less-successful countries respectively related policy responses (i.e. labour market regulations, innovation system) as well as firms' strategic orientations together with the networks they are embedded in what contributes to a better understanding of strategic decisions and of feasibility criteria for policies.

The paper's overall objective is to provide a basis for evidence-based policy recommendations for improving governance of smart, inclusive, and sustainable growth, i.e. for improving governance to achieve the EGA goals.

*Europe 2020 Strategy and the Role of the Regions*

## **THE EU2020 STRATEGY REVISITED: CITIES, CITIZENS AND SOCIAL ORGANIZATION IN SUPPORT OF SOCIAL INCLUSION IN EUROPE**

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**Tobias Panwinkler, BBSR, GERMANY**

The European EU2020 Growth Strategy has three main dimensions: smart economic growth, sustainable development, and social inclusion. The EU2020 Strategy follows an OMC (Open Method of Coordination) approach that orients national governments towards European-wide target indicators, demanding national policy measures to reaching nationally defined target indicators, and annual national reporting to the European Commission. The national policy measures are supported by European lighthouse initiatives.

In this contribution it is argued that it is not sufficient to break down the European targets into national sub-targets, but necessary to specify differentiated regional and local contributions to those targets and involve regional and local administrative authorities in the multilevel OMC process.

Moreover, it is argued that only in the two dimensions of smart growth and sustainable development the European and national target indicators are well-defined for OMC monitoring. For the strategic dimension of social inclusion this is, however, not the case. For this social dimension there is neither a consistent system of EU target indicators nor a systematic breakdown of European into national targets (but rather a sort of 'menu' from which member states can chose from), and as a consequence no systematic OMC reporting and monitoring.

Thirdly, the multilevel actors system in the policy field of social inclusion seems to be more complex than in the other two EU2020 dimensions. The concept of 'social inclusion' has a strong small-scale spatial component (e.g. segregation) and can hardly be approached by macro indicators like long-term unemployment alone. Furthermore it includes different components, e.g. ethnical and social. So it is even more important to not only include regional and local administrative authorities but also the civil society, i.e. social organizations and citizens, to support social inclusion in European cities and regions.

The presentation intends to contribute – from a scientific and analytical perspective – to the current discussion on a revision of the EU2020 Strategy, focussing on the dimension of social inclusion, discussing components and indicators incl. EU-wide empirical results of this construct, and presenting some thoughts on a multi-level and multi-actor OMC method in this field.

*Critical Studies of Urban and Regional Development*

## **ARE REGIONAL INNOVATION POLICIES REPRODUCING PERIPHERIES IN CENTRAL AND EASTERN EUROPE? THE EXAMPLE OF ESTONIA**

**Sebastian Schulz, University of Tartu, ESTONIA**

Social and economic disparities are increasing at the regional level, especially in Central and Eastern Europe (CEE), making it unclear whether current regional policies along the catchwords of innovation and competitiveness are helping to achieve more convergence between regions or if they are actually even contributing to the growing disparities. This issue raises the question: are policy-makers in CEE regions referring to an inaccurate conceptualisation of innovation which is not adapted to the CEE context, i.e. their particular historical, economic and social circumstances? There is the need for a revised conceptualisation of innovation as it is used in current regional innovation policy in CEE, in order to understand how it may affect the reinforcement of peripheries.

The paper focuses on identifying how regional innovation policies both on EU level and on national level induce and contribute to processes of peripheralisation. Furthermore, it turns the attention onto how innovation as a dominant development concept is understood by regional innovation policies and how it relates to processes of centralisation and peripheralisation in Estonia. It is argued that by putting its main focus on RandD activities in larger, high-tech companies in the urbanised capital region of Tallinn, regional innovation policy in Estonia contributes to processes which further peripheralise non-urban regions that have comparatively low-tech industries and are therefore at a disadvantage in terms of the indicators innovation and competitiveness are commonly measured by. It is pointed out that as a consequence, current policy approaches in Estonia enhance regional polarisation by taking on a conceptualisation of innovation which places higher value on the already well-developed and strongly performing capital region, thereby devaluing the rural areas even more.

The paper contributes to the current discussion by identifying and reviewing super-ordinated backgrounds of EU and Estonian regional innovation policies. It aims at filling the existing research gap that particularly exists for CEE countries, where the formation of targeted regional innovation policies on national level is still at an early stage and too little is yet known about the paradigm dominant regional innovation policies have emerged from. Until now, research on regional innovation policies as well as on peripheries has mostly been indicator-driven, focusing on the resulting structures and neglecting the relevant discursive processes. The paper critically debates recent (neoliberal) regional innovation policy in Estonia and takes on the process-focused concept of peripheralisation as a starting point to discuss the dominant, often overly reductive regional innovation policy concepts on the perception of current polarisation trends among Estonian regions.



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**Maria Della Lucia, University of Trento, ITALY**

Theoretical background and purpose of the paper: The transition of post-industrial societies towards the symbolic economy (Zukin, 1995), along with the current economic crisis, has emphasised culture as a major engines of urban development and/or regeneration in both theoretical and empirical studies (among the other Richards, 2013; Sacco, 2011, 2012) and European, national and local/urban political agenda (CSES, 2010; European Commission, 2010; Musterd et al., 2010; OECD, 2005). This shift, which Sacco (2011) refers to as the transition from Culture 1.0 to Culture 2.0 to Culture 3.0, has transformed culture to a value generating activity due to its transversal linkages throughout economies and societies. These culture-led intersectoral and interpersonal linkages injects creativity and knowledge into local economies and their outputs, promoting structural change and new balances which allow post-industrial cities to move away from the vicious circles of traditional development models and towards economic and social recovery (Richards and Marques, 2012).

The term creative city identifies both the source of culture-led creativity and the many processes which use it as a driver of sustainable development and renewal (Landry, Bianchini, 1995). The common denominator of these culture-led development paths is the fact that culture can link creativity and knowledge– with innovation (KEA, 2009). The processes that innovate traditional sectors through their hybridization with the creative economy have been dubbed smart specializations (Smart Specialization Platform, 2012) and creative tourism is an important manifestation of these (Richards, 2011, 2013; OECD, 2014).

The development of creative cities relies on the place specific dynamic between urban heritage resources, creativity and policy-making (Penco, 2012; Scott, 2006; Leslie and Rantisi, 2006). However, the literature and empirical analysis have so far largely neglected this dynamic, with few exceptions (Della Lucia, 2015; Go, Della Lucia, Trunfio, 2014; Sacco, Segre, 2009). Within this developing/emerging interpretative framework, a crucial factor is the proximity between people with a whole range of different interests and talents operating within particular socio-cultural (urban) contexts. This proximity allows the knowledge and creativity of one individual to spill over into other individuals, promoting cross-fertilizations not only among individuals working within the same sector, but also across different and sometimes apparently very distant sectors.

Shedding some light on the functioning of this this place specific dynamic is crucial to develop grounded theoretical models interpreting creative city development and when making decisions and choices about urban policy and marketing. This paper contributes to this domain by providing a methodology for the identification and analysis of the status of a creative city and applying it to Italian cities.

Empirical analysis design: The methodology comprises two-steps. First, the extension and the adaptation of the consolidated quantitative methodological approach of the literature and empirical research on industrial districts (Istat, 1997) to the identification of the socio-economic areas – Local Labour Systems (LLS) (Sforzi, Lorenzini, 2002) – where firms specialized in the culture and creative sectors are concentrated. This phase updates previous studies on the Italian creative economy (Lazzeretti, Boix, Capone, 2008; Capone, Cinti, 2009) by using the LLS identified by Istat – the National Institute of Statistics – in the last census (2011) and a definition of the culture and creative industries which combines different sources and adapt them to the Italian context. Second, urban LLS specialized in both traditional cultural industries and non-traditional creative sectors are selected. The status of creative cities of these urban systems is analysed through qualitative tools examining the nature and intensity of relationships within and between the actors of different culture and creative value chains, and between these stakeholders and tourism value chain actors.

Research limitations: A large set of propositions/conditions is needed to define the status of creative cities and identify them in practice. The qualitative analysis of the relationships and forms of collaboration between and among cultural and creative sectors may be enhanced by using social network analysis.

Originality/value: The improvement of literature and empirical analysis of culture-led urban development by harnessing, combining and deploying new knowledge/approaches.

Practical implications: Improvement of the awareness and effectiveness of urban policy and marketing providing decision makers with the developmental dynamics of cities towards creative cities and the local conditions which help them to create value.

*Community Economic Development*

## **HOW TO STIMULATE REGIONAL INVESTMENT ACTIVITY IN AUSTERITY POLICY**

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Regional distribution of investments in Ukraine is characterized by increase of inequality, and this inequality grew hugely during the crisis of 2014. In 2014, only two regions demonstrated the increase of capital investments, while FDI amount was reduced in all regions. Decreases of total indices of investments and low sector effectiveness in investments' regional allocation were also observed.

Capital investments are concentrated in process industry and construction, and FDI – in processing industry, financial activity and insurance, wholesale and retail sales, repairing of automobiles and motorcycles. There is a lack of capital investments in industry of raw materials and quarrying, agriculture, forestry and fishing; also, there is a lack of FDI in construction, agriculture, forestry and fishing industry, raw materials industry and quarrying. Therefore, there is insufficient amount of investments in those regions where position of raw materials or agriculture dominates in the structure of gross regional product.

The lack of investments doesn't allow the internal potential of regions to recover and it does not promote the effective use of resources and widening of resources borders for investment activity.

If the instability of public affairs and socio-economic conditions be continued, the further decrease of investments amount in regions will be predicted. Also, it is possible to forecast the freezing and even stopping of some investment projects of domestic and foreign business.

Instruments which are now used for capital projects' financing have point influence on investment activity. These instruments are public contracts, the State fund for regional development, investment grants. Public contracts promote the activity of enterprises which are systemic for regional economy; they create sale market and facilitate the development of regions. However, this instrument is not spread widely. Money from the State fund is directed on current needs and not on capital projects. Investment grants are instruments of subjective administration of regions. The mechanism of investment grants' reimbursement in case of its ineffective use is not standardized.

In order to intermit the bursting of capital investments' amount and outflow of FDI from Ukraine regions it is necessary to maintain effective defense of investor's rights and provide some guaranties for foreign investors as follows: stable conditions of business in regions, installment payments of credits etc. with the goal not to accept the break off of projects' realization. Also, it is viable to use internet sites of local authority and promote the possibilities and preferences of creation of those forms of economic activity as regional parks and industrial districts, which can encourage the stepping up of investments.

In order to increase the effectiveness of investments allocation and output of investments it is viable to stimulate the cooperation among enterprises in complementary sectors inside region for the investments' involvement. It is appropriate to create joint ventures for special product or its reworking, to facilitate the reorientation of enterprises on manufacturing the production for internal consumption markets (for instance, manufacturing the foodstuff), to create the preferable regime of economic activity – credits at lower rates, accelerated rates of capital allowance, favorable rates of local taxes and duties.

Enhancing the influence of mechanism of public contracts in the sphere of good purchase, some works, and service providing for the state's needs will maintain the effectiveness of instruments used in capital projects' financing. Also, the sphere of public-private partnership has to include the construction of objects of social infrastructure, investigation of sources of gas-condensate and oil and gas-condensate energy resources,

working out and implementation of unique author technologies with the aim to involve investors into social and public projects, and in this case, some preferences on profit taxation have to be given to investors.

It is necessary to restrict the list of directions which are financed from the State fund for regional development and introduce the next list: the state designated programs and investment programs in the part of regional goals, programs for overcoming the territorial depressiveness, development programs and actions for some administrative-territorial units (particularly small cities, mountain settlements, settlements in observation zones). It is obligatory to finance only long-term capital projects from this fund. Gradually, the fund will have to become the financial and credit organization capable to accumulate money from different sources – internal domestic (investors' money and budget costs) and external foreign (investments and credits), public and private.

In order to raise the effectiveness of investments grants it is necessary to regulate the demand of these grants' recharging in case of their ineffective and/or off-target utilization.

In order to incentive the investment activity in regions it is necessary to foresee some governmental support for domestic investors such as delaying the terms of credit payments during the re-investment of profit if domestic investors put up the capital in local manufacturing, having as a goal the mostly full involvement and use of internal socio-economic development potential of regions.

*Building Networks for Local Growth*

## **THE SOCIO - SPATIAL STRUCTURATION IN RIGA METROPOLITAN REGION**

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**Rūdolfs Cimdiņš, University of Latvia, LATVIA**

During the last decennia, as a result of expansion of urban territories, great changes of spatial structures have taken place in Riga – the capital of Latvia, as well as in the surrounding areas forming Riga's functional region. Riga, the capital city, is in the geographic centre of the country. Around the city there is a large metropolitan area, with some one million residents in the core area and 1.1 million people in the entire Riga functional region. The metropolitan area of Riga is home to nearly one-half of the country's residents, a truly excessive population concentration.

Statistics provides information about change in number of population within the formal territorial boundaries. Regretfully, it can only partly reflect the nature of the process from the viewpoint of urban development. Riga lost their population, inhabitants moved to suburbs and adjacent neighbouring municipalities, thus city is actually re-shaping the spatial structure. As a result various suburban spatial units have formed that differ by their social structure as well as community relationships and collaboration. Riga suburban area is a space, where present and formerly implemented policies and interests meet and intersect in the new manner. Suburban area has neither clear definition nor boundaries. It can be regarded as a bordering space between two interacting areas - city and rural areas, where urban and rural lifestyle interacts and is reflected in the recently emerging settlement patterns. Along with the spatial changes of Riga metropolis, the role of urban – suburban economical and social relationships has changed and the emergence of new structures of civil society and different forms of territorial communities is taking place. Riga's metropolis as any transforming space is mirroring these contemporary metamorphoses. In this context, it is important to identify the causal of changes that are mainly determined by the social structure of settlement units and the existence or potentials of activities representing by groups, leadership, community forming ties and communication patterns in the particular territory.

The paper deal with empirical arguments regarding Ķekava municipality that is characterized by diverse spatial structures, community formation and new social relationship patterns. Ķekava is situated in Riga metropolis, countermining the territory of Riga city, is appropriate for investigation of abovementioned processes. The aim of this study is to probe into qualities that characterize and reflect communities development in spatially

transformed areas, e.g., the development of social relationships, role of active social groups and individuals in the territory, role of affecting internal and external governance factors etc.

The research is based on social geographical surveys, socio-spatial mapping, semi – structured in – depth interviews with representatives of localities and municipality, analyses of historical and planning documents and statistics. The results show and allow to make judgements about specific qualitative and quantitative indicators that characterize the on – going process of society structuration in a whole suburban area of Riga. Most characteristic socio-spatial structuration processes in Riga metropolitan region are associated with a relative increase of population, particularly the working age population and children, what leads to fertility and mortality balancing, as well as migration from the capital Riga to suburbs and everyday commuting within metropolis is a significant indication. Above mentioned processes determine the proportion and changing role of basic population, change of economic status and related higher requirements for living, at the same time more job opportunities, qualification diversity and higher level of social activity and participation.

There is a significant role of active social groups and individuals, which by their nature are the most important creators of social climate in the territory. Evaluation of social processes, identification of key development issues and appropriate planning of metropolitan region are main needs in the context of on-going processes.

*Urban Tourism (Disentangling the 'Urban Character' of City Tourism)*

## **TOURISM PRACTICES IN SMALL AND MEDIUM-SIZED TOWNS. THE CASES OF AMBOISE AND CHINON IN FRANCE**

**Eirini Skrimizea, Gran Sasso Science Institute, ITALY**

Since the beginning of the 1990s interest in tourism has spread rapidly throughout many Small and Medium-Sized Towns (SMSTs) in response to pressures of social and economic restructuring. Current tourism global trends seem to favour this kind of towns: the visitors are searching for smaller, “authentic” destinations and new regions in Europe, the Internet is offering great opportunities for visibility and branding and low cost airlines are expanding their activities to a broad range of more or less popular places.

However, the trends are not enough by themselves. The competition between cities is intense and underlines the importance of proper management in order to develop and/or promote urban tourism destinations. But small towns generally lack the financial and strategic resources to correspond to such needs. In addition, tourism literature did not question until now the scale of the urban destination when forming typologies that guide policy makers, managers and researchers. As a result, urban tourism research has focused mainly on large cities when providing insights and guidelines for policies. Thus, it is doubtful whether such knowledge is suited also to SMSTs.

Recognizing the aforementioned gap in the literature, in this paper we focus on SMSTs and we aim an analysis of SMSTs’ local, public actors’ tourism practices (i.e. relations, formal and informal actions) in terms of governance, planning and management.

