

Mulvey, Gail ORCID: <https://orcid.org/0000-0003-0894-3065> , Cabras, Ignazio, Danson, Mike, Peck, Frank ORCID: <https://orcid.org/0000-0003-1976-154X> and Shaw, Keith (2017) The implications of Brexit for economic development and devolved governance in Cumbria, the North East of England and the Scottish Borders. In: Regional Studies Association (RSA) Annual Conference: The Great Regional Awakening: New Directions, 4-7 June 2017, Trinity College Dublin, Ireland. (Unpublished)

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GREAT REGIONAL AWAKENING: NEW DIRECTIONS

ANNUAL CONFERENCE 2017

4th – 7th June 2017

Trinity College Dublin, Ireland

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Great Regional Awakenings: New Directions

2017 Annual Conference

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Trinity College Dublin
Dublin, Ireland

This volume has been compiled by
Lesa Reynolds

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GOVERNING URBAN DEVELOPMENT IN THE LOW COUNTRIES: FROM MANAGERIALISM TO ENTREPRENEURIALISM AND FINANCIALIZATION

Manuel B. Aalbers, KU Leuven, Belgium
Jannes van Loon, KU Leuven, Belgium
Stijn Oosterlynck, University of Antwerp, Belgium

Has the post-war managerial approach of urban governance in the Netherlands and Flanders been replaced by entrepreneurial and financialized forms? In this paper, we adopt a variegated approach to grasp the temporalities and spatialities of urban governance in the Low Countries through case studies of the cities of Apeldoorn and Antwerp. We show how Dutch urban governance financialized by connecting local public finances through municipal land banks. However, inter-municipal financial solidarity and ring-fencing municipalities from financial markets create specific, Continental European processes of financialization. Flemish municipalities, in contrast, have shifted from a model of laissez-faire urban development, embedded in a system of large municipal autonomy, towards entrepreneurial urban growth regimes in which technocratic public and private actors have increased access to financial resources to create larger real estate projects. In Flanders autonomous municipal real estate corporations are a crucial instrument that connects municipal finance to the local real estate market.

DO FAMILY FIRMS ONLY SURVIVE? THE IMPORTANCE OF ENTREPRENEURIAL CAPITAL (EC) ON FIRM SURVIVAL AND JOB RELATION

Evans Adjei, Umea University, Sweden

In this paper, we investigate how entrepreneurial capital (EC) affects the survival and growth of family firms and non-family firms. We argue that the successes of entrepreneurs and firms are not solely based on the market but also on accumulated entrepreneurial capital – seen as the set of tangible assets (eg. financial and physical) and intangible assets (eg. human capital, experiences, networks) available to an entrepreneur through entrepreneurial parents (via socialization).

Using start-ups with a maximum of 50 employees in 2002 in Sweden, we followed each firm until the firm closed for business. We used a focal typology (4-types) of family and non-family firms based on entrepreneurial capital to capture how they survive and grow (employment).

Our results confirm that family firms are more likely to survive compared to non-family firms and that entrepreneurial capital enhances the survival of family firms and non-family firms. However, surviving during economic downturns is a matter of been a family firm. Considering the size of the firm, larger non-family firms benefit from entrepreneurial capital during economic downturns. Nevertheless, both smaller and larger family firms with entrepreneurial capital are more resilient. This indicates how entrepreneurial capital contributes to the development of different economic spaces through the resilience of family firms. Consequently, we find that though family firms with entrepreneurial capital mostly survive in urban and accessible rural regions, it is in remote rural regions that family firms capitalize on entrepreneurial capital to enhance employment growth.

MEASURING THE IMPACT OF CLUSTERS ON SUSTAINABLE DEVELOPMENT

David Adkins, Plymouth University, United Kingdom

Numerous evaluation techniques exist within the cluster initiative context to achieve a number of goals: to establish the extent of relationships; to measure the impact of cluster initiatives in terms of the contribution to innovation, competitive advantage and economic development; and to demonstrate return on investment.

Whilst the broad concept of sustainable development incorporates such areas, sustainable development extends beyond economic activity and key aspects have not yet been fully explored in the cluster evaluation literature. This paper acknowledges the positive impact clusters can have on economic and innovation activity, yet argues that the influence on sustainable development extends beyond these, and takes in other socio-cultural and environmental factors. These factors have been developed from existing models of sustainability.

The measurement of such factors poses a number of challenges; sustainable development reporting tools exist, although often require a considerable quantity of detailed data, making the process quite onerous. These tools do not reflect the effects of the cluster initiative, making causal links difficult to explore. The measurement tool in this paper focuses on the perceived view of the contribution made by both cluster management, and by being a member of the cluster, with a view to influencing cluster management priorities.

The model enables self-evaluation by members against the stated criteria and the influence of the cluster, and allows evaluation by a number of factors.

Early results have demonstrated mixed perceptions of sustainability within clusters, and show the potential for greater clarity in policy development.

DO RAILWAY INFRASTRUCTURE INFLUENCE URBAN FORM?

Marcus Adolphson, Department of Urban Planning and Environment, Sweden
Oskar Fröidh, KTH Royal Institute of Technology, Sweden

Since the mid 1990th a number of rail way stations in Sweden have been relocated into semi-urban and peripheral locations or decided to be kept in their original urban locations. Increased share of regional public transport and high speed trains are devices in reaching sustainability goals. High urban densities support public transport systems. Still, the urban morphological consequences of these transport infrastructure investments are unknown. In order to provide sufficient planning knowledge this research aims at providing knowledge on urban morphological consequences of relocations of rail way stations. Fifteen rail way stations were selected. Changes in urban densities from 1992 to 2012 were analysed by a combination of kernel techniques and estimation of the monocentric density model. Stations within an urban environment expose strong agglomeration tendencies. Within semi-urban end peripheral environments the urban development was unclear or even negative. Still, in an urban environment the location of the station attracted more urban resources compared to the location of the urban density centre. These results should be understood in the light shed of a market oriented socio-economic context since 1993 influencing the planning system and the development of urban form.

CAPITAL CITY ANCHORING, INTERMEDIARY THEORIES & ACTORS: THE NEGOTIATION BETWEEN CAPITAL SPHERES

Cláudia Affonso, University of Porto, Portugal
Emília Rebelo, University of Porto, Portugal

By intersecting finance capital spheres, at the financial market scale, with real capital spheres at the urban production scale (Harvey 2001; Corpataux and Crevoisier 2014; Halbert and Attuyer 2016), recent debates on political-economical geographies often position cities as the passive receptacle of financialisation, neglecting civil society needs (Aalbers 2015). With the fading of regulation borders and the globalization of capital flows, intermediary actors have emerged, forms of anchoring capital in the city have evolved and entrepreneurial logics have been imposed to governance and institutional structures (Guironnet and Halbert 2014; Weber 2010). However, intermediary theories analysing actors' translations suggest different perspectives, i.e. local actors anchoring "capital more openly, urban value is greater right from the start and can grow over time to the benefit of many actors, including financial actors." (Theurillat et. al 2016).

Thus, this communication proposes to identify the latest converging and diverging theoretical points on negotiation of capital anchoring in cities. The constant recent contextual changes and the multidisciplinary relations between actors (institutions, real estate developers, community) demand further clarification. This systematic analysis relies on complementary methodologies recently used to build theoretical frames – 'stylized outline', 'future pathways and scenarios' (Brenner et. al 2010) – and 'continuing and comparative quoting' frames (Theurillat et. al 2016).

Therefore, this work intends to contribute towards an evolutionary view on present academic research. Additionally, by identifying inflections in the scientific timeline, it aims for a clearer context overview of the research on city capital, providing empowerment and manoeuvre space to the city during problematics identification.

THE IMPACT OF MOTORWAY EXPANSION ON CRIME PATTERNS IN IRELAND

Kerri Agnew, Trinity College Dublin, Ireland

Official data for the Republic of Ireland shows that criminal gangs are using the high-speed motorway network to commit burglaries in homes within close reach of Dublin. Research shows that transport networks physically influence how criminals search for targets, and that crime is higher in more accessible areas and lower in less accessible areas. However, little is known about the causal effect of motorway expansion on nearby crime rates. To the best of our knowledge, this study presents the first causal estimates of motorway changes on crime rates. Identification rests on the spatial and temporal variation in the motorway network during this period. It does this by using a quarterly panel of 14 types of crime in Garda Divisions (28) and quarterly changes to the motorway network, covering Ireland 2003-15. The analysis is extended to a spatially granular annual panel of crime in Garda Sub Divisions (563). Multiple measures of motorway access are constructed using dummy variables to indicate new motorway access and drive time distances to Dublin and to the nearest motorway entrance/exit. The results from this study will help police services decide where to patrol and better identify areas with high future crime risks.

DETERMINANTS OF SUICIDE RATES IN BRAZIL: A SPATIOTEMPORAL ANALYSIS

Pedro Amaral, CEDEPLAR - Universidade Federal de Minas Gerais, Brazil

Renato Siqueira, CEDEPLAR - Universidade Federal de Minas Gerais, Brazil

This study investigates the correlates of suicide rates per 100 thousand inhabitants in the Brazilian micro regions as well as the influence of local neighborhood on these rates when controlling for socioeconomic variables. In this sense, local influence is represented by an "imitation" factor, i.e. micro regions with high (low) rates neighboring or close to micro regions also with high (low) rates. We examine the overall framework of suicide in Brazil over space and time by performing an exploratory analysis of data and incorporating these neighborhood relationships in the estimates proposed. The results show that space is important to explain rates even when controlling for other socioeconomic variables in 1991, 2000 and 2010, supporting the literature related to the effects of contagion and / or imitation in cases of suicide. However, while we confirm a significant spatial process, other issues need further investigation: the significant socioeconomic determinants of suicide rates vary across time, indicating that the dynamics of suicide on these micro-regions varied regarding its causes.

BARGAINING DEVELOPMENT IN AN EXTRACTIVE GPN: UNPACKING POWER ASYMETRIES IN THE CHILEAN COPPER MINING CASE

Martin Arias, University College London, United Kingdom

The latest processes of globalisation have brought major changes in the world's social fabric. Today, places are connected by an intricate web of relations and flows, determining their development possibilities. The natural resource rich countries and regions have been plugged into these global production networks, but despite their natural wealth, they have not successfully reached a sustainable development path. Orthodox economic theories have assumed positive externalities from FDI flows, but some extractive host countries fail to capture the value they generate.

However, recent developments in the Economic Geography literature provide an analysis of uneven development in the guise of the Global Production Networks approach. This literature acknowledges the decisive role of power in producing a strategic coupling between the host region/country interests and the extractive multinational enterprises, something crucial in the extractive industries.

This research focuses on the mining industry, as a way to advancing a better understanding of the relationship between the extractive industry and sustainable development of host regions. For this, it uses the Chilean copper mining as a case study. Hence, this research tries to contribute to the general question of how the mining industry affects uneven regional and national development in the context of the latest globalisation process by: first, incorporating the GPN in analysing the extractives industries; second, unpacking the concept of bargaining power, to explain issues related to value capture taking place with the mining MNEs in the current Chilean copper mining GPN.

DISPARITIES IN REGIONAL FINANCIAL DEEPENING: DOES BANK BRANCH LOCATION MATTER?

Rashmi Arora, University of Bradford, United Kingdom

India presents a picture of marked diversity with states being at the different stages of development. In some states the level of development is more or less similar to that in the developed countries,

some in contrast, lag much behind. In this study we examine disparities in financial development at the regional level. Our preliminary analysis suggests that per capita deposits and credit are significantly higher in the leading regions compared to the lagging ones. Further, almost all banking groups (public, private and foreign) are concentrated in more developed regions. Investigating differences in the banking levels further, we build multidimensional banking development index for 25 states and construct indices for each bank group- public, private and foreign banks separately. The banking development indices suggested that it is higher in the leading regions which are high income and more developed compared to less developed regions. Although theoretically capital is freely mobile and is assumed to benefit all regions. Yet, empirical evidence shows that bank branch location plays a major role in attracting deposits and proximity to a branch matters for bank credit as well. We therefore, look at the factors behind banks' location in different regions which may give rise to disparities in regional financial deepening. Using Principal Component Analysis our results suggest that bank-specific factors as well as region-specific factors both influence the branch location decisions of banks. More specifically, living standards, human capital and economic structure of the state are the principal factors in bank branch location.

CHALLENGES OF NEW PATH DEVELOPMENT AND IMPLICATIONS FOR (REGIONAL) INNOVATION POLICY

Bjørn Asheim, University of Stavanger, Norway

Sverre Herstad, Inland Norway University of Applied Sciences, Norway

Michaela Tripl, University of Vienna, Austria

When designing and implementing policies for economic restructuring and regional diversification, it is necessary to go beyond considerations of how to secure 'path extension' by focusing on forms of and conditions for new path development. Recent scholarly contributions have moved from too simple and broad categories of new path development to more fine-grained typologies, differentiating between various forms of path upgrading and path diversification as well as path importation and new path creation. Path upgrading takes place when existing firms introduce new technologies or acquire new production capabilities by upgrading of skills and technology. Path diversification occurs when actors move into different but related and unrelated industries through path branching (related variety), or through path renewal (unrelated variety) by new related or unrelated knowledge base combinations. Inflows of novel knowledge (through incoming, non-local, entrepreneurs, firms and organisations) could give rise to the emergence of an industry new to the region (path importation). New path creation represents the most wide-ranging changes in a regional economy as it includes the establishment of new, often R&D driven firms, in new sectors.

When economic restructuring and regional diversification are required, explorative efforts (STI, research system) need to be supported by policies aiming to stimulate large-scale capability building and human resource formation in new areas, that is, the build-up of exploitation capacity with critical mass and potential for cross-fertilisation through spillovers. The concrete policy implications of this will be discussed against the background of established Norwegian (regional) innovation policy practices.

LINKAGES AND NETWORKS. ARE MINING REGIONS IN CHILE BENEFITTING FROM RECENT CHANGES IN MINING MULTINATIONALS LOCATION STRATEGIES?

Miguel Atienza, Universidad Católica del Norte, Chile
Lufin Marcelo, Universidad Católica del Norte (Antofagasta), Chile
Soto Juan, Universidad Católica del Norte (Antofagasta), Chile

Recent changes in corporate strategies promoting externalization in mineral production could enhance the scope for a regional development based on mining activity in contrast with the traditional enclave hypotheses (Morris et al., 2012). This position is predominantly based on the potential for linkages creation that mining activity has nowadays. Despite this emphasis on linkages remaining relevant, we argue that the existence of strong linkages is not a sufficient condition to create a sustainable form of regional development in mining regions (Arias et al. 2014; Phelps et al., 2015). Location strategies of large mining companies have become increasingly complex and the global production network of mining could be reinforcing a hierarchical spatial structure across the world and within countries, maintaining mining regions, simply, as the suppliers of raw material and ancillary services.

This article analyzes the case of Antofagasta, the main mining region in Chile (55% of the domestic mining output). During the last three decades, mining production in Antofagasta has evolved from an almost complete vertical integration to the highest levels of mining externalization in the world. The objective of this article is to analyze whether this process has increased the strength of mining productive linkages and to study the spatial organization of the mining production network in Chile in order to understand whether potential increases in mining linkages are leading Antofagasta to a sustainable development path. For this purpose, we analyze the regional location of mining services suppliers in different stages of the supply chain, with special emphasis in the case of technology and knowledge intensive activities, and compare the characteristics of these suppliers among regions. For this purpose, we use a sample of around 4,000 mining supplier from the SICEP, a national company for mining business. Finally, we study the geographical location of mining patents in Chile using information from the Chilean National Institute of Industrial Property (INAPI). Results show that, as expected, mining linkages has significantly increased in the last two decades due to growing externalization. The region of Antofagasta, however, only represents a small percentage of mining service suppliers, mainly specialized in ancillary tasks. In contrast, most technology intensive mining services and innovation are concentrated in the main urban agglomeration, the city of Santiago.

LABOUR MARKET TRANSFORMATIONS IN ITALY DURING THE GREAT RECESSION: SOME EMPIRICAL EVIDENCE IN A REGIONAL PERSPECTIVE

Maurizio Avola, University of Catania, Italy

The Italian labour market is traditionally characterized by a marked territorial dualism. In fact, the South of Italy is one of the most problematic macro-regions of Western Europe and according to Eurostat LFS at the level of territorial divide NUTS2 for 2015 Italy is the EU country with by far the highest level of dispersion of regional employment rates. During the Great Recession the gap has grown even further: employment fell much more significantly in the South than in the Centre-North and the ratio between the employment rates of the two macro-area has reached the highest level in the Italian LFS history. In an international perspective, the dramatic situation of the labour market in the South is evident: the main regions of this area are by many years in the last places of the European regional ranking for the employment rate (roughly 40% against an EU average of 66%).

In this context, however, we are witnessing a rapid growth of foreigners coming from high e-migration countries. Unlike the stereotypes that emphasize the mismatch between the in-flows and the economic need for foreign workforce, in the Southern regions the level of integration in the labour market of the newcomers is significantly important: their employment rate is higher than that of natives and the unemployment is usually of shorter duration. This paper is an attempt to show the reasons of this apparent paradox, starting from the combination between some structural weaknesses of the labour demand (the so called “low way” to the decline of the Italian labour market - Reyneri, Pintaldi, 2013; Fellini, 2015), the dynamics of supply and the effects of the Great Recession.

‘BACK STAGE’ PLACE-BASED DEAL MAKING: WHAT ARE THE IMPLICATIONS FOR EFFECTIVENESS AND DEMOCRACY?

Sarah Ayres, University of Bristol, United Kingdom

This paper will examine the impact that back stage place-based deal making has on policy effectiveness and democracy. ‘Front stage’ describes the activities of visible and accountable office-holders in elected bodies, constrained by established bureaucratic rules. ‘Back stage’ describes the world of unseen decision making where public officials are less constrained by formal rules and public scrutiny. Drawing on a recent case study of English devolution in the United Kingdom, this paper examines how front and back stage policy making shape one another and the impact this can have on effectiveness and democracy in the policy process. This area of policy is highly suited to analysing the implications of back stage policy making for the following reasons.