In order to address this aim, we firstly do a literature review and construct a conceptual framework that connects SMSTs’ local, public actors’ tourism practices with what we identify as important (both global and local) factors that form and should continuously inform these practices in each SMST: tourism trends and demand, tourism impacts on small town destinations and tourism supply standards. This theoretical conceptual framework is then being tested via its application on two case studies, Amboise and Chinon, two SMSTs that are positioned in the centre of France and are part of the world famous destination and UNESCO World Heritage Site “Châteaux de la Loire”. The conceptual framework has been transformed into a questionnaire organized in 4 matrices: 1) the destination’s identification in the tourism map, 2) tourism governance, 3) tourism planning and 4) destination management. This questionnaire was used as the main methodological tool for the analysis of tourism practices in the case studies by guiding a series of interviews with key local, public actors. The information provided by the aforementioned interviews has been

complemented by secondary qualitative and quantitative data on the towns' broader administrative and geographical contexts, general profiles, tourism potential, flows and practices.

At the theoretical level, we perform a systematization of the tourism literature focused on SMSTs, which can be generally found only sparsely in the academic or policy oriented documentation. We also combine literature focused on urban tourism with literature focused on urban development issues in the light of tourism development; and global aspects of tourism with their local implications on SMSTs' tourism development. In addition, we propose a methodology, with an integrated questionnaire that has been proven successful to capture tourism practices in SMSTs and has confirmed and complemented the existing literature. Focusing specifically on the case studies and without aiming in a generalization concerning the whole of these towns, findings concern the critical importance of spatial and policy interdependencies for the success of tourism practices, the fact that different urban needs are drivers of different attitudes towards tourism development and the notion of "tourism destination" being a vague notion for some SMSTs.

*Developing Rural and Peripheral Regions*

## **FUTURE OPPORTUNITIES FOR BIOECONOMY IN THE WEST NORDIC COUNTRIES**

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Abstract from the final report of the project Arctic Bioeconomy: Matis Report, November 2014:  
<http://bit.ly/bioeconomy-wn>

The report is also published as a Nordic Council of Ministers TemaNord report.

The bioeconomy is a larger part of the GDP in West Nordic countries compared to other Nordic countries. The marine bioresources are therefore of common interest to the West Nordic countries which calls for close cooperation within the region. The economies in the West Nordic countries can be reinforced by developing industries further based on sustainable and responsible utilization of available resources. The aim should be to

create multiple value streams from each resource, to improve processes and to develop and apply new technologies with the goal of minimising waste and maximising value.

The knowledge available in the West Nordic fishing industry has increased in the last decade and knowledge and technological transfer between the countries and increased cooperation would strengthen the West Nordic countries. It is important to maximise processing yields within the fisheries. However, substantial increase in value addition is likely to occur in synergy between fisheries and the biotechnology. Combining strong industry, such as the fishing industry, with research, development and innovation within the biotechnology sector will benefit the economy of the West Nordic countries as well as turn the region into an attractive area for young educated people.

The macro-algae are growing in abundance in the coastal waters of the West Nordic countries and have promising properties for future utilization. The macro-algae can be used as biorefinery feedstock for bioconversions to platform chemicals, speciality chemicals and energy carriers (e.g. ethanol or butanol) and bulk carbohydrates, proteins and derivatives can be funnelled into in various value streams.

Research into more efficient utilization of feed and new possibilities in feed production should be given greater attention. It is also important to explore opportunities across different sectors of the bioeconomy as well as new innovative sources of biomass for feed.

Agriculture in the West Nordic countries is challenging due to harsh weather conditions. More emphasis should be on research on new crop variants, such as grain or berries and their adaptation to the West Nordic environment. There are also unexploited possibilities in using greenhouses to produce locally grown vegetables. Along with research on new crop variants, further research on revegetation, soil conservation and grazing pressure in the West Nordic countries is needed along with research on effects of climate change on the Arctic and the living conditions there.

Opportunities within the bioeconomy are likely to have an impact on the inhabitants of the area and help reverse the trend of young educated people, especially women, moving from the rural areas to the larger towns, cities and other countries.

There are large unrealised opportunities within the different sectors in the West Nordic countries. However, when each sector is operating separately in “its own silo”, the growth potential might be limited. If interdisciplinary cooperation is enhanced, the growth potential of the economy is far greater. Innovation, supported by strong infrastructure, is another key element in enhancing the bioeconomy, by exploring underutilized possibilities and growth opportunities within the West Nordic countries.

Finally the initiatives supporting bioeconomy in the West Nordic countries whether local, regional or Nordic will have most impact if they can be paralleled with European and other international research and innovation programs.

In the project actions where identified and a plan for their realization put forward, the main four actions identified are:

Action 1. Create a West Nordic Bioeconomy panel

- A West Nordic Bioeconomy panel could be a platform for promoting common policy, to identify opportunities and set a common strategy for the region.

Action 2. Establish an interdisciplinary Centre of Excellence (CoE) for the West Nordic region

- An interdisciplinary CoE will focus on the regions uniqueness, sustainability, energy and value streams, socio-economic aspects and rural development with active participation of all stakeholders.

Action 3. Launching the project Arctic bioeconomy II – Biotechnology

- A special project focusing on opportunities in applying biotechnology for value creation in the West Nordic countries.

Action 4. Program focusing on “The Blue Bioeconomy”

- In order to have a positive impact on value creation in the West Nordic countries, investment in research, innovation and technology along with strengthening the fish stocks is needed.

*Developing Rural and Peripheral Regions*

## **LOCAL CONTEXT OF SMALL AND MEDIUM ENTERPRISES PERFORMANCE DURING THE CRISIS: A CASE STUDY OF POLISH SMALL TOWNS AND RURAL MUNICIPALITIES**

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The aim of the study was to evaluate the performance of small and medium-sized enterprises from the place-based perspective on example of Polish small towns and rural communities. In particular the paper examines what factors - beyond characteristics of the companies - related to local system and actions taken by public authorities affects the growth of company revenues. For this purpose discriminant analysis was applied, which enables to identify the most important elements for the success of the companies during the global economic crisis. The results shows that this success was the result of not only the characteristics of the company itself, but also the specific features of the local system and activities carried out by the public authorities. Among the characteristics of the local system that was especially important one could indicate active business support organizations and well-developed social networks in business. This allows us to formulate appropriate recommendations for actions aimed at support of socio-economic development at the local level.

*Developing Rural and Peripheral Regions*

## **THE ENTREPRENEURIAL ENVIRONMENT AND ITS INFLUENCE ON SELF-EMPLOYMENT IN RURAL VIETNAM – REGIONAL PATTERNS**

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**Javier Revilla Diez, University of Cologne, GERMANY**

Self-employment has grown constantly over the last decades, especially in the developing world. In Vietnam the increase of self-employment can be seen part of the ongoing structural change, which started after the Doi Moi reforms in 1986 and which is influencing the income generation of urban and rural households. According to the GLOBAL ENTREPRENEURSHIP MONITOR 2013:32 only a minority of 25.1 % of the Vietnamese entrepreneurs start a business because they have no better option. Compared to other middle income countries, this share can be seen as relatively low. Consequently, Vietnam is characterized by a high share of opportunity-driven entrepreneurs. According to AHMAD/HOFFMANN (2008:11), opportunity entrepreneurship is positive related to job creation, economic growth and poverty reduction. Furthermore, they demand more research about the factors which determine entrepreneurial performance in a region (cf. AHMAD/HOFFMANN 2008:7). It can be assumed that major differences in the entrepreneurial performance exist between the different regions in Vietnam. On the village level, our analysis shows for the year 2012/2013 that in some villages none of the households are running a business outside of agriculture, while in other villages the share of households running a business outside of agriculture is going up to round about 86%. A common way to explain regional differences of self-employment are the infrastructural, institutional and market conditions in the regions (cf. AHMAD/HOFFMANN 2008:20, GEM 2013:49). FELKNER/TOWNSEND (2011:1) studied the concentration of formal and informal enterprises in Thailand. The showed that enterprises in Thailand are highly concentrated in a few regions. In addition they highlighted that the share of population running a business in an area is negatively related to the distance to markets and infrastructure. Furthermore, areas with an already high concentration of businesses can further increase their level of enterprises. Especially in rural areas, the environmental conditions can be seen as important for the level and the growth of the share of population running a business (cf. FELKNER/TOWNSEND 2011:2ff.). In the last decade, a new theoretical approach developed to explain regional economic differences, the evolutionary economic geography (cf. BOSCHMA/MARTIN 2010:4). According to STAM (2010:139), “entrepreneurship is a key element of

evolutionary economics”, whereat “the explanation of regional variations in entrepreneurship has also become an important issue” (STAM 2010:139). Most of the studies of the recent years are dealing with entrepreneurship in developed countries. Thereby, it’s not only enough being self-employed to be called an entrepreneur. It’s necessary that the self-employment is creating new ways of doing business or new products (cf. STAM 2010:143). Especially in rural areas of developing countries, this kind of entrepreneurship is hard to find. Rather, individuals often become self-employed because they have no better option. In contrast, some individuals becoming self-employed because they seeing opportunities in the market (cf. GRINDLING and NEWHOUSE 2012:2). The second group of self-employment is called “opportunity-entrepreneurs” and best fits to the term of entrepreneurs as it’s defined in the developed world. According to STAM (2010:143), entrepreneurship can be seen as “the result of the interaction between individual attributes and the surrounding environment”. There are a couple of studies dealing with the question which environmental surroundings have an influence on the level of entrepreneurship in a region. Most of them concentrate on developed countries, so that a lack of empirical studies in developing countries can be found.

The aim of the present paper is to integrate aspects of the evolutionary economic geography approach into a framework based on institutions, infrastructure and market conditions to explain the regional differentiation in “opportunity-entrepreneurship” in rural Vietnam. We will use data from a household survey conducted in three rural provinces in Vietnam namely Thua Thien-Hue, Ha Tinh and Dak Lak to run regression models to detect variables which can explain the level of “opportunity-entrepreneurship” on the village level.

*Innovation and Knowledge Economies*

## **EVOLUTIONARY ECONOMIC GEOGRAPHY AND PATH DEPENDENT ENTREPRENEURSHIP IN THE OIL AND GAS SECTOR**

**Elisabet Sørfjorddal Hauge, University of Agder, NORWAY**

This paper will discuss and argue how entrepreneurship serves as an important driving force for regional industrial path development directions in the oil and gas industry in four Norwegian regions. This will be done by describing how entrepreneurs start, promote, transform and influence regional growth within an evolutionary economic geography (EEG) perspective. EEG attempts to explain the spatial distribution of economic activities from the underlying industrial dynamics of firms. Martin and Sunley (2006 p. 429) emphasize the need and potential for a process oriented understanding of regional growth by claiming that “... Path dependence is a contingent and place-specific outcome and event sequence where further research needs to clarify how and why the mechanisms that produce path dependence operate to different degrees in different places”. Entrepreneurship is regarded as a key element of evolutionary economics, and is recognized as an important element in explaining regional economic development. By other words; explaining regional variation in entrepreneurship is an important issue when conducting research within an EEG perspective.

Path dependent development is one core notion within evolutionary economic geography. Based in an EEG perspective this paper’s aim is to [...] contribute to EEG theory on how to understand entrepreneurial processes that start off and/or enhance path renewal, path creation and path extension in four Norwegian regions. The research question; “How do entrepreneurs in the oil and gas industry influence industrial development paths in four Norwegian regions?” is asked. Norway reached its oil peak in year 2000, and further decline will continue unless new large oil fields are discovered and exploited. If oil and gas companies are to continue growth, it is likely that more oil and gas must be extracted from the Norwegian continental shelf, exploration and production must become more efficient or the sector companies could also adapt their activity to adjacent industries. Entrepreneurial processes and entrepreneuring are important mechanisms that contribute renew the oil and gas sector and regional industry and settle market competitive advantages. Innovation and knowledge development are essential to promote or enhance regional entrepreneurial processes.

By approaching the research question from an EEG perspective, the focus is to explain and describe how key entrepreneurs influence regional development paths and regional industrial structures by introducing incremental and radical innovation processes. This will hopefully contribute to understand the significance of a regional, national and international context in the establishment of new firms. The paper analytic outcomes of



entangling entrepreneurship and path dependent development is based in an explorative investigation study that aimed to evolve knowledge on how to understand entrepreneurship as a motor for path dependent development. Introducing entrepreneurship into evolutionary economic geography imply that the traditional focus on firms is complemented with a focus on individuals (Stam, 2010, p. 139). The research unit is entrepreneurs who has established or manage SMEs in the four investigated regions. The research method will be in-depth interviews and analysis of existing registry data as found in Dun and Brandstreet. The paper is a result of a research partnership founded by the VRI project 'Path development in different regional settings' financed by the Norwegian Research Council.

*The Future of Leadership Research in Urban and Regional Development in Europe*

## **GOVERNMENT, AGENCY AND PLACE LEADERSHIP: LESSONS FROM ACROSS NATIONAL ANALYSIS**

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**Andrew Beer, University of Adelaide, AUSTRALIA**

This paper considers the interaction between institutional factors and individual agency in the development and expression of place leadership. It argues that few accounts of the leadership of places have found an appropriate balance between structural and individual processes, resulting, on the one hand, in an over-emphasis on the actions of a limited number of charismatic leaders, and, on the other, structural analyses blind to the decisions and actions of individuals and groups. This paper attempts to offer a more balanced perspective through the examination of leadership in two, contrasting, sets of circumstances. It uses the differing economic, political, administrative and social structures evident in Finland and South Australia to better understand the ways in which structural conditions encourage, or limit, place leadership. It demonstrates that some systems of government, at the national, regional and local scale, are more encouraging of place leadership than others.

*Culture and Creativity as a Driver of Regional Development*

## **INNOVATION DYNAMICS IN THE FILM INDUSTRY: THE CASE OF THE SOHO CLUSTER IN LONDON**

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**Caroline Chapain, University of Birmingham, UNITED KINGDOM**

In the last 10 years, there has been a shift from a focus on the direct economic contribution of the creative industries, to their innovation capacities and indirect economic contribution. Two main strands of literature have tried to capture this. The first strand looks at innovation characteristics and processes in the arts and the creative industries (sectoral perspective). The second strand concentrates on the way these industries cluster and directly contribute to local and regional economies (spatial perspective). However, there is little work focusing on the innovation outputs of creative industries and how they compare to other industries and on how clustering really impacts their innovation performance and dynamic at the local and regional levels. This chapter tries to fill this gap by combining both sectoral and spatial perspectives. By using original data, the paper discusses the Soho film cluster in London in order to examine the in-novation dynamic of the film industry in a particular place. Innovations in the creative industries often differ from those in manufacturing or other sectors. As such, first, the particular nature of innovation in film industry is presented. The film industry can be highly innovative, both producing and adapting innovations. As examined in the second part of the paper, this innovation capacity and performance can be highly influ-enced by clustering processes. Our analysis of the Soho film cluster, in the third part of the paper, demonstrates the impact of geographical proximity on innovation performance through a high degree of embeddeness of the film industry in local and regional labour markets and in favouring local and international innovation linkages.

## **THE APPLICATION OF SPATIAL GINI INDEX TO MEASURE THE DYNAMICS OF REGIONAL HEALTH INEQUALITIES**

**Renata Stańczyk, University of Lodz, POLAND**

This study constitutes an application of spatial decomposition of the Gini coefficient to assess changes in regional health inequalities over time. The measurement of dynamics of the regional health inequalities is a subject of ongoing deliberations. To measure regional health inequalities many researchers apply the sigma-convergence method, which was developed based on the economic growth theory. The sigma convergence process occurs when a differentiation of income (or any other phenomenon) between the spatial units decreases in time. In this study we used the sigma convergence analysis based on the spatial Gini coefficient. Classic Gini previously known as income inequality measure, is recently applied to analyse an uneven distribution of various health determinants, like: mortality, life expectancy, healthy life expectancy and many others. We extend this approach to spatial effects and propose a spatially adjusted Gini index. It can be explained by the fact that the traditional convergence method, without taking into account the spatial effects, may overestimate the level of differentiation of the analyzed attribute. A spatial decomposition of classic Gini based on a spatial weights matrix divides overall inequality into two parts: observations that are geographically neighbors and those that are not. In result spatial Gini provides a joint measure of autocorrelation and overall inequality. The inference on the spatial decomposition is based on a small Monte Carlo simulation.

Health inequalities are identified on the basis of health indicators: an infant mortality rates, life expectancy and the synthetic measure from MIMIC model. The survey covers NUTS 2 European Union regions for the time period 2002-2012. Our results confirm sigma-convergence hypothesis. Decreasing values of Gini over time indicate the convergence process in health status across European Union Regions. Besides relatively high and statistically significant values of the Moran's statistics for the analyzed indicators in all years confirm a positive spatial autocorrelation of the studied phenomenon.

## **FOSTERING FIRM PERFORMANCE: "DISTRICT" AND "FAMILY" EFFECT IN ITALIAN MANUFACTURING FIRMS**

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The paper aims to investigate the impact on firm profitability exerted by both the localization in industrial district territories (district effect) and the family ownership (family effect). The relevance of both the "effects" and the interplay between them is investigated both for the Italian manufacturing industry as a whole and for single size bands which the industry can be disentangled in.

A large stream of literature has shown that firms operating in industrial districts can benefit from economies, external to the firm but internal to the district, exerting a positive effect on firm performance (Becattini, Bellandi, De Propris; 2009). Nevertheless, according to some evidence, in the face of ongoing global turbulences, the "district effect" in Italian manufacturing system seems to become less significant or even to disappear.