First, English devolution has recently attracted a lot of front stage attention. In May 2015 a Conservative government was elected with bold manifesto commitments to devolve powers and budgets to boost local growth in England - a commitment reasserted under the new leadership of Prime Minister, Theresa May. Front stage political rhetoric has, therefore, been a key part of the recent trajectory of English devolution policy. Second, despite a lot of front stage activity, there is very little formal guidance shaping the scope and direction of the policy. The Cities and Local Government Devolution Act 2016 is an enabling piece of legislation that allows the Government to reach a tailor-made deal with each participating locality. The negotiation approach means that back stage decision making has also featured heavily in the process. Findings reveal that operating back stage can offer a number of distinct advantages, leading to a greater initial dynamism. However, these benefits need to be balanced against the negative consequences associated with reduced levels of transparency and accountability if back stage decision making is to secure effectiveness over the long term.

PLACE, ECONOMY AND MANUFACTURING IN THE ‘CITY’ AND THE ‘REGION’

David Bailey, Aston University, United Kingdom

Paul Hildreth, UCL, United Kingdom

This paper compares the progress of manufacturing between the MDA and the Greater Birmingham (or West Midlands) City Region using ongoing work comparing results, outcomes and lessons. This work in progress is in the context of:

- An established framework for interpreting how firms relate to local, national and global economies through their vertical (suppliers/customers) and horizontal (competitor and collaborative firms and institutions). This framework makes a distinction between ‘pure agglomeration’, ‘industrial complex’ and ‘social network’ types of firm relationships in

explaining the nature of their agglomeration or clustering behaviours. As is shown in the paper, we have broken these categories down still further.

- Taking into account the evolution of a new model of manufacturing ('Manufacturing 4.0'), which has radical implications for the competitiveness and localisation of manufacturing in the UK. We have observed the evolution of this model in West Midlands e.g. BMW, the Phoenix Industry network and the Jewellery Quarter. The question is: is there evidence of this more advanced model emerging in the MDA? And if not why not?

Whilst conclusions are tentative, it appears to be the case that the Greater Birmingham City Region has seen more of a shift towards 'new manufacturing' than is the case for the MDA area. In terms of explanation, one it is possible that the agglomeration economies may have played a role in the Greater Birmingham area. However, another factor may lie in the different institutional histories of the two areas.

During the 1980s to 1990s, the Welsh Development Agency, Welsh Office and local government institutions were very successful in working effectively together to bring in new inward investment to the MDA area (North East Wales). However, our research suggests that many of those 'new factory' investments have not really moved on in terms of product and technological innovation.

There is also very little evidence of supply chain linkages amongst these firms within the MDA area. Many of the products are similar to those manufactured in the 1980s. With exceptions, where firms have changed products, there has been little movement up the technology scale. Second, the investment of these institutions was about securing new investment, not building effective firm-institutional connections to enable effective collaboration (e.g. as illustrated by the recently announced Advanced Manufacturing & Research Institute for Deeside). Greater Birmingham has gone down a different route. A legacy of the West Midlands Development Agency has been a set of institutional relations that have been more effective in the context of the evolution of 'new manufacturing'.

This paper explores these issues by:

- a) Making use of a framework of understanding firm relationships in the local, national and global context to identify patterns of agglomeration and clustering behaviours: of firms in the two places: 'pure agglomeration'; 'industrial complex' (hub-and-spoke and satellite models); and social network (customised products and enabling technologies).
- b) Using this framework and basic characteristic differences between the MDA area and Greater Birmingham City Region to identify different patterns in the evolution of manufacturing in the two areas.
- c) Describing how manufacturing is changing: 'new manufacturing' or 'manufacturing 4.0') and the impact that this is having on the value chain, which in turn has consequences for the localisation of manufacturing for both areas.
- d) Exploring the evidence respectively for MDA area and Greater Birmingham City Region to offer a comparison of possible causes and lessons to be learnt.

Finally, the paper also relates our findings to proposals in and context of the UK Government's new industrial strategy.

A DIAGNOSTIC APPROACH TO IDENTIFYING THE BINDING CONSTRAINTS TO TOURISM-DRIVEN INCLUSIVE GROWTH

Martine Bakker, Wageningen University, The Netherlands

The focus of this research is the need to gain better understanding of how tourism can contribute to an inclusive growth strategy in developing countries. For tourism to be supportive of inclusive growth it must create productive employment as well as economic opportunities for entrepreneurs while also ensure equal access to these jobs and opportunities. To achieve inclusive growth on a national or regional scale, both strategies need to be addressed concurrently. It is therefore important to identify and prioritize those constraints which are considered most binding to achieve both goals. A review of the tourism literature showed that the main constraints to equal access and outcome of tourism opportunities include unequal access to education, infrastructure, finance, power as well as social exclusion and government regulations. Disparity within countries related to tourism can be attributed to regional, gender, minorities and socio-economic inequality.

To identify the binding constraints to tourism driven-driven inclusive growth, this research proposes the Tourism Inclusive Growth Diagnostic Framework (TIGDF). The framework is adapted from Hausmann, Rodrik and Velasco's (HRV) Growth Diagnostic methodology. The HRV Framework is adapted to address unequal access and outcome of growth and has been tailored to the specific needs of the tourism sector. The TIGDF makes a departure from conventional fully quantitative approaches of the drivers of tourism growth and focusses on the 'deep determinants' of tourism-driven inclusive growth.

SHAPING REGIONAL FUTURES: PERFORMANCES OF REGIONAL DESIGN IN EUROPEAN REGIONS

Verena Elisabeth Balz, Delft University of Technology, The Netherlands

Agnes Förster, Studio Stadt Region, München, Germany

Wil Zonneveld, Delft University of Technology, The Netherlands

In numerous European regions politicians, administrators, planning professionals, market and civil actors are experimenting with design approaches to overcome limitations that the statutory planning systems pose. They use design practice to indicate how growing spatial integration exceeds restricting administrative boundaries, and to demonstrate why and how such barriers should be overcome. Design practices in European regions, however, vary greatly. In some regions there is a strong design tradition while in other regions this is far less the case, although actors observe the design practices employed elsewhere with curiosity. Despite the broad interest which has emerged recently, few lessons have been learnt so far.

This paper introduces a systemic analytical framework to identify and explain the multiple performances of regional design in planning decision making. The analytical framework has been developed for the 2015 conference 'Shaping Regional Futures' in Munich (for more information see Förster et al., 2016). During the conference invited experts and practitioners used the framework for an understanding of regional design cases in three European regions: the Amsterdam Region, the Zurich Region and the Ruhr area. One main aim of this paper is to present results from analysis. It identifies aspects of regional settings, performances, design strategies and processes that have influenced design-led approaches in these areas decisively. A second and more broad aim is discuss the analytical framework by means of results from comparative case study analysis, from a theoretical perspective.

THE INNOVATION ECOSYSTEM IN POOR COUNTRIES: DOES IT ACTUALLY WORK?

Raphael Bar-El, Ben-Gurion University and Sapir Academic College, Israel

Given the high tendency of innovation to concentrate in more advanced economies, there is an apparent risk of increasing gaps in the world economic development. However, the common knowledge today is that innovation is a vital factor for economic growth, at poor as well as at richer regions. Poorer countries are actually investing efforts in the advance of innovation. Our research question is to which extent such efforts are actually efficient and lead to a diminution of the innovation gaps between countries.

We use the database of the GII report for 141 countries for the year of 2015 and earlier, and try to estimate the influence of innovation inputs (as defined by GII, including variables such as education, infrastructures, etc...) on innovation outputs (knowledge creation, creative outputs). Using regression analysis, we identify on a global basis the main inputs that influence each of the innovation outputs. In parallel, we apply the same regression models separately to the more advanced economies (as defined by the World Bank classification as High and Middle High Income economies) and to the less advanced economies (Middle Low and Low).

Some of the main results show the relationships between inputs and outputs are not similar in both groups of economies, implying that the innovation ecosystems may not actually operate as same levels of efficiency. Consequently, despite the fact that the poorer countries have increased their investments in innovation inputs, the results in terms of innovation creation are not visible.

INNOVATION DYNAMICS AND RENEWAL IN MATURE MANUFACTURING CLUSTERS

Mariachiara Barzotto, Birmingham Business School, University of Birmingham (UK), United Kingdom
Lisa de Propriis, Birmingham Business School, United Kingdom
Phil Tomlinson, University of Bath, United Kingdom

Over the last two decades, manufacturing clusters in advanced economies have undergone a deep transformation in part following phases of growth and maturity. Technological change and production globalisation have undermined the industrial fabric of some clusters leading to terminal decline. Others have undergone fundamental changes to pursue trajectories of renewal powered by systemic innovation dynamics.

The present paper investigates what are the drivers of firms' innovation strategies in such mature manufacturing clusters. Our main research question is to understand what local and global resources can be found to drive firms' innovation performance.

The paper is framed within the economic geography literature that studies place renewal dynamics and in particular, it focuses upon firms' ability to innovate and to contribute to a cluster's systemic innovation. The transformations in such production systems have seen: i) a rising heterogeneity in the size of companies populating clusters, ii) a profound change in the geographical configuration of production networks, iii) a metamorphosis in the relationship with cluster institutions, and iv) an evolution of intangible infrastructure (industrial atmosphere).

We address this question using survey data on the North Staffordshire ceramics industry. We analyse the interplay between local and global factors via Qualitative Comparative Analysis, a configurational, case-oriented approach.