Similarly, a large stream of literature has shown the spread and relevance of family firms both in developed and in developing economies. Some features of family ownership have been identified as the source of a positive "family effect" on firm performance: long term orientation (Miller, Le Breton Miller; 2005), embeddness in local community (Colli, Rose; 2007), greater access to internal financial capital (Steier; 2007), family social capital (Arregle et al.; 2007) and stewardship (Miller et al; 2008).

Despite industrial districts and family firms represent two pillars of Italian manufacturing industry, and despite the large literature covering these topics, the interplay between corporate ownership and district localization has been largely overlooked. The paper aims to contribute to fill this gap providing preliminary evidence of the existence, relevance and interplay of the “district” and the “family” effects and the impact they exert on the profitability of Italian manufacturing firms.

Provided the importance of firm size as stressed by both the industrial district literature and the recent contributions on the increasing role of Italian medium-sized manufacturing firms, the analysis also explores how the “family” and “district” effects occur in the different firm size bands.

Analysis is carried out combining data at firm level from AIDA – Bureau Van Dick database and data concerning the spatial composition of Italian industrial district provided by the Italian Institute of Statistics (ISTAT).

Descriptive statistics and econometric models are employed to assess the impact of firm ownership and district localization on firm performance measured by the difference between the firm ROS index and the median ROS of the sector in which the firm operates. Variables interactions are also employed to assess the existence of complementarity or substitution between the “district” and the “family” effects.

Results indicate a strong family effect in every firm size band. The district effect and the interaction between the two “effects”, by contrast, are different in different size bands. It is therefore possible to suppose that different patterns underpin district and family economies operating at different size bands.

*Cross-Border (Research)/Regions*

## **CROSS BORDER COOPERATION IN A KNOWLEDGE ECONOMY: THE EXAMPLE OF THE INTERNATIONAL UNIVERSITY OF LAKE CONSTANCE**

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Knowledge and innovation are key factors for successful regional development. The competitiveness of regions - as well as of nations - depends more than ever on their ability to generate knowledge and innovation on the one hand and to apply new knowledge within the region on the other hand. This requires a permanent learning ability to adapt to changing conditions and challenges.

In regional innovation processes the interaction between knowledge-generating institutions (e.g. universities and research institutions) and the institutions that use and apply knowledge (e.g. companies) is the key to success. Both sites are connected in many ways with each other ideally and thus contribute to interact and circulation of knowledge and resources.

Especially border regions are confronted with a major challenge because in most regions the respective knowledge systems are often national oriented and existing opportunities of knowledge exchange are used insufficiently. Border regions act in the knowledge economy as contact zones between different national systems by workers, scientists and companies exceed these limits and learn from each other. This exchange of knowledge at the individual level and also at the institutional level can lead to a cross-border transfer of innovation for different sectors of the economy - particularly for regional development. However, it requires an ongoing exchange at the level of the single individual and institutions, not just the exchange of cross-regional politicians. From this fact, special requirements arise for cross-border cooperation. The cross-border networking of relevant knowledge institutions, especially universities, and the cross-border cooperation between knowledge institutions and companies are key success factor for the promotion of knowledge transfer and innovation. The existence of structures for knowledge exchange and transfer can stimulate cross-border cooperation in a knowledge region considerably.

With 30 higher education institutions, the Lake Constance region offers considerable potential for generating and disseminating knowledge in the region. The International University of Lake Constance (IBH) coordinates the activities of its member universities, universities of applied science and teaching colleges in the Lake Constance region with more than 100,000 students, some 20,000 employees and 3,000 professors. The International University of Lake Constance is the largest network of different types of higher education institutions in Europe. Thanks to its regional focus and cross-border cooperation, it contributes towards strengthening the Lake Constance region as a centre for education and knowledge and promoting innovation processes. The members of the IBH play an important role within knowledge region of Lake Constance both as single institutions and as a network. They generate knowledge and foster innovation, for example through teaching programmes spanning different institutions of higher education, by promoting applied research or providing a platform for researchers and employees to interact. The International University of Lake Constance offers added value both for its member institutions and for the Lake Constance region as a whole.

Added value for institutions of higher education:

- Interdisciplinary research and teaching
- International research and teaching
- Exchange on cross-disciplinary topics
- Involvement in international networks
- Applied research
- Boosting the appeal of member institutions
- for students
- for (potential) employees
- Improving quality in research and teaching
- Qualified graduates and employees
- Added value for students with innovative and international masters courses
- Summer schools for foreign students
- Refectories and libraries at all IBH member universities open to all students
- Enabling structure

Added value for the Lake Constance region

- Projects and activities geared to the needs of the region (relevance)
- Socially relevant issues tackled in applied research and development projects
- Raising profile of the region as a knowledge and education hub
- Improving education (further training and higher education)
- Strengthening the Lake Constance region through knowledge and technology transfer and promoting innovation
- Transferring expertise and knowledge between universities and regional companies, institutes and institutions (e.g. knowledge transfer in the team)
- Knowledge Spillover
- Brain gain instead of brain drain
- Improving the region's image
- Universities as multipliers
- Fostering a sense of identity
- within the member institutions of the IBH
- within the Lake Constance region
- Cultural convergence

The Lake Constance region offers great potential for innovation and learning. Joint courses and research projects, an exchange of ideas between different institutions of higher education and a platform for researchers and employees to network within the International University of Lake Constance as well as efforts to promote a knowledge and technology transfer with companies and institutions in the region all help to generate knowledge and innovation in the Lake Constance region. The International University of Lake Constance assumes responsibility and promotes the development of the Lake Constance region as an attractive and competitive centre for education, knowledge and research.

## **CROSS-BORDER CONNECTIVITY IN EUROPEAN GROUPINGS OF TERRITORIAL COOPERATION: HOW TO MEASURE POLITICAL AND TERRITORIAL INTEGRATION**

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The significance of local cross-border cooperation structures is expected to grow in the 2014-2020 implementation period of cohesion policy, especially through increased participation of European Groupings of Territorial Cooperation (EGTCs), introduced as a legal tool by the European Union in 2006. At the end of 2014, 47 EGTCs had been registered with the Committee of the Regions and while these have attracted attention from a number of scholars, there is still much need for empirical investigation into how these new organizations function and perform. Likewise, the discussions on methods have so far been largely lacking. The paper therefore has two aims. First, it seeks to contribute to this body of literature by mapping the extent to which EGTCs are territorially and politically integrated spaces. Secondly, it aims at raising the profile of methodology in relation to cross-border region studies in general, and EGTCs in particular.

In the paper integration is defined as a process of increasing and intensifying relations among entities that leads to the emergence and expansion of an integral whole. The paper applies a novel metric from network analysis that is specifically designed to measure integration in border lands, cross-border connectivity, introduced in the *Journal of European Integration* by Svensson and Nordlund in 2014. It relies mainly on publicly available data on EGTC membership and meeting activities, converts these into relational data, and presents a ranking of existing EGTCs in terms of territorial and political integration. A case study of one EGTC (Ister-Granum EGTC, at the Hungarian-Slovak border), which comprises relational and qualitative data, is used to provide depth to the analysis. The inclusion of the case study also enables a discussion of the relative merits of the different types of data, and whether cross-border connectivity as a metric tells us more about integration than traditional network tools such as density values. The paper finally proposes factors that may explain the variance in the empirical data, and discusses the extent to which integration, as measured by cross-border connectivity, leads to more efficient policy outcomes.

Both the research design and topic of the paper makes it appropriate to fit into the specific conference theme "Role of social networks in Regional Development", but the viability of EGTCs as regional institutions is also relevant for the general conference theme on regional growth and sustainability. These institutions may have the capacity to handle policy problems that nation-based regional institutions and previous cross-border cooperation institutions have not been able to solve. Ultimately, this paper is a part of this debate.

## **BIOECONOMY, SMART SPECIALISATION AND DEVELOPMENT STRATEGIES FOR RURAL REGIONS**

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**Gunnar Lindberg, Nordregio, SWEDEN**

A transition to a sustainable bioeconomy is seen as a solution to the dual global challenges of greening the economy and dealing with economic austerity. It is also nominated by the EU establishment as a way to contribute to regional development also in rural regions; in a sense an operationalization of the idea of a place based development. Moreover, the bioeconomy is an example of a sector (or domain) in which knowledge dynamics plays a significant role. Historically, as well as in the current era of high-technology bio-based development, cross-sectoral knowledge dynamics draws heavily on different disciplines, industries, and expertise. The stylized picture of the bioeconomy sees business-interests and regional-development hand-in-hand; but in each place the evolution of a bioeconomy will be different and involve different actors, conflicts and physical transformations.

The concept of Smart Specialisation Strategies (S3) has been diffusing at a rapid pace among European regions in recent years. The S3 concept, well on line with the Europe 2020 strategy “smart, sustainable and inclusive growth”, attracts a broad range of interest groups from academics and consultants to policy makers concerned with promoting growth and well-being in regions. The EU Program period 2014-2020 puts the S3 concept in a massive empirical scrutiny. Despite the highly increased interest in the S3 concept in general, there are aspects of S3 that deserve more attention. S3 issues have not yet been studied in a greater breadth and depth when it comes to rural and/or sparsely populated regions with specific challenges and opportunities especially in developing a knowledge-based bioeconomy.

Rural, and often sparsely populated, regions have specific characteristics that need to be taken into account when making efforts to contribute to regional development. It is being increasingly recognized by many researchers that, despite the general perception of a decaying and stagnant ‘countryside’, innovation has key features of long term rural history (see e.g. Jean, 2012). However, the sometimes disperse structures, and limited capacities of networks, need to be considered as well. As argued by e.g. Shucksmith (2012) “the highly uneven capacity of different communities of place to bring forward ‘development from within’ has been a consistent finding of studies of rural development in Britain and abroad”. The concept of S3 is a powerful tool, but some regions face the risk of ending behind, and then the response cannot be: “but we gave you the tool and the power”. Devolution of tool and new forms of governance does not put the burden of full government on local groups, networks and civil servants.

Some of the key questions regarding the development of the bioeconomy in rural regions include: how can regional development policies be designed or aligned to better contribute to smart, sustainable, and inclusive growth in rural regions with a focus on the bioeconomy sector? And what is the relationship between the bioeconomy, smart specialization, and rural regions? What actors are, and should, be included in such a process in order to reach success, in whatever form it is defined?

Our paper starts out with a review on the concept of smart specialization and how it can be thought of and applied to rural, often sparsely populated, regions. We describe some important features of the S3 concept and relate them to differences and similarities of rural and urban regions. Moreover, we describe and analyze the bioeconomy sector from the viewpoint of smart specialisation.

The empirical part of our paper then introduces and analyzes a comparison of two Nordic case study regions with a focus on bioeconomy: Örnsköldsvik in Sweden and Forssa in Finland. These are regions which are strong in the bioeconomy. We compare the findings in the two regions with the currently available mainstream theories on smart specialisation in rural regions to determine the possible development trajectories and possibilities and pitfalls of such developments. Finally, we discuss the possible policy dimensions of supporting and develop S3, positioned within the concept of the bioeconomy.

#### *Role of Institutions in Regional Development*

### **MY BUSINESS HAS BEEN SUSTAINING MY LIVELIHOOD, I DON'T SEE A POINT IN REGISTRATION: AN INVESTIGATION OF WOMEN ENTREPRENEURS' ATTITUDES TOWARDS FORMALISATION IN THREE REGIONS OF NEPAL**

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Exclusion from the formal economy due to the lack of education, skills and financial capital has created a venue for the absorption of women entrepreneurs in the informal economy. The informal economy in emerging economies is characterised by the over-representation of women, labour exploitation and high levels of vulnerability. Policies to minimise such exclusion and reduce women’s vulnerability have focused on the formalisation of the informal economy. However, there is limited research available to support the view that formalisation of the business leads to sustainable pathways of security, independence and safety for women entrepreneurs. This article reports on a qualitative investigation into attitudes and perceptions towards

formalisation of women entrepreneurs operating in the informal economy in Nepal. Understanding attitude and perceptions associated with the formalisation of the business is important to understand how these women view the formalisation process, what information is available to them to make those perceptions, and what factors influence their decisions. In investigating their attitudes, we explore how these women entrepreneurs frame their understanding of formalisation and its benefits. Framing enables to unpack the contextual issues and divergent perspectives of social phenomena through which different attitudes and perceptions are formed. Three economically active regions in Nepal were selected as the case study sites, such as, Kathmandu, as the capital city; Biratnagar, as the economic hub for eastern region and the second largest city; and Pokhara, as the city with tourism as the main economic activity. Samples of the women entrepreneurs in different informal sectors were selected on the basis of National Labour Force Survey 2008. In each region 30 one to one interviews were conducted with women entrepreneurs between December 2014 – March 2015. Interview questions were based on a literature review of female entrepreneurialism in the informal economy, both in the general context as well as within emerging economies, and particularly in south Asia and Nepal. The interview questions consisted of five topics focussing on business activity, challenges/risks associated with business start-up, the role of social capital and networks in supporting or hindering the venture growth, constraints for successful venture and future ambitions associated with the venture. Data was analysed using thematic and content analysis exploring women's attitude, their perception and the context of their framings, i.e. the social and cultural context of the women entrepreneurs. Preliminary findings show that the majority of women entrepreneurs operating in the informal economy in all three regions have a positive attitude towards formalisation based on the perceived benefits of registration and express the intention to register their business in the future. These perceived benefits include easier access to loans to support business expansion and support through training and other provisions. However, differences were observed in the framing of their intention to register their business. Many women entrepreneurs perceived their business to be not big enough to register, seeing them as resilient, sustainable and profitable enough - without access to formal support - to provide sufficient resources to send their children to school and to make some savings. Other social norms and conventions in the Nepal context, for example where sons rather than daughters look after their ageing parents, suggest some women take actively strategic decisions about the need to expand their ventures. This suggests that for many women entrepreneurs formalisation does not represent the best way to make their business sustainable. Moreover, the decision not to formalise is complex and involves various social and cultural norms and beliefs which shape their perceptions of business activity. Programmes seeking to promote formalisation tend to overlook the importance that these social and cultural norms have in framing women's entrepreneurial choices or how formalisation can have detrimental effects on family priorities.

*Territorial Governance and Regional Leadership*

## **TRANSFORMATIONS IN LEADERSHIP, GOVERNANCE AND PLANNING: THE CASE OF THE SMALL CITY**

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Urban governance literature has many examples of cities that have undergone transformation from 'dead-end' economies with associated social problems to new states of economic competitiveness and social wellbeing. Such transformation requires more than conventional land use planning and implies "the abandonment of bureaucratic approaches and the involvement of skills and resources that are external to the traditional administrative apparatus" (Albrechts, 2011, p. 75). This represents a move away from conceiving of urban planning as a linear process (Albrechts, 2005; Lorentzen and Hansen, 2009), and a more creative, responsive style of governance involving multiple parties in an overarching strategic approach.

There are two key processes at play, relating to the structure and functions of local governments in city making endeavours. First, changes in local government internal structures are visible in attempts to move outside traditional decision-making forms by reconceiving the parameters of leadership, governance and cross-

territory / cross-sector networking. Second, local authorities have been looking beyond conventional land use planning functions to reimagine their city, and be innovative about opportunities.

Cities that have transformed in response to socio-economic crises are a focus of theorists interested in identifying why changes are triggered and how they are played out. Stories of success add to knowledge of 'fruitful' city functioning. This paper examines how transformations in urban governance and planning can unfold in smaller cities by scrutinising the New Zealand city of Invercargill. The city underwent metamorphosis from a faded town with a negative image to one that has a new path despite isolation and small population. Leadership, networking, and innovation have been key factors. The paper unveils how development fortunes on the global periphery can be reshaped by strong place leadership, revised connections between different tiers of policy making, and reframed processes of governance and planning.

The experience of Invercargill demonstrates a small city transformation in accordance with a new governance paradigm alongside a rejuvenated local development ambition. It is a conscious effort to innovate using alternative administrative and strategic arrangements. A decline in traditional economic activity combined with a long period of population shrinkage has prompted this globally remote municipality to seek unconventional routes for survival, in a similar manner to that reported of small Scandinavian cities. It is an excellent southern hemisphere example of a peripherally-located, small city, opportunistic embodiment of the use of soft territorial boundaries in planning combined with soft forms of institutional governance. It is also an instructive example of the distinctiveness associated with location and scale in the operations of the small city.

*Economic Resilience of Firms and Territories A: Economic Determinants and Measurements*

## **THE LIABILITY OF RELATEDNESS: PATH DEPENDENCE, LABOR MOBILITY AND THE RESOURCE CURSE**

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The concept of related variety has taken the field of evolutionary economic geography by storm. Since Frenken et al. (2007), many other studies have emerged that investigate how related variety can explain regional industrial development (e.g. Boschma and Iammarino 2009; Neffke et al. 2011; Boschma et al. 2013) and performance of firms (e.g. Boschma et al. 2009; Timmermans and Boschma 2013). To operationalize the concept of related variety, these studies use a diverse arsenal of databases that contain different constructs of related variety (e.g. industry codes, mobility flows; technology classes, product classifications and educational backgrounds on related variety and/or geographical scope data sources that allow measurement of the degree of proximity between industries, firms and individuals.

Recently, these concepts have been applied to the question of how the presence of related industries can absorb labor of industries in decline, more specifically shipyards in Denmark (Holm et al. 2014) and Sweden (Eriksson et al. 2014). This study addresses to what extent the reverse effect is visible in cases where one (or several) industries have a dominant position in a region. Relatedness to such an industry might have two opposite effects: On the one hand, these industries might grow as a result of being related to this dominant industry, but alternatively some industries might suffer from this relatedness as they lose (key) employees to this dominant (better paying) industry. In the latter case, being related to a dominant industry might be considered more of a curse than a blessing and one might speak of a liability of relatedness.

To empirically investigate this potential effect, we will use the Norwegian linked employer-employee database. This database allows us to track individuals, and their labor mobility patterns, over a 10-year period. Consequently, it is possible to examine movements between industry classes and construct a revealed relatedness matrix – à la Neffke and Henning (2013) – for Norway. Based on this matrix, we will identify industries that are related to the Norwegian oil and gas industry, which since the discovery of oil on the Norwegian Continental Shelf in the late 1960s has emerged as a dominant industry in Norway. In particular, the 2000s was a period of strong growth within this industry, as the rapidly growing oil price fuelled new investments and increased activity. This contributed to enhancing the dominance of what was already the



country's major industry. The question is how these developments affected other industries outside oil and gas, depending on whether or not they are related to the oil industry. A further question of interest is whether these impacts might differ between regions that are more reliant on the oil industry compared to more diversified regions.

*Innovation and Knowledge Economies*

## **RECONSIDERING THE DRIVERS OF TERRITORIAL INNOVATION: NEW EVIDENCE ON THE SPATIAL KNOWLEDGE PRODUCTION FUNCTION IN THE EU REGIONS**

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Investments in Research and Development (RandD) are commonly acknowledged at the origin of innovation in firms and in territories as well. On the one hand, RandD is the main input in the production of new technologies and hence the larger is the amount of resources invested and the higher will be the likelihood to innovate. On the other hand research investments are characterised by considerable positive externalities, causing increasing returns. Evidence has shown that these externalities (knowledge spillovers) are subject, however, to threshold effects and distance decay effects, making more convenient for firms to co-localize and cluster in a territory, possibly in the neighbourhood of research universities. At the empirical level the contribution of RandD to innovation, as measured by patents, is estimated larger when territorial data is considered for the analysis than when data for individual firms are used. It is also argued that this evidence is in close relation with the knowledge spillovers. Nonetheless, this claim has been softened with time by empirical studies in which the coefficient related to the contribution of RandD has been estimated lower in magnitude after controlling for unobserved regional heterogeneity in innovation. Panel data methods applied to the standard knowledge production function can effectively help disentangling the real contribution of RandD to innovation while best accounting for regional heterogeneity. Because comparable longitudinal data for all EU regions are not available, the research topic has been investigated by using panel data to a limited extent only. This study benefits of data available after the publication of the Regional Innovation Scoreboard in 2012 by the EU Commission (DG Enterprise). The dataset is made of 198 EU regions representing 24 countries in Europe, of which 22 belong to EU, and includes information at the regional level not only in relation to the standard indicators used in the estimation of the knowledge production function (patents and RandD) but also to indicators derived from national Community Innovation Surveys. Building on this new dataset, two research hypotheses are formulated. Based on the first hypothesis, the estimated contribution of RandD to innovation decreases when panel data methods are used. Based on the second hypothesis, the estimated contribution of RandD to innovation decreases when alternative measures of innovative outputs are used. To test the above hypotheses a three-stage procedure is used. In the first stage the contribution of RandD is estimated with cross-sections of regions for all the available years in the dataset. This step is necessary not only to compare cross-section with panel data estimates but also to test to what extent these data (used for estimation by the first time in this work) can effectively be used in empirical estimation. Results from cross-section analysis are similar to those produced by previous empirical evidence, in fact. In the second stage a panel data model is estimated using patents as the dependent variable. In the third and final step a same panel data model is estimated using the percentage of innovative sales by firms in the region as indicator of innovative output. Both hypotheses find large confirmation in empirical evidence, suggesting that much of the emphasis on RandD and knowledge spillovers is in fact misplaced. By and large evidence suggest a much complex process running from input to output of innovation and offer interesting insights for reflection about the new directions of regional innovation policy in the EU.

**LOCAL BUZZ, GLOBAL PIPELINES AND TEMPORARY TRANSLOCAL CLUSTERS; ENHANCING INNOVATION IN THE NORTH STAFFORDSHIRE CERAMICS DISTRICT**

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Industrial clusters as specialised knowledge pools developed out of local interactions of firms, institutions, organisations and government agencies has become a well-established area of research. However recently the area has been criticised for having become overly insular with the balance of attention being paid to localised, agglomerations of firms and little being paid to the importance of more distant sources of knowledge created by formal pipelines (e.g. foreign direct investment, outsourced partnerships and the transfer of personnel between firms in dispersed clusters for training purposes etc.) and other external sources such as trade fairs, conferences and workshops. There has been a call to consider the latter more closely, particularly in the context of the knowledge economy.

Having been examined by sociologists and marketing academics in the past, trade fairs are now experiencing a resurgence of scholarly interest. They are recognised as having evolved from being purely market based meetings where traders would exchange wares, to being 'temporary trans-local clusters' of knowledge exchange where manufacturers, suppliers and customers can come together face to face to gather knowledge about future trends for their industry, and new and emerging technologies and processes, all of which can stimulate innovative behaviours by those firms and organisations in attendance. Trade fairs are recognised as having a role to play in 'upstream processes' in knowledge formation. They are a place where firms might start to identify remote but potentially complementary competences to their current activities and where potential sources of these competencies might be identified. Moreover scholars are calling for more attention to be paid not just to other sources of knowledge external to localised clusters beyond formal pipelines, but to consider how these are integrated and impact upon localised knowledge developed within clusters.

We explore these ideas using data from an original survey conducted on the 282 ceramics manufacturers identified as operating in the North Staffordshire industrial district, from which 112 useable responses were received. Our model follows previous approaches to modelling open innovation, by being based upon a standard knowledge production function supplemented with independent predictors in order to capture the extent of a firm's local and global linkages, and quadratic transformations of these to test for curvilinear effects.

First we show in common with other studies on localised clusters, that those firms who invest in innovation activities achieve a higher level of innovation output. In addition, those ceramics firms that more fully exploit local knowledge linkages and exploit local knowledge transfers, are also more innovative. Furthermore our results also suggest there are increasing returns to exploiting local linkages. Thus we find support for the notion of 'local buzz' being an important facilitator for innovation within the North Staffordshire ceramics industrial district.

However, our main contribution is our provision of empirical support that whilst the presence of an overseas manufacturing facility or significant outsourcing overseas does not constitute an important pipeline for innovation, links created by regular participation in external workshops, conferences and trade-fairs in Europe, North America and Asia are significant, suggesting that firms who engage and participate regularly in in these activities derive further benefits in terms of innovative performance over and above those gained from just localised cluster interaction. Thus trade fairs and other temporary gatherings, in locations distant from the cluster, have important roles to play in the up- grading or enhancement of locally generated knowledge through their impact for globally extended learning opportunities.

## **WHERE DOES THE CAPITAL FOR ECO-INNOVATION AND RESOURCE RESILIENT GROWTH COME FROM? A BALANCE SHEET-BASED APPROACH TO ANALYSE SYSTEMIC RESOURCE RISK IN THE NEW FINANCIAL SYSTEM**

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**Irene Monasterolo, CNR, ITALY**

We are living on a planet with limited natural resources which are being depleted by human action at a pace faster than the Planet can afford, thus leading to cross the Planetary Boundaries (Roeckstrom, 2009; 2014). This process has opened the way to a new era, called 'the Anthropocene' (Steffen et al., 2011). At the same time, growing evidence of climate change is going to accrue the challenge to assure access to key resources – food, water, energy – to a growing, more urbanized and unequal population (expected to reach 9 bn people in 2050, UN, 2014). The unsustainable path of the current economic system have been already studied in 1972 by the Limits to Growth (Meadows et al., 1972) which foreseen a collapse in the 21st century. Investments in eco-innovation have long been debated and even introduced in the economic planning (see EU Horizon 2020) but their implementation is low successful and slow. Also, the recourse to the most used neoclassical based financial models, which are unable to represent the changes in the financial system and their effects on economic system as a whole, creates a gap in the understanding of the dynamics between advanced financial system, eco-innovation and real economy. In order to fill in this gap, in this paper we are going to explain how a new approach based on System Dynamics (SD) and Agent-Based Model (ABM) could help overcoming the methodological limitations of the neoclassical based macroeconomic models to shape the new reality of the financial system and its relation with (i) the resource course, (ii) eco-innovation, and (iii) the green economy.

The main contribution of this paper is to highlight the complex interdependencies between resource-innovation-finance and assess their potential for the outbreak of systemic risk given the complexity and non-linearity of socio-eco-environmental development challenges. A structural policy discussion in which may overcome the constraints to prevent financial capital to flow into the green economy is provided.

### *Labour Markets and Migration*

## **SPATIAL PATTERNS OF INTERNAL MIGRATION IN ROMANIA DURING THE LAST TWO DECADES: CHALLENGES AND CONSEQUENCES**

**Ibolya Torok, Babes-Bolyai University, ROMANIA**

The migration phenomenon in Romania goes back quite a long way – being a fairly permanent process – although its intensity has changed a lot in the last two decades. Following a short wave of rural-urban exodus in the 1950s, spatial mobility has been moderate; moreover, in some big urban centres it has been totally restricted while international migration was strictly controlled by the governments.

The political and economic changes that have occurred at the beginning of the 1990s have brought about considerable changes in the territorial structure and migration behavior of Romanian counties along with a severe economic decline and deepening development differences between the eastern and western parts. The restructuring of state-owned enterprises, the privatization of economic structures has not been done in a breezily manner, being also influenced by the difficulties that appeared in the country's external balance of payments and the deficit of the central budget. The inflation has risen to an alarmingly high rate, while at the same time closing down the industrial plants has boosted unemployment, all these having a negative effect on the whole economy of the country. One of the most important effects of the economic processes taking place in the 1990s was the change of internal migration's direction as a reaction to deindustrialization. Starting with 1997, for the first time in the last four decades urban-rural migration has started to prevail. The trend of international migration has also intensified, first being the emigration motivated by ethnic and religious aspects, closely followed by permanent emigration and emigration based on economic reasons.

The aim of the paper is to use spatial autocorrelation techniques in order to present the current trends and spatial differentiation of migration in Romania in the light of socioeconomic transition, based on data for the smallest possible territorial units: communes. To view migration as a broader process of social and economic development and for the identification of spatial units consisting of communes with similar migration indicators we will make use of the net migration rate, comparing it between two periods: 1990-1996 and 1997-2013. The main question is to see whether we will be able to detect a spatial pattern in the relations of internal migration as well as to analyze the main features of the neighborhood effect.

*Role of Social Networks in Regional Development*

## **FROM SOCIAL NETWORKS TO CLUSTERS AND REGIONAL DEVELOPMENT**

**Gergely Torok, Babes-Bolyai University, ROMANIA**

The phenomenon of cooperation between human beings as well as organizations has received an increasing amount of attention in the last two-three decades. Considering the role of cooperation as the essence of human existence, the process has attracted not only the attention of sociologists and psychologists, but also that of economists as well as political scientists.

Clusters and social networks are both relatively new concepts in our societies, but with an ever increasing impact on our social and economic well-being. The analysis of social networks has become increasingly popular with the expansion of networks like Facebook, Flickr, Google+, Twitter, etc. where people with same interests and preoccupations can exchange experience and information.

Not just individuals but also organizations enter a series of relationships, each driven by own interest which can be either economical or seeking other kinds of benefits or relationships, done either consciously or unconsciously. On the other hand, organizations tend to group around networks which offer network externalities which can not be achieved by individual persons or organizations and thus offering more and more benefits to the organizations members in the certain clusters.

On the other hand, the omnipresent tendency of humans to choose partners which are connected to each other, creating a clustered relationship structure is explained by the fact that humans have evolved cognitive mechanisms designed to capture benefits associated with multiple network externalities (S. Levine, R. Kuzban, 2008). This aspect is all the more relevant in the organizational context, where clustering among managers can also help or hinder the formation and growth of clusters.

In the case of individuals, we can almost always find structural patterns. On one hand, most actors live or have lived in areas where they are mostly connected to one another. In other words, in most large networks, a very large proportion of the total number of ties are highly "clustered" into local neighborhoods. On the other hand, at the same time, we can be at quite short distances to vast numbers of people that we don't know at all (R.A. Hanneman, 2005).

But given the behavioral differences between individuals which are not necessarily competitors and profit oriented companies, can we say that the rules and assumptions which have proved to be true in the case of social networks can be of the same importance in the case of company networks or clusters? The objective of the present paper is to analyze whether the principles and patterns identified in the case of social networks in previous researches can be applied to regional clusters and if these theories can be utilized by public policies to foster the development and growth of such clusters.

**A CONCEPTUAL AND EMPIRICAL EXPLORATION TO THE REGIONAL AND URBAN ECONOMIC RESILIENCE APPROACH AND ITS APPLICABILITY IN MEXICO**

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Resilience is a concept of growing usage within the Social Sciences, and relatively little employed in economics. In this discipline the literature on economic resilience is still limited and under construction. One of the areas where the concept has been applied is in the urban and regional studies. The regional-urban performance and macroeconomic development have traditionally been approached from the perspective of economic growth, productivity and efficiency but more recently there has been increasing theoretical and empirical developments around the economic resilience concept. This has been used to identify territories and sectors within a territory that are able to endure global and local economic shocks and disturbances without being affected, at least not in a severe form, which makes them greatly successful. In simple terms, economic resilience is the ability of cities or regions to respond to or recover from economic shocks.

This paper explores the relevance and pertinence of regional and urban economic resilience from the conceptual and empirical point of view. In the last three decades various structural changes have taken place in the world economy and in many countries. Territories at different scales became more exposed and vulnerable to different internal and external economic shocks due to the increasing openness, trade and investment liberalization, and deregulation. However the exposure and vulnerability to shocks and crisis have been uneven and so have been their effects. Recently, the economic landscape resulting from the 2008-2010 financial crisis has been asymmetrical and diverse. Some countries, regions and cities were hardly affected by the crises or recovered rather rapidly whereas others still suffer significant consequences on employment, investment and growth. Particularly, the fast and successful recovery of some particular regions strikes the eye and raises the question of what is behind this success. The economic crisis and recovery are at the core of several recent policy initiatives that set the framework for the territorial development and growth agendas. The objective of the paper will be, on the one hand, to discuss the usefulness of the economic resilience approach to analyse such processes, and to present a literature review on the topic, especially on what has been written in the Hispanic language in order to strengthen the systematic analysis of regions and cities under the economic resilience approach. On the other hand, the paper attempts to assess whether some guidelines that support policymakers at different administrative levels in making the economic structure in countries, regions and cities more resilient to economic crises and sudden economic downturns can be derived. Finally some empirical analysis on Mexican states will be performed. That is, in addition to the theoretical construction around the idea of resilience interest of this paper is to know the local impact of disturbances on employment, unemployment, productivity and investment, the interregional differences in the ability to prevent or respond to such events.

The orientation of the paper is towards evaluating an operational and conceptual approach in economic resilience in terms of its implementation for analysis, diagnosis and territorial management. At the same time contribute to the formation of an empirical literature, especially in the field of regional and urban economic analysis in Mexico.

**A NEW PROCEDURE TO MAP AND SET UP THE SPATIAL HIERARCHY OF SOCIAL PROBLEMS. THE SPATIAL PATTERN OF THE MEXICAN POVERTY IN 2010**

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This research presents and applies a new procedure to elaborate a spatial hierarchy of poverty. The proposed method simultaneously combines variables of magnitude and intensity based on recent (bootstrapping and spatial autocorrelation) and traditional statistical techniques, and overlay routines of Geographical Information Systems.

While magnitude and intensity refer to absolute and relative data, respectively, each variable may be concentrated or agglomerated in space. In this study, concentration is the presence of high global values, regardless of their location, and agglomeration is the concentration of spatially contiguous high local values. Both agglomeration and concentration are merged through a geographical overlay procedure to create conglomerates of magnitude or intensity of poverty. Cases inside these conglomerates are classified by gaussian (natural breaks) or paretian (heads and tails) procedures to set up a spatial hierarchy.

For the first time in the study of the spatial pattern of poverty, the resulting spatial hierarchy is based on the simultaneous combination of the concentration and agglomeration processes measured in relative and absolute terms. The benefits of the procedure for an area-based public policy are illustrated by assessing the spatial targeting of poverty in the 2,456 Mexican municipios in 2010. The suggested methodology in this research may be easily extended to identify other spatial patterns, such as crime, industry, diseases, pollution or environmental justice in different areas or countries.