Our findings show the interplay of global pipelines, local production networks, institutional milieu, and industrial atmosphere contribute to high levels of firms' innovation performance. Findings also show how small and anchored large companies embedded in mature clusters can be equally innovative. Policy implications on cluster upgrading are discussed.

MULTINATIONAL COMPANIES BETWEEN GLOBAL AND REGIONAL EMBEDDEDNESS: A QCA OF EUROPEAN CASE STUDIES

Mariachiara Barzotto, Birmingham Business School, University of Birmingham (UK), United Kingdom
Lisa De Propris, Birmingham Business School, United Kingdom

Manufacturing in advanced economies has been the object of an intense reorganisation driven crucially by the international strategies of multinational firms as well as by technological disruptions powering a new model of smart manufacturing.

Drawing on and critically joining strands of literature on global value chain, international business and economic geography, this paper aims to explore company-based as well as place-based factors that can determine high levels of companies' performance. This is very important because we want to understand the interplay between firm-based, place-based and more global drivers of firms' performance. In particular, we focus on three factors: one is the composition of skills captured by the education mix of the firms' workforce; the second is the industrial composition of the regional economy where firms are homed – a sort of measure of regional related variety; and finally, the third factor is the role of firms in global value chains in terms of their contribution to value creation.

We empirically address this issue using a cross-country comparison by collecting primary data. We interviewed top managers of multinational companies, operating in four advanced manufacturing industries (biotech, engineering, fashion, furniture and new materials) and located in five European countries (Germany, Italy, Spain, Sweden and United Kingdom). We analysed the interplay of company-based and place-based conditions via Qualitative Comparative Analysis, a configurational, case-oriented approach.

REGIONAL FAMILINESS

Rodrigo Basco, American University of Sharjah, United Arab Emirates
Samuel Baixauli Soler, Universidad de Murcia, Spain
Susana Alvarez, Universidad de Murcia, Spain
Gregorio Sánchez Marín, Universidad de Murcia, Spain

The aim of this paper is to delve into the impact of family firms on regional competitiveness. We attempt to address this aim by linking Porter's (Porter, 1990) and Basco's (Basco, 2015) conceptual frameworks which account for microeconomic along with macroeconomics aspects of the economy to explain regional development. Assuming that family firms differ from non-family firms in terms of goals and incentives and subsequently in their decision making at micro-level, we investigate to what extent the dimensions of competitiveness vary between family and non-family firms and whether these aggregated differences affect regional competitiveness. By using a Spanish panel data (2003-2013) we adopted a bottom-up methodology to construct the firm and regional competitiveness indices and test our model. Our results indicate that there are differences between family and non-family firm competitiveness after controlling for firm size and firm age. In addition, we

observe that these differences in firm competitiveness between family and non-family firms permeate into the regional level in such a way that family firms contribute more significantly to regional competitiveness than non-family firms. This paper addresses the calls to combine macroeconomic aspects with microeconomic ones which requires a holistic perspective to integrate different level of analysis. Moreover, this paper not only addressed the call to bring the firm into the regional science (Maskell, 2001) but also to better understand the heterogeneity of economic actors (dimensions of family and non-family firms, firm size, and firm age) for considering firms as an endogenous aspect for regional development.

HATCHING THE EGG, POPULATING THE HIVE: CREATING A FERTILE FINTECH ECOSYSTEM IN BRUSSELS, BELGIUM

David Bassens, Vrije Universiteit Brussel, Belgium

Reijer Hendrikse, Vrije Universiteit Brussel, Belgium

Michiel van Meeteren, Vrije Universiteit Brussel, Belgium

We are currently witnessing a moment of increased fusion of the ICT and financial sectors, creating fertile soil for innovation in financial technology (FinTech). FinTech promises to deliver disintermediation in financial services, making the financial value chain more efficient, create new markets through data analytics, and promising to make physical retail banks redundant. Evolutionary economic geography suggests that regions that have a strong endowment in technologies that are becoming more related in an innovative trajectory have good prospects to capture economic growth. Moreover, being able to leverage this location advantage with a position in networks of complementary competences further enhances this position. This paper describes the emerging Fintech geography of Neo-Marshallian nodes in global networks from the entry point of Brussels, Belgium.

We discuss the viability of a bid to make Brussels a key node in the global network of Fintech 'hubs' from a perspective of multiple scales. Brussels' position as a traditional (inter)national financial centre has largely hollowed out over the last decades but, as elsewhere, it still has the aspiration to regain its bygone clout. As such, local FinTech entrepreneurs have captured the imagination of Belgian bankers and politicians alike, having recently set up (i) FinTech incubators for individual banks, (ii) a growing FinTech ecosystem for the (Belgian) financial sector as a whole, and (iii) formal connections with FinTech hubs elsewhere, including Brexit-plagued London – Europe's FinTech capital. Besides enjoying solid backing from incumbent banks and Belgian politicians, Brussels' bid has been fortified by the standard-setting presence of global financial backend organizations such as Swift and Euroclear, and the political clout of Brussel as Europe's prime regulatory centre.

Reporting on interviews with Fintech startups and institutional entrepreneurs forging growth coalitions combined with a robust spatial analysis of the labor market and economic endowments of the wider Brussels Region, we sketch a picture of how a nested ecosystem oscillating between collaboration and competition in a shared environment is actively constructed. By coupling FinTech startups with established banks operating in Belgium, platform infrastructures are enabled that allow incumbent European banks to develop, install and operate FinTech applications. Moreover, by leveraging Brussels' political platforms, the institutional environment is readied for a situation where FinTech can be adopted within the EU without the disruption caused by the cyber-libertarian ideologies that permeate much FinTech discourse. Lastly, the forging of linkages between Brussels and complementary cities is explored to see how this competition/collaboration nexus extends from inter-firm to inter-city interactions. Reviewing these dimensions, a key question is whether and to what extent FinTech entrenches finance as just another economic specialization to which entrepreneurial

cities can aspire. The paper ends with a reflection on how FinTech can serve to rejuvenate the positionality of financial intermediaries in a second-tier financial centre as “obligatory passage points” when disintermediation is deemed imminent.

JOBS, WELFARE AND AUSTERITY: HOW THE DESTRUCTION OF INDUSTRIAL BRITAIN CASTS A SHADOW OVER UK PUBLIC FINANCES

Christina Beatty, Sheffield Hallam University, United Kingdom

Steve Fothergill, Sheffield Hallam University, United Kingdom

This paper argues that it is important to take a long view of many economic problems. The paper explains how the large-scale loss of industrial jobs in parts of Britain during the 1980s and 1990s still inflates the contemporary budget deficit in the UK.

Drawing on the findings of several empirical studies by the authors, the paper shows that although there has been progress in regeneration the consequences of job loss in Britain’s older industrial areas have been near-permanently higher levels of worklessness, especially on incapacity benefits, low pay, and a major claim on present-day public finances to pay for both in-work and out-of-work benefits. Furthermore, as the UK government implements reductions in welfare spending the poorest places are being hit hardest. In effect, communities in older industrial Britain now face punishment in the form of welfare cuts for the destruction previously wrought to their industrial base.

The authors conclude that the source of many of the UK’s current economic difficulties lies much deeper than the 2008 financial crisis and that by its failure to look beyond national data and national trends the UK Treasury has failed to grasp causality and misdiagnosed problems. Allowing Britain’s industrial base to wither so dramatically has not been costless and has certainly not been absorbed by the smooth operation of market forces.

THE EFFECTIVENESS OF REGIONAL, NATIONAL & EU SUPPORT FOR INNOVATION IN THE UK & SPAIN

Bettina Becker, Aston University, United Kingdom

Stephen Roper, Warwick Business School and Enterprise Research Centre, United Kingdom

James Love, Warwick Business School and Enterprise Research Centre, United Kingdom

Innovation policy aims to stimulate innovation and hence firm-level productivity and growth. Here, we use data from the national innovation panel surveys in the UK and Spain over the 2004 to 2012 period to explore the effectiveness of regional, national and EU innovation support in promoting the extent of innovation activity, its novelty, and its market success. Allowing for potential selection effects, our results suggest that in both countries, regionalised support is most influential in increasing the probability of undertaking innovation for process change and organizational types of innovations. For both the UK and Spain, national innovation support is associated with a higher probability of product or service innovation, and the degree of novelty of product or service innovations. In the UK, it is only national support that is effective here, while in Spain EU support also is effective. In terms of innovation success, measured as percent of sales due to new-to-the-market and new-to-the-firm innovations, we see a rather different pattern in the UK versus Spain. In the UK, only regionalised support is associated with increased innovative sales. In Spain, innovative sales are influenced by all three of regional, national and EU support measures. Our results suggest that moves towards more centralised innovation policy in the UK since 2012 may reinforce a focus on leading edge, novel

product and service innovation, while placing less emphasis on broadly based process change and organisational types of innovation.