*Innovation in 'ordinary' regions and 'boring' sectors*

## **IDENTIFICATION OF REGIONS WITH LESS-DEVELOPED RESEARCH AND INNOVATION SYSTEMS**

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Smart specialisation has become the new regional innovation policy paradigm in the European Union. This policy concept “is about placing greater emphasis on innovation and having an innovation-driven development strategy in place that focuses on each region’s strength and competitive advantage. It is about specialising in a smart way, i.e. based on evidence and strategic intelligence about a region’s assets and the capability to learn what specialisations can be developed in relation to those of other regions” (European Union, 2011, p. 7). A key question is if smart specialisation strategies are applicable to any type of regions. It has been argued that regions with less-developed research and innovation systems have a low potential to diversify into new industrial areas due to unfavourable economic structures and a weak organisational and institutional endowment (Boschma, 2014, Isaksen and Tripl, 2014). In addition to weak knowledge generating organisations, some less-developed regional research and innovation systems suffer from weak policy and governance capacities, which could curtail the effective use of Cohesion policy funds (Charron et al. 2014) and may form major barriers to the successful formulation and implementation of smart specialisation strategies (Rodriguez-Pose et al., 2014). The aim of this paper is to contribute to the debate on how to identify regions with less developed research and innovation systems. We look at both conceptual and empirical approaches that figure prominently in scholarly work on regional innovation systems. Based on a critical review and discussion of the literature we shed light on a large number and variety of barriers and weaknesses that may hamper regional innovation and industrial change. The paper shows that the regional innovation system concept can inform the current debate on the design and implementation of smart specialisation strategies. We review the conceptual debate on RIS, system failures, organisational and institutional thinness, knowledge bases and regional industrial path development and demonstrate how these concepts can contribute to identifying various types of regions with less-developed RIS. This offers rich insights into various dimensions of regional innovation systems that may be weakly developed and allows for the development of typologies that capture the heterogeneity of these systems. We also provide a critical discussion of empirical approaches to categorise less-developed RIS based on measurements of their innovation performance. It is shown that empirical approaches to identify regions with less-developed research and innovation systems fall short of taking account of the conceptual advances made in the recent past.

**KNOWLEDGE RECOMBINATION MECHANISMS AND REGIONAL BRANCHING IN CLUSTERS AND THE CLUSTER LIFE CYCLE: TWO QUALITATIVE CASE STUDIES ON EUROPEAN FOOD-RELATED INDUSTRY CLUSTERS**

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**Dominik Santner, CRIE, University of Bremen, GERMANY**

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In Evolutionary Economic Geography, recently, a brisk discussion on how new economic activities emerge and develop across regional diversification processes emerged. Two prominent approaches contributed significantly to this debate: the relatedness approach and the cluster life cycle approach.

The relatedness approach has shed light on regional branching processes (Boschma and Frenken, 2011) and on how regional innovation policy can influence them. The Evolutionary Economic Geography perspective argues that regional economies diversify over time through following a patch dependent process in which new sectors (and knowledge) spur from related sectors (and knowledge). To illustrate this process two closely related concepts are used in the literature: technological relatedness (Neffke et al. 2011; Boschma and Frenken, 2011) and related variety (Frenken et al. 2007). Related variety is a key to regional growth, because it induces knowledge transfer between related complementary sectors at the regional level. Furthermore, the branching process and industrial renewal can take place at regional level from four main knowledge-transfer mechanisms: spin-off activities, firm diversification, labour mobility and networking. The technological relatedness concept has provided additional insights to the question whether knowledge related (intra or extra-regional) linkages matter for regional growth: it is not inflows of extra-regional knowledge per se, but inflows of knowledge that are related to the existing knowledge base of regions that might be crucial.

The cluster life cycle approach (Menzel and Fornahl 2010) has helped to understand the evolution of the cluster and the role of the heterogeneous knowledge in its dynamics. It argues that cluster development follows a more or less ideal life cycle along different stages of development. The growth and decline of a cluster is seen as a function of the availability of heterogeneous knowledge to the agents of the cluster. This heterogeneous knowledge can cause incremental as well as radical change to the industrial structure of the cluster by recombination of existing and newly available knowledge. Cluster change may be the result of this process. However, the empirical validation of the cluster life cycle approach is still weak. Furthermore, it shows a significant weakness when explaining the detailed knowledge recombination mechanisms.

Our study aims at unveiling and understanding the mechanisms and contexts of knowledge recombination processes in the emergence stage as well as in the adaptation, renewal and transformation in the life cycles of a cluster within the regional diversification. In order to do so, we set out a framework of analysis that combines the approaches outlined above (i.e. related variety and cluster life cycle). We claim that such integrative framework can contribute to a better understanding of the dynamics of cluster emergence and evolution.

Our framework is empirically tested using two qualitative longitudinal case studies. The first case study explores how the Galician Turbot Aquaculture Industry in Spain has evolved over 30 years. This industry plays a key role in the domestic food security and the local economy of Galicia. Currently, Galicia concentrates more than 99% of the national production and the 88,3 % of Europe production. However, this leadership was possible through a set of activities in the emergence stage by the first entrepreneurs. These key agents had to face a lot of technological and knowledge gaps, they overcome these gaps with the knowledge recombination from the local related industries and activities. The second case study deals with the agricultural engineering industry in Western Lower Saxony, Germany. The industry co-evolved with a strong agriculture and food sector in the same region since the 1960's. As a result, incremental branching processes within the field of agricultural engineering sectors diversified the industrial portfolio of the cluster. Since 2000 the cluster experienced a more radical branching process into the field of biogas plant manufacturing.

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For several decades now, industrial parks have been installing in Chile, however, the results and impacts of these parks are not clearly known. This research explores the experience in the region of Biobío. This region is localized in the southern part of Chile and concentrates the second highest economic activity of the country after Metropolitan Region. To do so, this work evaluates if the localization of the companies in the three existing industrial parks in the region of Biobío has created extra profits due to clustering synergies. The methodology of this research consists in getting primary information throughout a survey which was sent to 138 companies in the three existing parks. This instrument was created based on a conceptual model that includes the existing literature which explores the benefits and impacts of clustering. The survey used as the instrument of this research measures two groups of variables which may express the benefits of clustering. The variables belonging to the first group were called processes variables. These variables don't necessarily reflect the benefits of clustering but when present they settle the seed which boosts the benefits of clusters and its future profitability. These processes variables are: cooperation, coordination, complementarity, communication, and competition. The variables belonging to the second group were called benefits variables and they include, among others: benefits related to the innovation, learning, specialization, economies of scale, and economies of scope. Finally, this work also assessed if the companies in the three existing parks in the region of Biobío perform some of the activities usually present in companies belonging to a cluster. In order to do so, the survey asked if the company performs any of 12 selected activities which evaluate results and concrete actions of clustering.

With the methodological instrument created for this research five work hypotheses were evaluated. These hypotheses were analyzed using non-parametric statistical analysis. The hypotheses are: H1: Companies' expectations regarding the benefits of clustering had not yet fulfilled. H2: There exist no significant benefits of clustering in the industrial parks in the region of Biobío. H3: Clustering processes are independent of companies' age- H4: Clustering results of industrial parks depend on how long the companies have belonged to the park. H5: The presence of subsidies or fiscal contributions has not driven a higher degree of clustering in the parks.

The results of this work enable to conclude that companies in industrial parks, despite of the years belonging to them, have not achieved significant processes that account for externalities driven by localization, clustering, or regular interaction between companies. The reasons for this finding are unknown. However, it is possible to make the assumption that one possible explanation is related to the heterogeneity of the companies in the parks. The companies in the parks are of different nature, some of them are motivated by the existing fiscal contributions and not necessarily by the benefits of clustering.

Notwithstanding the above, the data shows that companies which have belonged to the park for an intermediate period of time get better results than those just installed or those which have belonged to the park for longer. This is aligned with the theoretical background which establishes that clustering has a growing period, followed by a maturation period, and finally a decline in its performance. The data shows that companies with more than 12 years belonging to the park are in this last stage.

Finally, as expected, the existence of governmental subsidies or fiscal benefits have not had impact in the processes, results, or benefits of clustering. The explanation to this is related to the drivers of the companies that settle in industrial parks. It is probable that companies don't seek subsidies because of the benefits of clustering but for the opportunity of having lower costs. Besides, the companies using these benefits didn't have better or worse results than those which didn't use them. This shows that public politics have been focused on localization and not in achieving benefits ahead of the subsidy. This would explain why the companies after using fiscal incentives apply systematically to new fiscal benefits.



## **ASSESSING ARGUMENTS CONCERNING AN INDEPENDENTLY DEVELOPED AND ADMINISTERED PAN-AFRICAN JUSTICE SYSTEM TO ENFORCE HUMAN RIGHTS**

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What is the future of human rights protection through criminal and other forms of law enforcement across Africa, and how does this tie in with questions of African self-reliance and regional resilience? The development of human rights in Africa has been difficult and challenging. One such challenge is the perceived imposition of western standards and ideology of rights on the region.

This has often taken place without regard to African cultures and beliefs, as well as insufficient respect for countries' preparedness and capacity to incorporate these standards. What is the case for and against different types of an independently developed and regionally administered Pan-African justice system responsible for such human rights interpretations and protection? This paper will outline and then address the arguments for and against different possible models for region-wide legal recognition and enforcement of rights within a Pan-African context. This focus is important given the widely recognized shortcomings in the existing protection. For instance, the reliance upon purely domestic proceedings for enforcement, enforcement (a situation that could be compromised by incompetence, political instability and government interference). There is also the question of the perceived lack of credibility (stemming from, for example, claimed bias) of many supposedly "international" level bodies, including the International Criminal Court (ICC). This paper makes a contribution to existing wider debates over the future of regionalism with particular reference to pan-African regional arrangements for human rights protection. These aims will be discussed in terms of a proposed programme involving a combination of critical historical, doctrinal and comparative analyses of different institutional forms of human rights enforcement, culminating in the creation of a range of institutional reform proposals. These proposals will be subjected to self-critical analysis concerning their meaning, scope and viability in both principle and in practice, which includes identifying favourable and unfavourable preconditions for their successful implementation.

The proposals align with calls for a "multicultural" approach to reform the human rights regime. As part of this process, there is need to create a viable institutional human rights regime in Africa that is self-reliant and specially positioned to handle the peculiar situation of human rights in the region. This regime may choose to prioritise economic and social rights as a means of addressing the underlying causes of several regional conflicts on the continent.

As part of this regional development, an African criminal court could also be created to oversee cases of more serious violations. This apart from capacitating the region would avoid the allegations of western imperialism and bias (fuelled by no lesser than the AU itself) associated with the trial of African leaders at the ICC.

*Have Cluster-based Economic and Regeneration Policies Lost their 'Buzz'? Where are we Heading...and where should we be Heading with Regard to Cluster Research and Policy?*

## **CLUSTER POLICY VS POLICY IN CLUSTERS. RATIONALES AND CHALLENGES**

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In recent years clusters have become an object of fascination for academics and policy makers alike. The interest in clusters has been stimulated by the emergence of high-profile clusters such as Silicon Valley or industrial districts in Italy. Policy makers both in developed and developing countries have as a consequence actively tried to recreate similar experiences through implementing cluster programmes.

Despite the popularity of the term cluster and the widespread use of cluster policy, the nature of cluster policies and particularly their impacts are less well understood. The literature is mainly concerned with examining the advantages of clusters (Frenken et al. 2015), rather than constituting a direct assessment of

cluster initiatives (Duranton 2011). A gap therefore remains between the notable diffusion of the cluster 'model' and the little progress made with regard to learning in cluster policy making (Nauwelaers and Wintjes 2003).

A strong controversy indeed surrounds the capacity of the public sector to 'create' clusters. There is for instance a tendency to overstate the capacity for policy action in terms of the capacity to act on the right policy levers that cluster development requires. Furthermore, despite frequent exhortations about the need for adapted and context-sensitive policies, the mimetic adoption of recipes that seem to have worked elsewhere remains all too common.

This paper contributes to this debate by reviewing the main arguments underpinning cluster policy, recent policy experiences in supporting clustering in a number of OECD countries, the challenges associated with the evaluation of these initiatives and available evidence on their outcomes.

*Cross-Border (Research)/Regions*

## **INNOVATION AND SMES IN INTERREG POLICY: TOO EARLY TO MOVE BEYOND BIKE LANES?**

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Cross-border regions have been seen as laboratories for European integration. Here the people of Europe would meet and experience the benefits of European integration. To support and sustain this claim there has been generous funding for cross-border regions by the European Commission from 1989 onwards. At that time 14 cross-border pilot projects were initiated, soon followed by the first Interreg program in 1991 (OECD, 2013). The budget allocated to Interreg by the EC has increased ever since and at the end of 2014 the fifth Interreg funding period started with a total budget of 10.1 billion euros. The increase of funding for the Interreg program has gone alongside a shifting of priorities. The Interreg V program, especially in the northern European countries, is now for a large part directed at innovation and collaboration between SMEs and knowledge institutes. However, innovation is a complex and uncertain process requiring trust and cooperation capabilities which might not yet be in place in most cross-border regions.

Innovation is increasingly pursued in cooperation between companies and between knowledge institutes and companies. In order to spur their innovative potential and create economic growth, governments have put in place policies that stimulate cooperation amongst firms and knowledge institutes directed at innovation. This policy idea is now applied to cross-border regions. Yet, the question is whether this kind of innovation policy, focused on cooperating SMEs, is the most accurate policy for cross-border regions. Cooperation between firms for innovation requires the build-up of linkages; in order to cooperate you need to have a network of firms to cooperate with. It also requires the build-up of trust, as cooperating for innovation adds an extra dimension of uncertainty and risk to the innovation process. For most SMEs cooperation is already a rare phenomenon within their own region and nation-state, let alone cooperating cross-border for innovation. Focusing Interreg policy firmly on innovation and cooperating SMEs might therefore be too early. Most SMEs lack linkages across the border and, perhaps unjust, expect cultural, juridical and administrative barriers.

In this paper we seek to answer the question whether the focus of the Interreg V programmes is too quickly being focussed on developing cross-border innovation systems (Trippel, 2010), whereas cross-border linkages still have to be built up and nurtured. In the paper we analyse the development of the Interreg policies and compare it to the built-up and development of innovation connections in border regions. The comparison is made to the construction of bike lanes with Interreg funding, which is often seen as an example of what Interreg policies should move beyond. Whilst this might be true for infrastructure development in Northern European countries, for innovation connections, we seek to answer the question whether it is too early to aim for the construction of an integrated transport system when there is only a limited amount of bike lanes.

Empirically we explore this issue by using a case study of the Dutch-Flemish border region where cross-border contacts and cooperation have a long history. Cooperation for innovation in this border region is especially relevant, as it comprises the so-called Top technology region Eindhoven-Leuven-Aachen, established in 2004, which the OECD (2013; 228) sees as 'one of the most advanced European experiments in building an innovation-driven functional cross-border region'. We look at the development of Interreg policy in this region by using document studies, interviews with key partners and results from a recent case study on cooperating innovative SMEs in this region.

This empirical analysis provides the basis for a more general discussion on Interreg policy and the development of cross-border regional innovation systems (Lundquist and Trippl, 2011). While borders and border regions are being studied from a range of perspectives, there are only few studies taking innovation and innovation systems in cross-border regions as their departure point (Hansen, 2013). We aim to contribute to this discussion by providing empirical evidence of the development and policy efforts in a cross-border region where cross-border innovation is getting considerable policy attention. This helps to shed light upon the way that a cross-border regional innovation system might develop and the way policy makers can contribute to this.

*Economic Resilience of Firms and Territories A: Economic Determinants and Measurements*

## **REGIONAL RESILIENCE: STRUCTURAL DETERMINANTS VERSUS INTERREGIONAL DEMAND EFFECTS IN REGIONAL ECONOMIC GROWTH**

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The economic crisis in Europe that started with the banking crisis in 2008 and still continues into 2013 is characterized by interregional spillovers of (negative) growth. These negative growth spillovers make it difficult to analyze the performance of regions and thereby the effectiveness of regional investments to enhance a region's resilience and competitiveness. Competitiveness measures local conditions in location, economic performance and endowments for firms and industries but focuses less on network effects of trade that influence local growth opportunities. In this paper we want to distinguish between regional growth that is the result of an increase in demand in other parts of the world, and growth that is due to a change in structural factors strengthening a region's competitiveness and increasing its productivity.

Economic growth is in general equivalent to producing and selling more products and services. This economic growth can have two distinct sources. It can be due to economic growth and demand from other regions, or it can be due to internal factors raising productivity. These internal factors that increase a region's competitiveness result in a gain in the market share of this region. In the case we represent the total economy as a large pie the first source of regional economic growth is due to growth of the total pie, while the second source is due to a region gaining a larger share of the pie. The first source of regional growth cannot be influenced by the region as it is due to the independent growth of a region's export destinations. The second source of regional growth is due to structural factors inducing an increase in market shares and thereby the result of an increase in a region's competitiveness. These structural factors can be influenced by the region itself. Demand induced growth (or decline) is beyond a region's sphere of influence. In other words, a region may perform excellent but go into recession because of a lack in demand from other regions. Vice versa it may be the case that a region underperforms but still grows due to external factors. In this last case a region would underperform relative to its potential.

We propose a growth decomposition that provides region specific sources of economic growth in European NUTS2-regions for the period 2000-2010. We show that the decomposition can be done on the aggregate or industry, technology-specific level. We will illustrate the proposed decomposition method for heterogeneous sets of regions that are focus of EU and national policies: large urban versus polycentric and small regions, regions in Eastern Europe versus Western Europe and regions with technologically specialized versus diversified economies. First estimates show that regional development may be up to 75% dependent on

exogenous influences, suggesting much less room for local development policies as suggested by policy makers. We translate these outcomes to smart specialization strategies of regions, where “smart” may mean more network oriented than many policymakers expect.

*Europe 2020 Strategy and the Role of the Regions*

## **REINDUSTRIALIZATION AND MANUFACTURING IN HUNGARY**

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Specialization of regions and urban areas is one of the main sources of economic growth and development. The region, which is able to strengthen its key traded sectors, can achieve serious advantages in regional competition. An efficient approach to identify regions' key sectors is the cluster mapping, which is designed to reveal geographical concentration of dominant and innovative economic activities.

Between 2014-2020 in the EU, it is a high priority of regional policy making to promote smart specialization and reindustrialization. The change of global economy and economic shocks has made crucial to discover all the potential economic activities in regions that reach critical mass, have higher innovation capabilities and contribute to the development of regional competitive advantages. Among all traded economic activities, manufacturing sectors have become vital in Hungary. It promotes innovation, productivity and trade, generate economic growth and employment, and have increasing demand for services.

Therefore, present study aims at revealing how the manufacturing sectors changed over the time, from the EU accession of Hungary to 2010, when the impact of the global crisis can be demonstrated. We analyze the spatial distribution and the critical mass necessary for clustering of manufacturing subsections on the level of Hungarian city regions. Hungarian city regions reflect residential, business and labour relations. We follow but slightly modify the methodology of cluster mapping done by the European Cluster Observatory. We use data on employees, and we compare the results of two years, 2005 and 2010. The main conclusion is that Hungarian city regions have different developmental trajectory, and we might witness reindustrialization processes only in few less developed regions in Hungary.

*Critical Studies of Urban and Regional Development*

## **REPRESENT NEWLY CREATED TOWNS A WAY TO PROSPERITY?**

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After the collapse of the socialist regime, the spatial structure of towns in Romania has changed significantly in a very short period of time. In 2001, a new settlement network development strategy has been made, as part of the National Regional Development Plan by Law. nr. 351 of 2001. According to this, settlements are classified in six levels (ranks), ranging from 0. (Bucharest) to 5. (villages), based on five criteria. The law states also the requirements for a rural settlement to become a town (rank 3) among some concrete quantitative conditions regarding the number of inhabitants, and the economic, social and infrastructure situation.

After this act coming into force, in the next three years (but especially in 2004 by a general law), a total number of 46 rural settlements gained the town status, redrawing thus the urbanization map of Romania, and raising the urbanization level of the country by two percentage points, from 52.5% to 54.5%. This was the most intensive growth of the number of towns ever experienced in Romania.

Most of the newly created towns do not match the conditions stated by the 2001 law. Almost all the villages with a high number of inhabitants have been promoted to the rank of town without being functionally able to do that: the main characteristics of them are a not diversified economic structure outweighed by the third sector, rural features and serious infrastructure deficiencies.

After ten years of change in their status, it is worth to discover the results and consequences of these political decisions. This paper chooses as case study the towns created in the North-West development region of Romania (NUTS 2), in a number of 8, examining them from an economic point of view.

The research questions are:

1. What were the political reasons for this rural settlements being converted into towns? Have they been met?
2. Have the local economic structure changed towards a more urban shape? To a what extent has increased the percentage of industry and service sector and for a what rate are they contributing to the GDP? How has changed the amount of investments?
3. What were the new chances and opportunities for this settlements as urban ones (new programs, funding sources, applications)? Could they make use of this new opportunities? How is this reflected in the growth of their income?
4. What former opportunities and revenues had they lost by breaking away from rurality?

The issue addressed by the questions above is if these towns gained something in plus by progress in rank. Have they experienced a growth at least in their budget? Can rural conditions and contexts be changed by a simple law without a real content? What have change in the trajectory of development of this settlements? Do they develop faster now?

Very likely, the moving up the ranks by a political decision, but without a real base is not fruitful. Growth and development can't be artificially created. Neither by conceiving a town only on paper, nor by artificially increasing the urbanization rate of a region.

This latter remark is important from a regional development point of view. Urbanization is generally seen as the way from poverty to prosperity. In Romania, the urban-rural topic is of great relevance, because almost half of the population is living in rural areas, while urban-rural disparities are striking. Correlation coefficients indicate a close association between the GDP and the urbanization rate of the counties (NUTS 3), meaning that more urbanized counties perform better economically.

Here comes into view the urbanization of rural settlements. In the regional context, the question is if increasing the number of towns and thus the urbanization rate, could enhance the performance of the counties, and thereby the performance of the region? The assumption is no: the counties with forced urbanization have not experienced a faster growth than the others, urbanization has not represented a solution for the problem of underperformance. This relationships reveal the problem of the North-West development region: in spite of the high economic performance of its chief town Cluj-Napoca – the second largest city of the country after Bucharest and an absolute development engine of the region – the whole region performs moderately, ranking only fourth out of a total of eight within Romania. This inconsistency is attributed to the high inequalities between the six NUTS 3 levels of the region, and to the underdevelopment of the counties where the most of newly made towns are located.

The methodology used in this paper will be collecting data from local councils, analysing them over a period of 15 years (five before and ten after becoming a town), and making comparisons between the towns. The results will be than projected to the county and regional level as well.

*ESPON Session: Practical Tools for Analysis and Policy-Making*

## **A NEW MACROECONOMIC MODEL FOR EVALUATING REGIONAL POLICIES IN BELGIUM**

**Frederic Verschueren, IWEPS, BELGIUM**

This paper presents the key features of a multiregional macroeconomic model aiming at evaluating the impacts of aggregated policies decided at the regional level. It has been developed in the context of the sixth State reform recently implemented in Belgium. The two main decisions concerned respectively the transfer of a large block of powers from federal level to the federated entities and a major revision of the Special Finance Act (SFA). Three important fields of competence have been notably transferred to the regions: (i) employment policy (partially, including policy on target groups), (ii) mobility and road safety and (iii) tax reductions and tax

credits. Consequently this reform increases the fiscal autonomy of the regions while maintaining solidarity between the federated entities in order to ensure the long term sustainability of public finances. Surprisingly few tools are available to assess the economic and budgetary effects on Belgium of alternative policies that would now be taken at a lower level of governance. This is all the more important as Belgian regions exhibit differences in terms of growth performance, unemployment and structure of population while being highly connected through interregional economic flows and labour mobility. The purpose of our model, named PREVIEW for Policy and Regions: Evaluating the Impacts on the Economy of Wallonia (one of the Belgian regions), is precisely to fill the gap. The model is a macroeconomic model inspired by the Keynesian theory but also incorporating elements from the geographical economy. Firms and households are region-specific and behave as optimizing agents: the first ones minimize their production costs while the second ones maximize their leisure time. Constraints relate respectively to a fixed-by-demand production level and to the presence of a budget line which controls consumption. Regional production is mobile and can meet the demand expressed by any region. Labour is also mobile and interregional repartition of workers is explained by differentials observed both in time spent to commute and in wages net of travel costs. Data combine Belgian regional accounts, input-output tables as well as specific annual surveys. Regarding changes in regional implicit employer's contribution rates, first simulation results suggest that Belgian regions have much to gain by harmonizing their fiscal policy rather than triggering fiscal competition. Also, travel time appears to be a key variable to explain why some agents prefer to work in their region of residence, hence putting pressure on local unemployment. The PREVIEW model could be used to simulate a wide range of exogenous and policy shocks affecting regions, providing to regional policy makers a useful tool to conduct efficient macroeconomic policies.

*EU Regional Policy and Practice*

## **A PLACE-BASED STRATEGY TO SMART SPECIALISATION: THE CASE OF APULIA REGION**

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A debated policy issue is how to combine the excellence goals chased by Research and Innovation (RandI) policies and the need to reduce regional disparities as of the EU Cohesion Policy priorities. In other words, there is a tension between concentrating funds in core and well-endowed urban areas, in order to reach economies of scale and scope or rather favouring less endowed, peripheral and economically weaker regions, which could be less prepared to achieve excellence in innovation and research.

A way to address this trade-off between has been proposed by the recent smart specialisation approach. This approach admits the possibility for any region to generate innovation, by leveraging its own strengths and competitive advantages and selectively targeting its place-based RandI strategy on those economic activities in which the region can hope to excel. However, the conditions which could actually ensure a synergic relation between different policies aiming at enhancing European competitiveness, overcoming possible obstacles and tensions, still have to be explored.

This paper aims to provide some insights to understand how regional innovation policies can be effective in promoting both excellence and cohesion objectives in lagging behind EU regions. To this end, the case of the regional innovation system set up by the Apulia region (Southern Italy) over the past nearly ten years is presented. Since 2005, an integrated and long-term strategy for innovation has been developed by the regional government of Apulia. The overall goal of this strategy is to strengthen the research and innovation potential of the regional economy. Resources and efforts of large enterprises, SMEs, public authorities, universities and centers of research have been combined and concentrated towards a common long-term development objective of smart specialisation. The strategy, formalised in April 2009, is moving towards a full reshaping of the regional innovation system. Territorial dialogue is taking place in the context of a new and more effective governance system. Regional and local actors, who best know local needs, are capable to set up innovative solutions and design support instruments according to a user-oriented approach, and thus contribute to design and implement an effective innovation strategy. By incorporating research and innovation

issues within a wider regional development strategy fully tailored to regional needs and specificities, the case of Apulia shows that a place-based strategy relying on a coordinated and multi-stakeholder governance, offers the best guarantees to unleash regional development potentials. Although a number of relevant steps have been taken, tangible and conclusive results are still to materialise, and a lack of a proper evaluation system is a major weakness of the policy.

This paper critically describes elements of strengths and weaknesses of such a system to produce lessons learned of more general relevance.

*Role of Social Networks in Regional Development*

## **CONNECTIVITY APPROACH TO REGIONAL DEVELOPMENT AND INNOVATION POLICY. THE OSTROBOTHNIAN MODEL OF SMART SPECIALISATION**

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According to different regional innovation theories (regional innovation system theory, innovative milieu etc.) innovations occur in interaction within and between firms and between firms and other actors such as universities. Networks are necessary for innovation since they are a channel for co-operation, changing ideas and knowledge transfer in general. In order to understand the process of regional innovation, we must examine networks and the connectivity of actors in networks.

In this paper, we apply the triple helix framework of Etzkowitz and Leydesdorff (1998, 2000) in regional context and present findings of a study on connectivity between different triple helix actors (companies, universities and public organisations) in a Finnish region Ostrobothnia. The connectivity was analysed with the help of the dimension of proximity (Boschma 2005; Boschma and Frenken 2009; Torre and Rallet 2005). In this case we analysed institutional proximity (i.e. same vs. different helix) and geographical proximity (Ostrobothnia/other parts of Finland/world) of the partners of the triple helix actors in Ostrobothnia.

The connectivity approach in studying regional development and innovation was developed in the context of smart specialisation strategy in Ostrobothnia. Smart specialisation is a new growth strategy within the EU that can be characterised by regional level entrepreneurial discovery, identification and development of cross-sectoral activities, selection and prioritisation of the activities under development, and experimentation. (Foray et al. 2012; Foray 2015.)

In Ostrobothnian model of smart specialisation, the dynamics of the network was analysed with the help of gap indexes between expectations and experiences concerning a group of relationships. These indexes provide information about the bottlenecks and good solutions among the relationships of the actors. A detailed questionnaire was prepared and tested, and 53 interviews were conducted in the autumn of 2013.

The major finding was that the innovation system in Ostrobothnia is business oriented and relatively well connected. The relations are asymmetric: companies mostly have connections with other companies and both the public and university sectors rely more on the companies than on their own sectors. The networks in Ostrobothnia are locally embedded and cohesive, so gaps are relatively small. The analysis shows that universities and energy technology companies in particular are well connected through their regional triple helix. Almost half of the partners in technological development come from the region, and there is a shared regional technology platform between the universities and the companies.

The Ostrobothnian model of smart specialisation is a development tool that can be used in smart specialisation planning across the EU. The model consists of surveys, gap analysis, focus group meetings, policy measures and evaluation followed up by a repeat of the procedure. The gaps are identified, and policy measures are suggested to bridge the gaps, create new links and strengthen the weak ones.

**RHETORIC VERSUS REALITY: EXAMINING NEW REGIONALISM IN RURAL CANADA**

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'New Regionalism' emerged in the 1990s as response to failures of previous approaches to development and in the face of a changing political and economic context and related challenges such as increasing global competition, budget cuts, government withdrawal and eroding capacity, and widespread environmental degradation. New processes and institutions were introduced, with a focus on regional assets and competitiveness, learning and innovation, and new patterns of local governance involving enabling roles for governments and the recognition and mobilization of regions within multi-level policy networks. New regionalism has been criticized for focusing on metropolitan and model regions, having little to say about rural peripheries.

The presentation will highlight findings of a four year empirical assessment of Canadian regional development policy and practice, particularly evidence of new regionalist ideas within this policy and practice over the past two decades. The project used a multi-level, mixed methods case study approach. Conducted in four provinces and five largely rural regions, the study utilizes an analytical framework centred on five key new regionalist themes: place-based development, governance, innovation and knowledge flows, integration, and rural-urban relationships. Methods included a review of published literature and related government and non-government reports, field observation and experience, and over 100 interviews with key respondents.

Our findings suggest that elements of the reported new regionalism paradigm can be seen in Canadian regional development in recent decades. We also identify, however, a significant gap between the expectations, theorization and in some cases rhetoric of new regionalism and policies and practices on the ground. Empirical evidence of new regionalism is uneven and partial. Integrated approaches were largely lacking, for example, with a focus on innovation and infrastructure for economic growth rather than well-being and quality of life drawing from diverse rural assets. Further, we found limited collaboration across and within levels of government or evidence of policy co-construction. While identity plays a critical role in fostering regional development processes, it remains largely emergent and/or is actively resisted within our research sites and is therefore its power as a significant force for place-based regional development is diminished. Some attention has been paid to increasing rural-urban relationships, however with a focus on city regions (consistent with trends globally). This raises questions about the nature of these relationships and the future of rural communities seen as lying in the shadow or in service of urban growth centres, and is particularly troublesome for communities that lie outside of rural-urban commuting zones. Yet examples of innovation and mobilization illustrate the potential for regional partnerships and the value of supportive rural development policies. Implications for both policy and research and the claims associated with new regionalism posed by the analysis and conclusions from this research will be explored.

**REVERSE KNOWLEDGE SPILLOVER FROM LOCAL TO FOREIGN FIRMS IN CHINA: FIRM OWNERSHIP AND PRODUCT INNOVATION OF FOREIGN FIRMS**

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In recent decades, literature on trans-boundary knowledge flows has primarily focused on how local firms can benefit from foreign firms in emerging economies. However, the issues on whether and under what conditions foreign firms are able to enjoy knowledge spillovers from local firms in developing countries are largely unknown. In this study, we argue that reverse spillovers from local to foreign firms operating in China depend upon localized ownership structure of firms. With China's rapidly catching up, innovative performance of foreign firms can be improved by receiving knowledge spillovers from local firms, but the influences of local



firms are varied by different types of ownership. Based on a large-scale firm-level database, this study revealed that while state-owned firms positively affected product innovation of foreign firms, collectively-owned firms exerted no significant influence and privately-owned firms even produced negative influences on innovation of foreign firms. Moreover, the more diversified a region's ownership, the more innovative a foreign-invested firm would be. These findings cast doubts over the under-socialized research on the process of knowledge flows across borders and call for more studies on the social dimensions of inter-firm knowledge flows.

*Culture and Creativity as a Driver of Regional Development*

## **MEASURING REGIONAL HUMAN CAPITAL AND CREATIVITY IN 289 NUTS REGIONS – EFFECT OF NON-COGNITIVE SKILLS (VALUE ORIENTATIONS) ON REGIONAL GDP**

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During the last few decades the focus of urban development literature has been fixed on creativity. As Jamie Peck puts it "Creativity is the new black". The origin of this hype is often traced back to writings of Richard Florida suggesting that human creativity has become the primary engine of twenty-first century economic development. Even though these arguments have landed well at policy makers and urban leaders they have not have not gone unchallenged in academia and the debate of on urban creative policies has been sometimes heated. However it has also been repeatedly noted that too much effort has been put on arguing about the originality of floridian thesis, and neoliberal agenda embedded in the creativity strategies and at the same time the main point has been missed: a justified call for better measures of human capital and creativity.