POSITIONING CIVIL SOCIETY IN THE BUILDING OF ENGLISH AND WELSH CITY-REGIONS

David Beel, Staffordshire University, United Kingdom
Martin Jones, University of Sheffield, United Kingdom
Ian Rees Jones, Cardiff University, United Kingdom

Within the UK and as well as further afield, the concepts of localism and spatial delineation of the 'city-region' (CR) have seen a renaissance as the de-facto spatial political units of governance for economic development (Clarke & Cochrane, 2013). In the UK, this has been led by the UK Government, as they have sought to reshape the ways in which economic development takes place. Although this shift in governmental delivery began under New Labour, it has been much vaunted by the UK Coalition Government (Deas, 2013), and subsequently by the continuing Conservative administration (Conservative Party, 2015). Post-the-Brexit vote and a new Conservative Administration, this strategy is somewhat in question and has uncertain future. Despite this, existing city and devolution deals seem to be holding. This policy landscape frames developments taking shape in both England and Wales. In Wales, two city-regions have been identified (Cardiff and Swansea). Both have sought city-deals with the UK and Welsh governments. To date, only Cardiff Capital Region, has a city-deal in place. Swansea Bay CR has yet to negotiate such a deal and may not get such an opportunity to do so. In England, Greater Manchester CR and Sheffield CR both have well developed devolution deals in place. This paper therefore follows the development of city-regionalism in England and Wales through these different discourses and (the potentially) unfolding city-deals, thus allowing the authors to ask: within a language of localism and devolution where does this position civil society with its focus upon social development?

EXAMINING A NEW METHOD FOR UNDERSTANDING PLACE LEADERSHIP: A SIX NATION ANALYSIS

Andrew Beer, UniSA Business School, Australia
Sarah Ayres, University of Bristol, United Kingdom
Terry Clower, George Mason University, United States
Fabian Faller, University of Kiel, Germany
Markku Sotarauta, University of Tampere, Finland
Alessandro Sancino, Open University, United Kingdom

Increasing attention has been paid within regional research to questions of city and regional leadership (Normann 2013), and the part played by key individuals and institutions in shaping the future of places (Sotarauta 2016). There is a consensus that place leaders rely upon the capacity to influence others and it is this use of persuasion that differentiates leadership in regions and cities from that of major organisations (Collinge et al 2010). Importantly, place leadership can be one of the 'strategic relations' that define regions and determine their development trajectories (Lagendijk 2007).

Place leadership is deeply dependent upon context, that is, the circumstances and conditions shaping a region, town or small rural community determine the capacity for leadership to emerge, and shape the ways in which that leadership is expressed (Beer and Clower 2014). Epistemologically, place leadership has remained an ideographic phenomenon, with researchers producing a portfolio of in-depth case studies but unable to draw insights across wider spatial scales, economic structures, time

periods or systems of government. A limited volume of research has attempted to either draw comparisons between nations (Sotarauta & Beer 2016; Budd and Sancino 2016) or use formal surveys to explore leadership-related issues (Sorenson and Epps 1996; Smailes 2002). While these are important steps, greater methodological innovation is needed if research is to advance beyond a collection of one-off studies. This paper adds to the techniques available to researchers, by focussing upon the insights that can be drawn from the use of vignettes. It also examines variation in the practice of place leadership across nations in order to distinguish those features that appear common and those that are context dependent.

THE MOVE TO LOW CARBON MOBILITY AND ELECTRIC VEHICLES: WHAT ARE THE IMPLICATIONS FOR ENGLISH RURAL MOTORISTS?

Jason Begley, Centre for Business in Society (CBiS), United Kingdom

Government funded low carbon vehicle trials have demonstrated a clear distinction between the experience of owning and driving a petrol or diesel vehicle compared to an electric vehicle (EV). However, little work has been done on the differing experiences of urban and rural motorists and the potential impact of more extensive use of EV technology outside centres of population where services and employment opportunities are more dispersed and often not as comprehensive. A recent rural electric vehicle trial undertaken in the West Midlands sought to rectify this knowledge gap by testing a number of EVs in rurally defined locales in the county of Warwickshire over a two year period. The results of this trial gave a range of important insights into the challenges faced by rural motorists utilising EVs in both a private transport capacity as well as from a commercial perspective. The aim of this paper is to examine the challenge for rural motoring presented by the adoption of EV technology and demonstrate how it differs in nature to that facing urban travellers using evidence arising from the Warwickshire Rural Electric Vehicle Trial.

NEW SERVICE ORIENTED MANUFACTURING AND PLACE-BASED DIVISION OF LABOUR: THE CASE OF THE TEXTILE INDUSTRIAL DISTRICT OF PRATO

Marco Bellandi, University of Florence, Italy

Erica Santini, Fondazione per la Ricerca e l'Innovazione, Italy

The massive introduction of disruptive technologies in the last decades is changing the industrial organisation of many industries and territories. Within this stream it is included the growing availability of services that help the consumers enjoy the intrinsic functions of a product, sometimes also in substitution with their ownership of the product. Furthermore, the same organization of production is characterized more and more by the spawning of knowledge intensive services, as the field of activities of firms that collaborate with manufacturing companies. The value creation processes are radically hit by such so-called “servitisation” processes. In local manufacturing systems based on specialized small and medium sized enterprises (SMEs), such as Industrial Districts (IDs), these processes affect deeply both the socio-institutional dimension and the local division of labour within global relations. Sources and forms of ID external economies change. This paper adopts the ID of Prato as a case study, and aims at exploring the two above mentioned dimensions. A cluster analysis is applied to firm level data in the period 2006-2015, for all the ID companies and sectors, together with interviews to local actors on institutional features. This investigation gives us clues of a growth of service-based activities that in some cases are related to servitisation processes and to service oriented manufacturing. The realization of new ID external economies related to skills, innovation and

networking requires a difficult adaptation in the socio-institutional support and in the business cultures within the system of SMEs.

DISPROPORTIONS AND IMBALANCES IN THE INTEGRATION PROCESS OF THE POST-SOVIET REGION

Anton Bendarzsevszkij, PAGEO - Pallas Athene Geopolitical Foundation, Hungary

The Belovezh Treaty, which basically put an end to the existence of the Soviet Union on 8 December 1991, was organized in complete secrecy between the leaders of Belarus, Ukraine and Russia. The independence of the states of the region led to a different formation: Commonwealth of Independent States (CIS). Members of CIS were independent, sovereign states and in the structure of the formation there was no institute, which would have supranational rights. In the last 25 years since the creation of the CIS, other organizations followed: Customs Union was created in 2010, Eurasian Economic Space in 2012, and Eurasian Economic Union launched in 2015. Final goal would be to create the Eurasian Union from the ashes of the Soviet Union based on the example of the European Union.

The research question of the current study is where the integration processes of the post-soviet region are leading, and if the Eurasian Union can step into the place of the Soviet Union, becoming the new geopolitical reality of the region. What will be the role of Russia in the integration? How effective and viable are these new organizations, and if they can survive without the financial assistance of Russia, especially in the current economic situation formed after the events of 2014.

CHANGES IN THE WEALTH OF HOUSEHOLDS AFTER THE FINANCIAL CRISIS OF 2008 IN THE VISEGRAD COUNTRIES

József Benedek, Universitatea Babes-Bolyai, Romania

György Kocziszky, University of Miskolc, Romania

Mariann Veresné Somosi, University of Miskolc, Romania

Dóra Szendi, University of Miskolc, Romania

The 20th century was the century of the great financial turbulences and crises. Only some to mention: beginning from the bank crisis of New York in 1907, through the great economic depression of 1929/33 to the recent financial crisis of 2008. In the last period several researchers have examined the causes and consequences of crises. Most of the studies pay significant attention on the decrease of real economic output, on the sharp increase of inflation, or on the decrease in demand, but the changes in the households' wealth get only small emphasis.

The authors examine in their research the consequences of the financial crisis of 2008 to see what kind of changes are happened in the wealth of households in the regions of the Visegrad countries. Through the analysis the authors build up a model which goal is to examine the influential factors of the households' wealth living in that region.

Based on the analysis of the region's socio-economic indicators can be made a statement that after the financial crisis of 2008 on the one hand the growth rate of the real economic output was decreased, and on the other hand the unemployment rate was increased, which has made unfavourable effects on the income inequalities. The exchange rate turbulences of the 2008th financial crisis have made a very negative effect on the affected households. The credit banks have transferred the weakening of national currencies. The authors aim is to analyse the changes happened in the wealth of households, and the chances of recovery.

THE MICRO FOUNDATION OF SPATIAL STRUCTURAL CHANGE. KNOWLEDGE INTENSIVE FIRMS AND PRIVATE HOUSEHOLDS IN THE LIGHT OF METROPOLITANISATION AND LOCATION COMPETITION

Michael Bentlage, Technical University of Munich, Germany

Over the last 100 years, we have witnessed the emergence of large scale urban systems. This evolution is accompanied by societal changes and an ongoing process of up-scaling. New technologies in transportation and communication affect the spatial range of individual activities fundamentally and, hence, changes the way people make their location decisions. The level of the city region becomes the relevant scale on which people decide how to organise their lives.

At the same time, regions are facing an intensifying structural change towards the knowledge economy which is affecting spatial patterns of growth. Features of such a change know many facets: fierce competition for skilled, mobile and motivated labour force, unemployment of non-qualified labour, longer commutes, multi-local households, re-concentration of the value chain, increased knowledge intensity of innovations, triple-helix collaborative ventures, structural weakness of public budgets, etcetera.

These changes result in an intensifying competition of locations for qualified labour force and knowledge intensive companies. This calls for new approaches of urban governance and spatial planning in which private and public actors cooperate in order to steer development on different spatial scales. Based on a case study on the Munich metropolitan region we assess the emerging polycentric structure and discuss competing forces that drive polycentric development. We reflect the competition of business locations on different spatial scales and conclude with findings for the future development of the region.