This study aims to respond to this call. It implements the measures of universal human values included in the 6th round of European Social Survey (ESS) in order to predict economic outcomes in 289 EU regions. The universal human value scale in ESS is developed by Shalom H. Schwartz is the most commonly used measure of value orientations among social sciences. Schwartz has determined ten types of universal values: achievement, benevolence, conformity, hedonism, power, security, self-direction, stimulation, tradition, and universalism. As value orientations work as a motivation affecting individual behavior and choices, the theoretical framework of this study assumes that some of the values could be linked to human capital, creativity and entrepreneurial culture and thus carry economic importance. Out of the values listed above the values achievement, power, and self-direction are the ones which in aggregated form are assumed to shape the 'people's climate' at regional level and result as economic outcomes. We test this hypothesis with dataset of 289 (NUTS) regions in Europe, containing register data also on intramural RandD expenditure, employment rate and share of population with tertiary education. As the dependent variable in this analysis we use the broadest estimate of economic activity, regional GDP, and thereby are also interested to know how much of the economic performance (GDP) of regions is explained by creativity (values of achievement, power, and especially self-direction) of their population. In this cross-sectional analysis we are able to control for the objective economic indicators (RandD expenditure, employment and educational attainment) and also for the spatial autocorrelation of NUTS regions through the procedure of spatial filtering.

The empirical analysis shows that while most of the aggregated values (especially security and tradition) are negatively related to regional GDP the value orientation of self-direction a superior predictor for regional GDP. The value orientation of self-direction is linked in Schwartz value theory with individual motivation for independent thought and action, choosing own goals and creating and exploring. While controlling for conventional measures for economic activity this variable accounts a significant share of the total variance in regional GDP and outperforms also the objective measure of human capital and creativity; educational attainment.

## **THE RESILIENCE OF BERGAMOT FARMERS IN THE REGGIO CALABRIA PROVINCE OF SOUTHERN ITALY**

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Bergamot is a citrus fruit with more than 90% of the global production coming from the Reggio Calabria province in southern Italy. It is used almost exclusively as an essential, high-quality fragrance ingredient. Reggio Calabria is one of the poorest provinces within the European Union and experiences high unemployment. This situation has worsened in recent years as a result of the global economic crisis.

A study was carried out to examine the impact of the stability that has occurred in the bergamot market in the past six years as a result of the reform of the bergamot value chain. The study took two approaches to evaluate the impact, based on a survey of representatives of some 326 households who produce bergamot.

Firstly, the results of the study were analysed to examine what the reported impact of the changes were, *inter alia*, on farm profitability and on its contribution to the household income and intention to invest. The second and major purpose of the study was to attempt to quantify these impacts. To do this, the concept of livelihood resilience was applied to measure the impact of the stability of the bergamot market on the ability of households to cope with economic challenges.

Subsequent to extensive literature searches, the adaptation of the approach, development of a bespoke questionnaire, research in the region and the training of a team of interviewers, 326 interviews were conducted with representatives of households that produced bergamot and were registered at the Consortium of Bergamot of Reggio Calabria. The interviews were carried out in three interview centres across the province in March and April 2014, using a CAPI-adapted technique.

The analysis of the responses to the questionnaire identified that there had been an impact on the households involved in bergamot production. In the seven-year period under consideration, the number who reported that they could live exclusively from their agricultural activities increased from 15% to 26%. Over the same period, the number reporting that their farming activities were profitable increased from 30% to 71%. In addition, 73% of those interviewed had a positive or very positive view of their future in agriculture and 83% declared the intention to expand their bergamot production. It should be noted that these positive changes and outlooks are in the context of the worst recession in decades. Critically, almost 70% have seen their income increase by between 32% and 35% in the seven years to 2014. This is against a real income decrease for Italy as a whole of 13% between 2007 and 2013, as reported by the International Monetary Fund.

In terms of the resilience-based approach, seven components of resilience were identified. For each component, a range of observable variables that characterise households and their 'behaviour' were selected: Economic Connectivity (EC), Agricultural Assets and Technologies (AAT), Non Agricultural Assets (NAA), Access to Economic Resources (AER), Social Networks and Information (SNI), Household Structure (HS), and Human Capital (HC). These seven components (latent variables) were calculated from the observable variables using a stand factor analysis with appropriate criteria to determine significance. These, in turn, using a similar approach, were combined to give one overall resilience index. A number of tests were carried out to check and, ultimately, confirm the robustness of the approach.

The study demonstrated that bergamot production under stable market conditions provides an opportunity to diversify income sources and obtain additional income for the entire household rather than solely for individual family members. Bergamot production was identified as both being more profitable than other crops and contributing to farmers' resilience by increasing their access to networks. The market stabilisation which occurred in the last six years has provided additional security to the bergamot growers' community and has notably increased their livelihood resilience.

As resilience is a context-based approach, the role of bergamot production in the resilience building process was determined via simulating, using scenario-based approach to measure the impact of bergamot on the resilience of the entire sample and on various sub-groups. This analyses showed that if the cultivation of bergamot were no longer carried out it would induce a decrease in producers' resilience by 21%.

The newly-introduced concept of resilience in the socio-economic context appears promising for further research as it can yield data on current status, on what has been achieved to date and on how to optimise future interventions both in developing and more developed regions.

*Role of Institutions in Regional Development*

## **PARTICIPATORY URBAN GOVERNANCE AS AN INNOVATION FOR FURTHER DEVELOPMENT OF POLISH CITIES (?) – TRENDS, PERSPECTIVES, RECOMMENDATIONS**

**Aldona Wiktorska-Swiecka, University of Wroclaw, POLAND**

The importance of transformation in urban governance as a necessity nowadays is widely recognised for its significant effect on the quality of life and strengthening of democratic legitimacy. As such, efforts to build and/or improve participatory governance are crucial for the further development of cities looking for innovative ways of development. Participatory governance implies a need for more scope for participation within the relationships between citizens and public authorities. This concept has been often considered as a way of making authorities more accountable and more responsive to the needs of different groups of stakeholders on local level. An important prerequisite for the successful longterm urban development is the knowledge of city users' perceptions of the attributes of the participatory governance. Polish cities offer today dynamic social and cultural experiences, chances of interactions with diverse groups, creative, intellectual as well as political milieu. On the other hand, still poor – although growing - economy, migration, social polarization and socio-spatial inequality are among some of the challenge cities face today. That's why it is worthy to explore, what strategies do urban users use to maintain and strengthen the ties within and across communities, what strategies do they use to cope with exclusion, displacement, borders that separate and unite, or gender and class inequalities. Further questions, that can be answered in this context, link to how do urban policies shape opportunities in future and constraints for different groups in cities.

The proposed exploratory paper seeks to present the idea of participatory urban governance - both their theoretical foundations and empirical dimension. It provides a research tool for examining participatory urban governance in Poland. The discussion about will be preceded by an overview of the existing body of literature and research conducted so far on this subject. Subsequently, the author proceeds to point out doctrinal sources of pursuing innovation in public governance: theories of democracy, civil society, knowledge, social capital and networks. She defines the participatory urban governance as a concept, at whose root, there is the construction of new relationships between citizens and public authorities in the cities. She uses this term for one aspect of this citizen–public authorities relationship on a local level, which encompasses the institutions and processes, both formal and informal, which provide for the interaction of the state with a range of other agents or stakeholders affected by the activities of government. Thus, it includes not only government institutions but also the wider set of organizations that influence the local processes. Thus, participatory governance is about making public development more inclusive and as a result more effective.

The paper aims to juxtapose the assumptions made for the idea of participatory urban governance with the institutional praxis. Additionally, they will be confronted with local stakeholders within an exploratory survey conducted for this paper. The latter will be designed to capture the components of understanding of participative urban governance held by a convenient sample of potential users of the cities. To do so, the author proposes a three-part analytical model for examining participatory urban governance in Polish biggest cities. It will be helpful in answering of following research questions: What are the benefits and barriers in implementation of the idea of participatory urban governance in Poland? What are main tools and methods? Are their implementation into institutional practice efficient? Do they support and strengthen public participation in urban governance? The paper will examine the emerging forms of the participatory urban governance with particular attention to participatory budgeting in Polish cities, which is one of the most

popular tools used in everyday reality in researched cities. The participatory budgeting can be considered as one of the most significant innovations in democracy and local development. In this aspect, following case studies will be presented: Sopot, Łódź, Warszawa and Wrocław and confronted with the idea of public participation with particular attention to assumptions of the idea of participatory urban governance.

The paper will close with conclusions and general recommendations of perspectives of participatory governance for the future of cities.

*Sustainability - Climate Change, Environment and Energy*

## **CITIES AND CLIMATE CHANGE IN AFRICA**

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Climate change and its potential effects are increasingly important concerns to the scientific community, governments, international organizations, and exposed populations around the world. No region of the world is unaffected by climate change but residents of urban areas in Africa are particularly vulnerable. This vulnerability stems from high rates of urbanization coupled with poor urban planning, gaps in public services and infrastructure, settlement in hazard-prone areas, and high levels of poverty, illiteracy, and poor health but also to low adaptive capacity and high vulnerability to climate related hazards such as flooding, drought, and sea level rise.

This chapter examines the capacity of governmental systems, with an emphasis on large cities in Africa, to prepare for and respond to climate change and increased exposure to climate related hazards, especially urban flooding, sea level rise, and water scarcity. The chapter is organized around two primary questions:

1. How will the consequences of future climate change affect people living in African cities and what determines the vulnerability of these exposures?
2. How does the development of initiatives to build urban resilience to climate change vary across urban areas and what factors explain the variation?

Local government plays a key role in developing resilience and addressing urban vulnerabilities through the provision of local infrastructure and public services, promulgation and regulation of land use and building codes, and other local services. While many countries have developed, or are developing, national climate adaptation plans, efforts to address adaptation at the local level are frequently challenged by a lack of collaboration between multiple local government jurisdictions with limited capacity. The chapter adopts a comparative case study approach based on field research on the governance systems in a set of African cities: Accra, Alexandria, Cape Town, Casablanca, Dakar, Dar es Salaam, Johannesburg, Kampala, Luanda, and Maputo.

*EU Cohesion Policy*

## **FINANCIAL INSTRUMENTS IN EU COHESION POLICY: WHAT DO WE KNOW ABOUT THE REGIONAL INCIDENCE OF FINANCIAL INSTRUMENTS AND WHY MIGHT IT MATTER?**

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**Rona Michie, EPRC Strathclyde University, UNITED KINGDOM**

The 2007-13 planning period saw a new and significant emphasis on the use of so-called 'financial instruments' as measures to implement Cohesion policy. This was justified on the basis that such instruments are sustainable (because funds are recycled to be spent again in the same region), that they generate better quality projects (because funds have to be repaid and commercial expertise can enhance project selection) and that they are a more efficient use of public funds (because private sector monies are leveraged in to supplement public spending). For 2014-20, the emphasis on financial instruments is reinforced, but against the

background of rather little information about how such instruments have performed in 2007-13, and arguably even less understanding of patterns of commitment, spend and investment at the subnational level. These patterns have potentially important implications for regional development: scholars have long recognised that financial systems are inherently spatial, with a tendency for access to finance to focus on the more prosperous regions, typically to the disadvantage of peripheral rural economies. Do patterns of spend on Cohesion policy co-financed FI exacerbate or offset this tendency? Patterns of FI spend also have implications for the capacity of FI to deliver on their stated objectives – for example, the objective of sustainability depends on monies being committed to FIs, paid to funds or instruments, invested in final recipients and repaid. The extent to which each of these stages is fulfilled directly affects legacy funds available to reinvest in the region. Against this background, this paper provides a preliminary analysis of the regional incidence of Cohesion policy FI spend as a first step to exploring some important issues in the relationship between access to finance, regional disparities and the role of FI in Cohesion policy.

*EU Regional Policy and Practice*

## **KNOWLEDGE BASED MANAGEMENT? THE USE OF EVALUATION RESULTS IN POLISH AND SPANISH REGIONS**

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Regional operational programs (ROPs) financed to a great extent within European Union (EU) cohesion policy (CP) have become a crucial tool to boost up development of regions lagging behind. The shape of the ROP - supporting areas, potential beneficiaries, implementing institutions - should be consistent with the nature of the particular region. It should support changes in the unfavorable socio-economic structures, mitigate backwardness, strengthen region's potential and consequently accelerate development. ROP's assumptions in most cases are prepared by the region's authorities and - after approval of the European Commission - the region's authorities are responsible for the management of the program proving correct implementation and achievement of the expected results. One of the tools to assist the region's authorities in effective and efficient implementation is the evaluation, which aim at providing the decision-makers useful information (knowledge) on program's implementation process and results.

In this paper we present the result of the first cross-state comparative study on evaluation activity and the actual use of evaluation results by regional authorities in Poland and Spain. There are few premises that lie behind the choice of these particular countries. First of all, the critical moment which spurred development of the evaluation of regional public policy in both cases was accession to the EU, as well as the fact that the regions of Poland and Spain became the greatest beneficiaries of CP (Toulemonde 2000; Summa and Toulemonde 2002). Second, although the evaluation requirements concerning operational programs implemented under CP are equal for all countries, the development of evaluation practices in this field in Poland and Spain has been completely different: while in Poland a vast number of studies were carried out, Spain remains at the end of the EU members evaluation activity ranking list (Olejniczak et al. 2011). And finally, the selected countries adopted a similar system of implementing regional policy, leaving the regional authorities significant autonomy in preparing and managing their regional operational programmes (ROPs).

In our study we decided to examine to what extent the differences in evaluation activity observed at the member state level are also present at the regional level, with respect to implementation of ROPs. We also concentrated on identifying factors that determine the evaluation activity of authorities executing ROPs in the studied regions. Furthermore, we found it crucial to examine whether differences in evaluation activity translate into the degree of utilization of evaluation findings, and therefore may be considered as a factor influencing the effective management of regional programmes and, in consequence, regional development policies.

The results show that even though evaluation activity in studied regions differs, no significant distinctiveness in the use of evaluation findings exists. We conclude that both Polish and Spanish regions need to adopt strategies for better use of evaluation as a source of usable knowledge and reflections in managing regional development programs.

## **COMMERCIALIZATION AND TECH TRANSFER POLICIES AND INTELLECTUAL PROPERTY REGIMES IN CANADA**

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Universities occupy an increasingly central place in the knowledge creation and dissemination mechanisms of the knowledge-based economy. While the main research role of universities has traditionally been seen as the performance of basic research, they have come under increasing pressure in recent years to expand this role and play a more central role in the commercialization of research results. At issue is the changing nature of the relationship between the universities and the broader innovation system in which they are embedded, as well as the changing nature of the research and development process within large corporations. This paper begins with a survey of the range of federal and provincial policies that have been introduced in Canada to support university-industry partnerships and promote knowledge transfer between the two sectors. It reviews the nature of the IP policy regime in Canada and underlines the extent to which Canada has a highly decentralized IP regime in which virtually every university is free to determine its own IP policies. Finally, we provide a more detailed review of university tech transfer practices in Canada through a closer examination of four case studies of the role of the university tech transfer office and the broader IP policies at some of Canada's most research intensive universities. We conclude with a discussion of some of the unique institutions that have been created to promote commercialization and tech transfer in Canada.

## **RURAL DEVELOPMENT THROUGH TOURISM – AN AREA OF CONFLICTS. CASE STUDY**

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Rural areas – in opposite to urban ones – have never been seen as a driver for regional development. However, it does not mean that they do not seek their own ways of achieving economic goals so as to be independent of cities and not considered “subsidiary” to them.

Research has shown that in Poland a large majority of local self-governments while building their development strategies perceive tourism as a chance to find their “own” way and – further – to boost local economic growth, regardless of their factual tourist attractiveness. Needless to say, rural areas see their tourist values via the natural components of the environment. The commonness of this way of thinking and acting efface the problem of conflicts that result from human intrusion to the environment. One important issue, still not discussed enough in Poland, is the economic account of the local development through the tourist use of the natural values of the rural area, i.e. there is still a shortage of attempts to answer the question whether it is justified to “sacrifice” the environment for the purpose of the development goals when the number of possible solutions is limited.

Another issue still not well-realised by the local actors is the fragility of the natural environment. In this context, local components of large natural systems are threatened with destabilisation and breakdown. In the conditions of the decentralised systems, they are the local entities (self-governments) which are responsible for environmental protection, social and economic development and spatial planning. However, at this level, the self-governments seem to suffer from a shortage of knowledge and skills.

An in-depth case study, constituted by research and empirical observation, was conducted in one of the village in Poland (Mstów, the Śląskie Voivodeship) which possess a high value of the natural environment, whose area is a part of the regional and national environment structures, whose local authorities are very active on the field of the development of tourism and – since being close to the city – is rapidly being built-up due to the outer suburbanisation process.

The aim of the work was to answer the following questions: 1) How should rural self-governments build their development strategies if willing to take advantage of tourism? 2) How should they achieve the balance between the economy and the environment? 3) Should they look for alternatives? 4) How to make the entities aware of the conflicts of interest?