IS SCIENTIFIC INTEGRATION ALWAYS GOOD? A CONCEPTUAL FRAMEWORK AND EMPIRICAL EVIDENCE FROM THE EU AND US

Laurent Bergé, University of Luxembourg, Luxembourg
Iris Wanzenböck, Utrecht University, The Netherlands

It is generally assumed that higher integration in science and research across space increases innovation and growth. Creating an integrated research area has been one of the major aims of European scientific) policies, but several studies show that the movement of people and ideas across space is still impeded in the EU. This paper takes up the research interest in the integration of science by shifting attention to the consequences of an advanced integration process.

This paper aims to introduce a conceptual framework to better understand the consequences of scientific integration on innovation. We define scientific integration as the objective to set the lowest barriers to the movement of people and ideas within an area. In standard economic theory, integration leads to the relocation of agents across space, which then would increase output due to efficiency gains. Because “science” is not a standard good, traditional economic analyzes cannot apply. In this paper, we argue from a knowledge recombination perspective that the ‘geography problem’, leading to lower integration, can also be a blessing – at least at the macro level – due to opposing forces that underlie the scientific integration process. Further, we analyze under what conditions too much integration can hinder innovation.

Finally, we provide descriptive evidence for the US (an integrated area) and the EU. We use EPO patent data from the biotech sector to characterize the two areas in light of the theory, providing stylized facts in terms of duplication of research, circulation of ideas and occurrence of breakthroughs.

UNORTHODOX COHESION POLICY IN HUNGARY

Judit Berkes, Department of Economic Analysis, Széchenyi István University, Hungary

The regional policy is a tool of the practice of strategic planning. For each planning period the EU Member State should strive to achieve the most efficient allocation of available resources, that would bring long-term sustainable development and induce further investments in the region. This is a basic goal, which is based on the cohesion policy. Applying the principle means driving job creation, economic growth and social renewal to encourage and support enterprises, to strengthen research and innovation and finally to improve the environment and transport, etc. The regional policy extends to local regions and cities, it targets their development, with almost third of the EU budget allocated to this matter. The regions eligible have a lot of freedom spending the funds, but of course according to the strategy approved by the EU. The enforcement of the strict rules and principles is constantly monitored by the macro-regional organizations. The presentation is about how the spending of the funds follow the principles of EU, what are the specific features in the Hungarian regional policy and practice. The aim is to underline the strengths and shortcomings of the Hungarian regional development practice.

THE PLACE TO BE! THE ROLE OF REGIONAL DEVELOPMENT AGENCIES IN SUPPORTING SMART SPECIALIZATIONS: THE CENTRALITY VS PERIPHERY

Tamara Besednjak Valič, School of Advanced Social Studies, Slovenia

Regional Development Agencies (RDAs) have the an important role in development and implementation of regional development strategies. Perceiving a Smart Specialization as a regional development strategy we are focused on the position and the role of RDAs within the context of implementing smart specializations via supporting the entrepreneurial discovery process. The latter is the concept within the hart of Smart Specialisation strategy and is percived as the most important outcome of collaboration between the policy makers and private sector. The role of RDAs seems significant within the above mentioned process, since the RDAs are operating as so-called intermediary institutions established in order to facilitate the communication and collaboration between the policy makers and the economy. By being put in the position of the intermediary institutions, the RDAs found themselves in the midst of important social process and are very rarely examined as social actors. Their task is additionally very much accompanied by expectations to lead the regional development in form of path shaping. RDAs therefore have a difficult task to preform – operating in conditions of high social complexity they are constrained by choices and constraints of other actors in regional development. We shall explore the role of RDAs in regional development and smart specialization by distinguishing the geographical location of RDAs (urban vs. non-urban regions), their operation within social context of interplay of social forces (institutions, networks, cognitive frames) where the concept of social fields will be applied.

TIME, ENTREPRENEURIAL EXPERIENCE(S), AND THE MEANING OF PLACE: USING MIGRATION DISCONTINUITIES TO DECIPHER VARIATION IN RURAL CUMBRIA, ENGLAND.

Zografia Bika, University of East Anglia (UEA), United Kingdom
Christos Kalantaridis, De Montfort University, United Kingdom

In this paper we explore how does the meaning assigned to place influence entrepreneurial choices (regarding knowledge resources), and innovation outcomes in rural areas. Drawing insights from the ideas of Alfred Schütz we argue that processes of innovation in rural Cumbria (North West England) stretch beyond geographical boundaries not only because of the absence of local knowledge generating organizations, though this undoubtedly may act as the trigger, and the background of key actors. Entrepreneurial choices, in our view, are influenced by meanings of place that are neither objective nor shared but individual: shaped by direct experiences and through experiencing the experiences of others.

GLOBAL INNOVATION SYSTEMS – A CONCEPTUAL FRAMEWORK AND TYPOLOGY FROM VARIOUS CLEANTECH INDUSTRIES

Christian Binz, Lund University, Sweden
Bernhard Truffer, Eawag - Swiss Federal Institute of Aquatic Science & Technology, Switzerland

This paper proposes a framework for the analysis of technological innovation processes in transnational contexts. By drawing on existing innovation system concepts and recent elaborations on the globalization of innovation, we develop a multi-scalar conceptualization of innovation systems. Two key mechanisms are introduced and elaborated: the generation of resources in multi-locational subsystems and the establishment of structural couplings among them in a global innovation system (GIS). Based on this conceptualization, we introduce a typology of spatial innovation modes in four GIS configurations, building on the knowledge base and valuation system in different industries. The analytical framework is illustrated with insights from four emerging clean-tech industries. We state that a comprehensive perspective is instrumental for developing a more explanatory stance in the innovation system literature and developing regional policy interventions that reflect the increasing spatial complexity in the innovation process.

THE CO-BENEFIT CONCEPT AS AN ASSESSMENT PARADIGM TO SMART ENERGY DISTRICT PROJECTS

Adriano Bisello, European Academy of Bozen/Bolzano, Italy
Farnaz Mosannenzadeh, University of Trento, Iran, Islamic Republic of
Daniele Vettorato, EURAC Research, Italy

In this paper, we analyze projects aiming at (re)developing smart and sustainable energy districts in European cities, having the primary goals of reducing CO₂ emission and saving energy. We focus on the so called “co-benefits”: the other positive impacts or effects of the projects. The current debate on co-benefits highlights how this concept contributes to operationalizing positive effects of low-carbon projects. Accordingly, to provide a comprehensive overview, all the relevant co-benefits distributed throughout the sustainable-development dimensions (i.e., social, economic, environmental, and institutional) should be listed and assessed.

Previous studies focus mainly on those co-benefits strictly related to the project implementation phase, leaving a gap in understanding what others co-benefits can emerge in different project phases and what stakeholder are involved.

The aim of this study is transferring the co-benefits concept into a project-oriented approach, also considering the roles and relationships among partners and stakeholders. To achieve this, both the co-benefits concept and a selection of European-funded projects are introduced and analyzed. As a first result, co-benefits related to project-management activities are recognized and listed, providing a comprehensive overview. Then, all the identified co-benefits are discussed, linking project statements to literature findings. Finally, a new co-benefits taxonomy, based on smart city characteristics, is suggested. The main purpose of this research paper is contributing to a better understanding of the multiple positive aspects related to the implementation of smart-energy projects at the district scale, providing an innovative framework that enables researchers, developers, and decision makers to better understand citizens' and stakeholders' priorities.

COMPREHENDING THE ENTRANCE - EXIT DYNAMICS OF COMPANIES IN CONTEMPORARY GVCs/GPNS

Jiri Blazek, Charles University in Prague, Czech Republic
Kaoru Natsuda, Ritsumeikan Asia Pacific University, Japan

This presentation aims to contribute to GVC/GPN research by complementing voluminous studies upon repositioning and upgrading strategies of firms with analysis of external evolutionary dynamics of these global networks. Namely, the presentation seeks to identify the key drivers shaping the entrance-exit dynamics of contemporary GVCs/GPNs and to illustrate this dynamics empirically by cases covering firms of various industries, which are mostly studied within this stream of research. In this effort, perspective of lead firms and of higher-tier suppliers on entrance-exit dynamics was confronted with perspective (motivation) of lower tier suppliers as well as of potential new suppliers eager to plug-in. Consequently, several casual drivers reshaping the organizational structure of GVCs/GPNs have been identified and analysed such as streamlining the supply base and resulting cascade effect, or global and forward sourcing to name at least a few of them. The presentation concludes that interaction among these processes is giving rise to a highly variegated evolutionary dynamics not only of particular GVCs/GPNs, but even of specific segments of various production networks. Thus, authors would like to encourage more research aiming at fuller comprehension of the overall dynamics of current production and value networks.