To answer the above-mentioned, the author developed and elaborated the maps of: 1) the natural environment structure, 2) the environmental threats, 3) the usefulness to building development, and 4) the predicted intensity and spatial directions of land development in the future, basing on a modified Monte Carlo method, and used: 1) the village tourist map and 2) the map for the study of conditions and directions of spatial management, which an obligatory, "referring" and strategic spatial development document in Poland.

The author states that on the one hand the environment should not be considered priority if the development of tourism is a real and achievable way of increasing the local economic growth, but on the other hand a kind of a binding document regarding the environment must be introduced as an act of local law. The balance can be kept only if being supported by bottom-up and system solutions.

#### *Role of Institutions in Regional Development*

### **LABOUR TRAINING AS A CHANNEL TO TRANSFER NEW INSTITUTIONS INTO HOST REGIONS? EXAMINING THE DETERMINANTS OF MULTINATIONAL ENTERPRISES'S INVESTMENT INTO FURTHER TRAINING OF EMPLOYEES IN VIETNAMESE SUBSIDIARIES**

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Many emerging economies from the Global South have introduced political reforms during the last decades in order to achieve a prosperous long term development. While shifting towards a market economy, they are undergoing a fundamental transformation process of their institutional settings. Institutions consists of three pillars which can be distinguished by regulative, normative, and cultural-cognitive elements which together comprises institutions (SCOTT 2001:48). A good example of such an emerging economy which is struggling with institutional changes is Vietnam which has been accumulated massive FDI since the introduction of the 'Doi Moi' reforms in 1986.

However, whether such initiated reforms will result in long term economic growth is deeply influenced by a society's stock of knowledge and its ability to offer an institutional infrastructure which reduces transaction costs (NORTH 2005). Since learning is the major determinant for the rise of new institutions, investment into education can significantly contribute towards a country's transformation process (NORTH 1998).

For instance, Vietnam needs to transform its labor market and education system in order to equip upcoming graduates with those skills which have been increasingly demanded by the industry, in particular by MNEs. Nevertheless, Vietnam is facing a huge mismatch on the labour market: Graduates from public schools and universities have not developed modern soft skills like problem solving, critical thinking or working in a team, and they are lacking of practical experience (THANG/QUANG 2007; DUOC/METZGER 2007). Hence, MNEs have to retrain most of their new employees both on general soft and communication skills but also on the corporate-specific culture. For instance, Japanese MNEs train new technical employees on country-specific business elements like PDCA, 5S or Kaizen while white-collar labours learn more about Kaizen (continuously improving processes), Quality control systems or leading skills. As a side-effect of these training investments MNEs can induce a renewal of institutions in their subsidiaries' host environment, (DUNNING/LUNDAN 2008; OZAWA 2005). Furthermore, broader spillover effects might occur in the host regions if employees, who have been trained by MNEs, bring their acquired knowledge about normative and cultural-cognitive elements to their new employers (BLOMSTRÖM/KOKKO 1998; MEYER 2004; SPENCER 2008). In the case of Vietnam, more than one third of all employees, who had been trained by MNEs in 2010, left the company after one year (PCI Report 2010:75), causing a brain-drain towards higher paying employers (COX/WARNER 2013:185).

As a result, this paper will focus on the type and extent of vocational training by MNEs in Vietnam. Although the transfer of organizational routines within MNEs and their subsidiaries have already been intensively discussed, the majority of existing literature has neglected multilevel determinants which might equally affect knowledge transfer within the network of a MNE (MICHAILOVA/MUSTAFFA 2012:390). In particular, determinants on different geographical dimensions such as the institutional distance on the national and the institutional environment on the regional level might not only impact a MNE's strategy related to its mode of entry into a new market, but also on its extent of investment on vocational training.

Therefore, this article will provide new insights, by examining to what extent the institutional distance between the home and host country, the educational systems in the host regions, and firm-specific characteristics have an impact on a MNE's investment into training of its employees in Vietnam.

The paper is structured as followed:

After the introduction chapter two presents a literature overview about Vietnam's outdated socialistic education system, summarizing the causes of the skill mismatch on its labour market between.

Chapter three provides the theoretical framework which bases on the concept of institutional distance and New Institutional Economics with a spatial perspective, thereby deriving our hypotheses that host region characteristics might have an impact on a MNE's extent of on the job training.

Chapter four presents the methodological approach. Using data from Vietnam Census Vietnam, data based on a FDI survey of the Provincial Competitiveness Report working group, and from Hofstede's national cultural dimension index, will allow as us to evaluate to what extent a MNE's investment into vocational training is influenced by region-specific institutions like the quality of public schools and vocational training centers as well as by the institutional distance, expressed by the normative and cultural-cognitive pillars of institutions, between home and host country compared to firm level characteristics such as financial performance or firm size. Taking into account all data, our analysis is based on a sample size of 900 MNEs across ten Vietnamese provinces. The final chapter summarizes the results and limitations and provides potential direction for future research.

*New Global Dynamics in Manufacturing and Services Relocation*

## **CHANGING DYNAMICS IN THE CROSS-BORDER PRODUCTION NETWORKS OF TRANSNATIONAL CORPORATIONS: RELOCATION OF HONG KONG AND TAIWANESE MANUFACTURING IN MAINLAND CHINA**

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The global production networks (GPNs) perspective in economic geography, especially its focal concept of "strategic coupling" has been widely applied to regional studies in the era of globalization. The 2000s, especially the aftermath of the 2008 global financial crisis, has witnessed changing dynamics and dramatic restructuring of the GPNs; the effects of which on regional evolution have, however, been understudied. Echoing to the recent plea for conceptualizing the types, degree and depth of strategic coupling in the GPNs framework, this paper postulates that regional trajectories have been reshaped by the transition from strategic coupling to recoupling and decoupling, as a result of spatial relocation of manufacturing transnational corporations (TNCs) in diverse host regions in China. Based on updated field investigation and in-depth interviews, this paper examines and compares the distinctive transformation of the cross-border production networks driven by Hong Kong and Taiwan-based TNCs, particularly their divergent engagements in decoupling from source regions in coastal China, e.g. the Pearl River Delta and recoupling with the inland provinces, such as Sichuan and Hubei. Particular attention is paid to the changing power relations among TNCs and concerned regions with the emergence of key supplier-led domestic market-oriented production networks in China. Through developing an evolutionary framework on strategic coupling, the paper puts forward pertinent topics on the research agenda to explore dynamic interaction between GPN restructuring and regional evolution in the contemporary global economy.



## **HOW MUCH RURAL SURPLUS LABOUR EXISTS IN CHINESE WESTERN AREAS FROM 1991 TO 2000**

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This paper aims to calculate the number of rural surplus labour in Chinese western areas based on three different methods. Though in past thirty years, labour issue is a very popular issue in Chinese academic research field, there exist two problems. The first problem is most of present studies focus on labour issue in middle and eastern China, there is very little studies on rural surplus labour in Chinese western areas. China' middle and eastern areas have much better economical condition, and traditionally play key role in China's development. Therefore middle and eastern China is always main research centre in academic field. However, since 2000, the population' structure is changing and China' western areas plays more important role than before. There are thirty four provinces totally in China, of which eleven provinces were grouped in western areas both by politically and geographically, and they are denoted by their abbreviation as SX,GS,QH,NX,XJ,SC,YN,GZ,XZ,GX,NMG in this paper. The second problem is there is no consensus on how many surplus rural labour exists in China now. Therefore, this paper is try to shed light on how many rural surplus labour exists in China's western areas. For exploring the changing trend, we study this subject in the time period from 1991 to 2010. The data used in this paper are based on China Statistic year book, eleven provinces' province statistic year book, China labour statistic year book and public data obtained from research institution and government. Three different methods were used in this paper to calculate the rural surplus labour. They are the classic model, the new-classical model and the international standard structure comparison method. This paper compares the results of these three different methods to obtain the changing trend of rural surplus labour in China' western areas.

The main results of this paper are, (i),all of the three methods show, from 1991 to 2010, the rural surplus labour in Chinese western areas is increasing slowly, in 2010, the number of rural surplus number in China' western area is approximate 60 millions. Large amount of rural surplus labour would make great pressure on local labour market and other social governance. Especially the labour market in China' western area is not so mature as eastern area, so the employment of rural surplus labour is big question for local government. (ii),in classic model and international standard structure comparison model, only between 1994 and 1997 the total rural surplus labour is decreasing a little. This may related with economical reform policy, many rural labour decided to migrant to middle and eastern Chinese provinces. So in this period the labour number in western areas is decreasing. (iii), the number of rural surplus labour and the proportion may not have same trend. From the perspective of number, the Sichuan province have much more rural surplus labour than other provinces, but considering the proportion of rural surplus labour, rural surplus labour' proportion of other provinces is much higher than Sichuan province. This paper also shows when use different method to calculate rural surplus labour, the different method would affect the result, so it should be very careful when use different methods to calculate the rural surplus number. This paper also obtain rural surplus labour' number of all the eleven provinces of every year from 1991 to 2010, for words limits here, all the other detail results will show in whole paper.

*On Regionalism within International Law: A Themed Panel*

## **THE SCO AS A CLASSIC EXAMPLE OF TRANSNATIONAL REGION?**

**Yinan Yin, University of Central Lancashire, UNITED KINGDOM**

This paper will shed new light upon the implications and limits of Grossraum theory by cross-referencing an empirical analysis of the SCO. The SCO is a permanent intergovernmental international organisation whose creation was proclaimed on 15 June 2001 in Shanghai, China. The SCO emerged as the successor to the Shanghai Five, which had been used by Russia, China, Kazakhstan, Kyrgyzstan, and Tajikistan from 1996 to 2001 as a forum for addressing Sino-Soviet border disputes and demilitarising borders. In 2001, it transformed itself into the SCO understood as an essentially voluntary and treaty-based regional organization.

Although the SCO as a regional organization was initiated for counter-terrorism, the SCO has within its first decade, clearly developed and refined an organisational structure, expanded its relations with other multilateral institutions, and taken concrete actions to broaden and solidify its economic, political, and security-related impact and influence, not least in promoting the wider pluralistic cause of multi-polar regionalism.

The SCO is a unique regional organisation, which differs from the other longer standing international organisations. It has "RATS" as a permanent standing organ of the SCO which serves to promote cooperation of member states against "the three evils" of terrorism, separatism and extremism, which are run together. However, it is also different from NATO in that possesses a wider remit over regional development - including finance, banking, energy and economic development. The SCO is similar to the EU Grossraum to some extent, with its commitment to enhance regional integration by removing impediments to certain types of economic planning, organisation and development. However, it is also different the EU, not least in terms of a preservation of strong national sovereignty enhancement and the retention of an intergovernmental structure with lower levels of delegation to administrative bodies and the absence of doctrines of quasi-legislative "direct effect." Therefore, it is worth exploring and interpreting what characteristics the SCO is equipped with, what role it plays as an emerging Grossraum with two leading powers - China and Russia, in the context of diversity of regions.

What is important is the argument that many aspects of the empirical practices of the SCO cannot be grasped in traditional Grossraum terms, and thus suggest a need to revise this classical approach. This paper will firstly concentrate on those elements of the SCO that are relevant to its possible characterisation as a Grossraum in the sense addressed above. The paper aims to answer the question of whether the SCO, given its recent creation, has made remarkable steps forward towards regional integration along classic Grossraum lines. Furthermore, if the SCO's significance lies in how its empirical details and structure partly exemplify the Grossraum concept, what challenges may the SCO pose for classical Grossraum theory? This question is raised is because there are discrepancy areas that should be noted as well, such as the co-existence of two regional superpowers (China and Russia), the fragmented membership of security organisations, and the absence of provisions for minority representation. There is also the question of the underdeveloped nature of SCO-wide executive and administrative bodies outside the field of security.

However, the SCO has succeeded in securing various regional balances of power and equilibrium tendencies through its dealings with both the EU and NATO. This has occurred in ways that classic theory does not anticipate but perhaps needs to learn from. Meanwhile, there is growing evidence that the SCO is meeting many of its members' aspirations with no members withdrawing and other states, such as Iran, India and Pakistan, seeking to join as full members. Can this equilibrium or balance which the SCO has achieved both internally and externally be sustained and remained within an increasingly multipolar global order? What is clear is that existing Grossraum tendencies reject the false alternative of a re-affirmation of traditional interstate approaches on the one hand, versus, on the other, stateless universalistic orientations with imperialistic implications that have jettisoned spatial differentiations altogether. These tendencies towards regionalism to which the SCO is both a contributor and beneficiary, are likely to intensify - albeit in perhaps unpredictable ways. In order to retain the equilibrium or balance and achieve regional self-determination in practice, the SCO needs to positively promote global intra-Grossraum principles to run alongside the often hopeless work of the United Nations.

*Role of Social Networks in Regional Development*

## **SOCIAL SPACE, NETWORKING AND NEW CITY FOR REGIONAL ECONOMIC MODERNISATION**

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**Dr Gerry Edgar, University of Stirling, UNITED KINGDOM**

In regional development studies, the complexity issues of regional innovation systems were commonly discussed and the important roles of geographic proximity of firms with local system actors were highlighted. The benefits of proximity may influence the way of local systems operates including the interaction and collaboration, networking, learning, innovation and local development. These benefits provide challenges for

regional policy designers to strategically fit the best dynamic approach for local development success particularly late comers of emerging nations to sustainably competitive with other develop nations. Evidently, an approach of creating new city was used for local economic modernisation and provides space for local technology development and production. In this respect, this paper investigates the relevance of social space and proximity for absorptive capacity of an organisation in an effort for regional innovation development and production in new city of Cyberjaya in Malaysia. The study uses the role of collaboration as a mechanism to accelerate the absorptive capacity of universities and firms in ICT and Biotechnology industries which located within the designated areas of Multimedia Super Corridor (MSC) Malaysia – a national initiative for regional development of technology-based industry including city of Cyberjaya. The study further examines the motive and barriers behind the issues of collaboration among local system actors including universities, industries and government agencies with using a pragmatic research approach of mixed methods techniques. The results illustrate that social space is an important contributing factors for the knowledge opportunity and spill-over of an organisation for local technology and innovation production. Meanwhile the benefits of proximity in local context cannot be utilised as there were limited provision of social infrastructure in new city of Cyberjaya, consequently the role of social networking was less effective. The results also provide a rationale to fundamentally understand the logic concept of social space in spatial structure and planning for local innovation operation and development in creating new city for emerging countries such Malaysia. An integral approach in early stages of strategic thinking and planning is required to provide social spaces for system actors to socially integrate and connected locally. Then the density for knowledge opportunity and spill-over effect may have occurs and gives significant impact on the production of local innovation of local economic modernisation. Neglecting the importance contributions of social space may lead to ineffective and uneconomical regional development policies. Therefore a closer collaborative relationship with universities, industries and government agencies may be interrupted and less effective of social networking activities. This paper has offered theoretical and policy debates on the diversity effect of social space for an organisation in regional innovation system and regional development context.

*Developing Rural and Peripheral Regions*

## **TOWARD SUSTAINABLE VILLAGE LAND CONSOLIDATION AND REGIONAL DEVELOPMENT IN CHINA**

**Sheng Zhong, Xi'an Jiaotong-Liverpool University, CHINA**

In the past several decades, China has experienced unprecedented economic growth and breakneck pace of urbanization. Industrialization and the associated urban territorial expansion have compromised both the quantity and quality of the country's cultivated land. At the national level, this consequence is interpreted as a threat to China's food security and self-dependency while at the local level, the loss of high-quality farmland exerts a deep impact on the livelihood of rural communities. In addition, such socioeconomic and spatial changes are also frequently associated with the widening urban-rural disparity, which had caused much public outcry in recent years. In order to accommodate the objectives of both urbanization and rural development, and in particular, to address the historical issue of urban-rural divide, China has in recent years embarked on a series of reforms. The village land consolidation program, which has been implemented in many localities in the country, represents an important policy experimentation. The aim of the program aims to enhance land use efficiency through linking the rural and urban land resource, which had historically been managed separately. The basic idea is to spatially reorganize villages that had been hollowed out due to mass outmigration and save the land resource for rural development or transfer the extra land use quota (or development right) to adjacent urban areas. Through balancing the quantity of urban and rural construction land, the total amount of cultivated land is expected to be maintained.

This paper explains the background and evolvement of China's village consolidation programs and its implementation details. It analyzes the issues and problems exposed in the design and implementation of local village consolidation projects. Evidences show that existing practices in effect often run counter to the program's original aim of bridging urban-rural disparity. Due to asymmetric power of urban and rural communities built into the Chinese institutional settings, cities often benefit disproportionately from the village consolidation processes. And this new round of exploitation of rural areas by cities is conditioned by the

outdated land use planning paradigm, which stresses technicality and land use efficiency rather than social value articulation and participative processes. These program design and implementation problems, if not properly addressed, would obstruct China's sustainable regional development and urban-rural integration. Based on such an understanding, the paper tentatively proposes a new program design for village consolidation centering on partnership building and collaborative planning. The new design on the one hand draws inspirations from successful experiences of land readjustment around the world and on the other hand, has taken the Chinese local contexts into consideration.

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