ENTERPRISES IN THE SUBURBS AND THE LOCALITY OF ENTREPRENEURSHIP

Erik Borg, Södertörn University, Sweden
Besrat Tesfaye, Sodertorn University, Sweden
Malin Gawell, Sodertorn University, Sweden
Ali Hajighasemi, Sodertorn University, Sweden

Suburbs represent an essential subject for regional studies and have a rapidly increasing economic significance within wider metropolitan regions (Phelps 2010). It is necessary to create inclusive suburbs with a stronger identity. The current growth of populations in major cities requires an ability to reorganize existing cities and a massive restructuring of urban infrastructure (Modarres and Kirby 2010). The interpretation of the needs of suburbs have previously called for a transdisciplinary and collaborative strategy (Després et al. 2004). We look at entrepreneurship and different types of

businesses as a source of vitalization of suburbs. These ventures are studied in the context of the diversity of the population of suburb. Entrepreneurial investments, the establishment of high impact enterprises as well as networking among local and migrant businesses represent elements that can vitalize previously marginalized suburbs. Enterprises that are clustered in suburban neighborhoods reflect the different impacts of suburban and city spatial forms. Newly arrived citizens draw upon the critical mass of ethnic members to form a niche market for ethnic business (Fong et al. 2007). Minorities may have limited access to financial capital in the larger urban economy, but ethnic enclaves may provide a source of a unique competitive advantage (Cummings 1999). Entrepreneurship rooted in a suburban surrounding represent a specific opportunity to become embedded in an economic and spatial dimension. The migrant may be seen as representing a diversity capital which penetrate specific market conditions located in ethnically diverse neighborhoods situated in the suburbs of major cities. The spatial and entrepreneurial dimension of ethnic business can thereby be given a relevant context for interpretation.

RELATEDNESS, KNOWLEDGE COMPLEXITY AND TECHNOLOGICAL OPPORTUNITIES OF REGIONS. A FRAMEWORK FOR SMART SPECIALIZATION

Ron Boschma, Utrecht University, The Netherlands

Pierre-Alex Balland, Utrecht University, The Netherlands

David Rigby, UCLA, United States

A smart specialization policy requires a framework to systematically identify technological opportunities of regions. We define a technological opportunity as a potential to develop a technological advantage in a field that (1) draws on the specific knowledge bases of the region, and that (2) leads to technological upgrading of the regional economy. A technological opportunity can therefore be identified as a technological field in which a region does not have a technological advantage yet, but that displays at the same time a high degree of relatedness with the regional knowledge base and a high degree of knowledge complexity. In this paper, we use USPTO patent data to identify technological fields and compute relatedness and knowledge complexity in European regions, and we assess the extent to which relatedness and complexity of the regional knowledge base, the openness of regions and the regional institutional context impact on the intensity and nature of technological diversification in European regions. Then, we discuss at length the implications of our findings for the implementation of a smart specialization policy strategy.

THE DIGITAL ECONOMY – REPLACING OR SUPPORTING TRADITIONAL BUSINESSES?

Gary Bosworth, University of Lincoln, United Kingdom

Liz Price, University of Lincoln, United Kingdom

Tom Whilde, University of Lincoln, United Kingdom

Policy focused on promoting the development of the digital economy has met with challenges of engaging certain sectors of industry – especially in more rural and peripheral regions. As a result, some businesses are suffering declining market share in the face of extended on-line shopping, on-line entertainment and on-line information resources.

Regional development and business support continues to emphasise the need for faster broadband and a digital agenda but this appears to be alienating a certain group of business owners. For some, disengagement may be a personal choice but for others this may be connected to inadequate connectivity or inadequate training provision to capitalise on digital opportunities. Where advances

in the digital economy is seen as a threat to businesses, it can elicit a defensive approach that shuns new technology. This “head in the sand” mentality can limit the potential of a business and also restrict the prospects of employees.

In this research we therefore seek to identify exemplars of traditional businesses that have successfully embraced new technology as a means to rethink the best methods to engage business owners around the subject of the digital economy. We do not make an assumption that “digital is best” but invite business owners to consider how the proliferation of internet-based activities are creating new competitive threats as well as advantages. Such an approach then invites business owners to think about how best to position themselves with respect to the digitisation agenda and can inform new training and support activities better targeted towards currently disengaged groups.

TOWARDS PLACE-BASED DEAL-MAKING IN CANADA: FEDERAL METAGOVERNANCE

Neil Bradford, Huron University College Western University, Canada

The idea of “place” in Canadian public policy is a conundrum. Studies of the national political culture consistently reveal a strong territorial sensibility in public attitudes and orientations to civic life. Yet, the country lacks a robust tradition of place-based policy making. An advisory report to the Prime Minister concluded that “Canada needs to catch up with other countries on the issue of place” while an OECD territorial review described Canada’s “disjointed approach” to urban and regional policy. What accounts for the disjuncture between territorialized community identities and the relative absence of “place matters” principles in state strategies? To what extent are Canadian governments now embracing more spatially- sensitive policies as pressure mounts to combine equity or cohesion with innovation and specialization? This paper takes-up these questions, situating Canadian federal development policy in the growing international and comparative debates about place-based deal-making. Beginning with historical-institutional discussion of factors inhibiting place-based approaches the paper identifies three emergent forms of geographically tailored, collaborative national policies threaded through Canada’s highly decentralized federation: institutional intermediation in regional development agencies; territorial policy adaptation in localized governance networks; and community-based regionalism in learning demonstration pilots. While not yet officially recognized as such in government circles, this menu of spatial policies and territorial mechanisms constitutes a Canadian variant of the place-based agenda. Emphasizing the agenda’s differentiated roll-out and hybrid logic, the paper offers a metagovernance framework to capture the variable scale and scope of Canada’s place-based deals.

‘WHY DOES UK NOT HAVE ITS OWN GOOGLE, LET ALONE A NEW ARM?’ - AN ASSESSMENT OF THE TAX AND FINANCING POLICY INCENTIVES THAT COULD INFLUENCE FIRM GROWTH IN UK

Nasira Bradley, University of Glasgow, United Kingdom

UK has some of the most highly competitive tax and financing incentives globally aimed at promoting firm growth. It reached the lowest corporate tax in G7 economies with 26% in 2012. To promote venture capital investment, UK has also maintained the lowest capital gains tax rate amongst G7 economies since 2000. To further aid venture capital, UK introduced innovative tax relief incentives. Financing incentives such as enterprise investment scheme (EIS) was launched in UK since 1994, as well as Venture Capital Trust Scheme (VCT) since 1995. These incentives were further enhanced in 2012 through Seed Enterprise Investment Scheme (SEIS). As private Equity is recognized to impact not only start-ups through venture capital, but also aide medium and large firm growth through mergers

and acquisitions: UK reduced regulatory barriers to mergers and acquisitions, through removal of the public interest tests in Enterprise act 2002.

It is indeed remarkable, given these competitive incentives that UK has not produced the new Google or the new Tesla. Yet, it ranked 4th in 2015 for producing innovative start-ups (GEDI , 2016). Could these policies have been effective towards one end of the firm spectrum more than others, that could perhaps explain UK firms diminishing presence on the global giants of today. To assess how policies may have shaped the current outcome, this study analyses the impact of these competitive measures on firm growth across the three firm-sizes: small, medium and large, using firm-level data from all UK sectors over the time-period 2005-2015.

TERRITORIAL DEVELOPMENT AND IRELAND'S CITY REGIONS: PLANNING AND GOVERNANCE CHALLENGES

William Brady, University College Cork, Ireland

The preparation of a new National Planning Framework for Ireland in 2017 provides an incentive to consider an urban policy framework for Ireland's second-tier city regions. The National Spatial Strategy in 2002 did attempt to introduce an urban hierarchy as part of the challenge of supporting balanced regional development; the four second-tier city regions were designated as National Gateways, reflecting their role in forming the critical second level of the national settlement hierarchy.

This paper examines the extent to which this new found emphasis on urban concentration at the second tier as a policy aim was matched by subsequent political and administrative commitments in the form of enhancing the capacity of urban governance at this level of the urban hierarchy. Following a brief overview of the state's recent demographic and economic trends, and a discussion of the broader context of the position of second tier cities in an international context, it deconstructs the meaning of national gateway status within the NSS and develops an understanding of what this implied in the context of the focus on the second tier cities concerned.

It then assesses the relative performance of the four second tier cities by measuring the degree of concentration of settlement and development activity and discusses briefly the urban governance dimension by examining the extent to which the city regions concerned were actually equipped to function effectively as strong regional centres and to fulfil their role as National Gateways.

REFRAMING SMART SPECIALIZATION STRATEGIES AT THE URBAN LEVEL

Alberto Bramanti, Bocconi University, Italy
Giulia Lazzeri, Scuola Superiore S.Anna, Pisa, Italy

The economic recovery around Europe is still unsatisfactory and it calls for an urgent change in the economic policies followed by the government and the European Institutions. The market alone has proved not to be able to give answers to the problems of growth and unemployment.

New material and immaterial investments are needed in order to raise productivity and the domestic demand for consumption, and a new attention to evolving needs is mandatory. In short, we need a "new industrial and regional policy" able to stimulate the creation on new knowledge among different social and economic actors.

In the recent years the “Smart Specialization Strategy” has widely spread throughout Europe highlighting the tight integration between productive phenomena, the diversification into new activities (domains) and also the integration between different sectors at the urban and regional level. While searching for positive evidences of this approach – which are still lacking or less than fully convincing – European regions need to move on devoting the greatest attention to new urban investment policies.

The paper will discuss the need for complementing the export-led approach with a renewed attention to different modern industries producing for the domestic demand, strictly linked to the development of new urban markets, and having a significant economic impact in terms of employment and growth: a) housing; b) mobility and logistic; c) culture, leisure and media; d) health, welfare and education; and e) environment and energy saving. The relaunch of investment in these six sectors, related to improving the quality of life in urban areas in Europe, appears fundamental for several reasons.

The paper has a strongly policy oriented “normative approach” addressing the urgency to mobilize public and private investments for new production and new services of collective interest with a bottom-up view rooted at the urban scale.

IS COMPLEXITY RARE? A NEW APPROACH TO THE MEASUREMENT OF KNOWLEDGE COMPLEXITY

Tom Broekel, Utrecht University, The Netherlands

Knowledge complexity is seen to be one of the crucial dimensions for understanding technological progress and regional development. In particular, in the field of Evolutionary Economic Geography, it is argued that regions being successful in complex technologies are more likely to experience prosperity and sustainable long-term growth. Empirical confirmation for this claim have been put forward measuring knowledge complexity with the so-called method of reflection. The method ultimately builds on the assumption of complexity been spatially rare, i.e. only few regions are able to successfully contribute to the development of complex technologies. While this seems to be plausible, the assumption is empirically unconfirmed and, crucially, cannot be tested with the method-of-reflection-based approaches due to endogeneity issues.

The paper presents a new approach of measuring knowledge complexity without assuming any relation between spatial (or combinatorial) sparsity of knowledge and its degree of complexity. On the basis of information theory, the proposed measure incorporates on essential features of complexity by considering the diversity of technologies’ knowledge base and the intricacy of the (re)combinatorial processes need for their advancement.

The empirical applicability of the measure is demonstrated using European patent and patent citation data in the evaluation of more than 500 technologies’ complexity. Subsequently, by analysing the spatial distribution of knowledge complexity, the paper gives an answer to the question of whether knowledge complexity is spatially rare or not.

AN EVOLUTIONARY APPROACH TO GREEN ECONOMY TRANSITIONS IN TOURISM

Patrick Brouder, University of Johannesburg, South Africa
Piotr Niewiadomski, University of Aberdeen, United Kingdom

Although UNEP (2011) has listed tourism as one of the ten key sectors through which green economy transitions should be pursued and great hopes are pinned on tourism by the UN's Sustainable Development Goals (UN 2015), still very little is known on how the contribution of tourism to green growth is being realised and what place-specific and historical factors mould it. The overarching aim of this paper is to address this lacuna and set an agenda for detailed research on the interdependencies between tourism evolution and green economy transitions. The paper argues that as much as tourism has the potential to contribute to green economy transitions, it also has a lot to gain from such transitions, in particular by overcoming the climatic 'elephant in the room' of global tourism. In order to address both spatial and temporal aspects of such interdependencies as well as the normative aspect of "greening" the economy, the paper adopts an evolutionary perspective - a combination of evolutionary economic geography (EEG) and geographical political economy (GPE). Special attention is paid to novelty and its central role in green economy transitions. The paper contends that while tourism is not usually deemed 'innovative' (Hjalager 2010), the novelty which green economy transitions rely upon can serve as a window on the type of changes tourism requires to be truly sustainable in the long term. A number of empirical examples from the existing literature are used to exemplify green transitions in tourism and these are analysed through an evolutionary lens.

LOSING THEIR PLACE? THE IMPACT OF POLICY ON THE 'LOCAL EMBEDDEDNESS' OF COMMUNITY SUPPORT ORGANISATIONS IN ENGLAND

Kevin Broughton, Centre for Business in Society (CBiS), United Kingdom

'Locally embedded' support organisations in England have performed an important role in supporting communities in disadvantaged neighbourhoods, often as key players in area-based initiatives in the UK, Europe and beyond. Empirical evidence suggests that the nature of locally embedded support offers unique added value for marginalised communities. Such support can enhance residents' inclusion in the wider community and local economy, thus contributing to 'inclusive growth' agendas.

Many locally embedded support organisations are voluntary and community sector organisations (VCOs). Successive government policies towards VCOs in England have focused on encouraging these organisations to deliver public services, civil renewal and innovative solutions to social problems. Driven by the need for 'sustainability', government policy has increasingly encouraged VCOs to develop commercially-inspired models of organisation, such as social enterprise.

This paper provides a critical exploration of the impact of successive government policy on the 'local embeddedness' of VCOs and their communities. In the context of 'new localism', it explains how recent government policies appear to be eroding the locally embedded nature of VCOs' support services, distancing such organisations from their communities. The paper then offers an empirical case study of a VCO that has developed an organizational model which continues to serve its local community, whilst developing a sustainable future. The paper concludes by suggesting broader research and policy needs which could support the sustainability of VCOs whilst preserving their local embeddedness.

ON SUSTAINABLE DEVELOPMENT: INCLUSIVE INSTITUTIONS IN THE TERRITORY AS A COMMON

Alberto Brugnoli, University of Bergamo, Italy

Filippo Sabetti, McGill University, Canada

The paper sets the basis to address the question: “What kind of institutions can be identified to work for development and advanced human welfare?”. In this regard, it is intended to verify the importance of institutions in development, taking into consideration their quality (performing institutions or just institutions that works) and their links with the territory, the realm in which development emerges. These considerations will open the debate on a central issue, it is: if performing institutions matters, how these are shaped and created?

With this aim, the first part of the paper approaches the concept of institutions and its links with development and advanced human welfare, considering these elements within specific territories. For this analysis, we consider first the contributions on development of North (1990), Sen (1999) and Acemoglu and Robinson (2006, 2012) to stress both the role of institutions and the role of territories (and their governing institutions of the commons). The second part of the paper will deepen the study of territorial sustainability and advanced human welfare, moving the focus of the research from “why institutions matters for development” to “how are shaped performing institutions”. For this aim we take into consideration the contribution of collective actions and elements that regard the challenges to achieve the sustainability of the territory (commons) conceived in line with Ostrom (1990, 2009), as well as the complexities involved in the process of “crafting institutions” in Sabetti (2009, 2011).

RESOURCES, ASSETS & LINKAGES: TOWARDS A RESOURCE BASED VIEW OF REGIONAL ECONOMIES

John Bryson, University of Birmingham, United Kingdom

Catherine Harris, University of Birmingham, United Kingdom

Linkage is a concept that describes ties between firms that aid in the selling and distribution of goods). These can include the provision of equipment, movement of goods and linkages with providers of financial services and information and knowledge. Exploring linkages used to be an important conceptual tool for exploring the structure of regional economies; however, the concept has been ignored in recent academic debates. The focus on linkages was replaced with debates on clusters and, more recently, chain-related metaphors. The linkage approach provides an alternative metaphor for exploring regional relationships that support local economic activity. Linkage and chain-based metaphors highlight the importance of understanding relationships between firms and other actors. Thus, linkage and chains represent place-based relationships. There is another well-established literature on firms: the resource based view of the firm (RBV). This highlights the role that resources play in firm competitiveness by providing forms of inimitability. Through this approach firms can be conceptualised as regional resources or assets. Linkage, chain-based metaphors and smart specialisation all place an emphasis on firms. In response, this paper will recover an old debate on linkages and use it to develop a new conceptual framework based on the development of a resource based view of regional economies. This paper applies the RBV of the firm approach but at a regional level to explore regional resources that provide inimitability and differentiation. The paper promotes a discussion between debates in regional studies (linkage, clusters, smart specialisation) and organisational theory (RBV).

AREA BASED REGENERATION IN POLAND – THE POSSIBILITY OF MEASURING SUCCESS

Robert Buciak, Central Statistical Office of Poland, Poland

In 2015, for the first time in history, public statistics conducted a survey on regeneration in Poland. The main aim of the survey was to develop a methodology for measuring regeneration undertaken by municipalities and to obtain data about the scale of the activities carried out in the period of 2012-2014. The survey helped to elaborate diagnostic features on regeneration activities. The size of the activities was described by basic variables – the area covered by regeneration activities, the number of people living in these areas, methods used to determine the regeneration areas, the scale of consideration of regeneration in municipal planning documents.

In 2015 Polish government implemented the Law on Revitalization (Journal of Law 2015, item 1777). The introduction of the law triggered the rapid growth for information on regeneration in Poland. At present, trying to meet the informational need, public statistics conducts the second round of the survey for the reference years 2015-2016. Current survey includes much broader set of information. Questions on social participation, sources of funding and monitoring of the process were added. Municipalities are obligated by the law to use in regeneration plans a numerous social, economic, environmental and spatial planning indicators. Every municipality adopts criteria tailored to their needs. In order to ensure comparability a short set of diagnostic indicators that allows to objectify and evaluate the management processes was prepared.

UNDERSTANDING HIGH-TECH CLUSTER EVOLUTION

Giulio Buciuni, Trinity College Dublin, Ireland

Dieter Kogler, University College Dublin, Ireland

Paul Ryan, Trinity College Dublin, Ireland

Over the past decade, a growing body of research has focused on the evolution of industrial regions and the manner in which such regions have reacted to globalization (e.g. Breznitz & Buciuni, 2015; Christopherson, 2014). In particular, Evolutionary Economy Geography (EEG) theory has emerged as a new discipline to improve the understanding of the spatial evolution of firms and industries through an explicit dynamic perspective (Boschma & Frenken, 2006; Kogler, 2015; Martin & Sunley, 2015). Despite recent endeavour, this discipline has fallen short in taking account of micro-level dynamics as the principal drivers of regions' evolution across space and time (Boschma & Frenken, 2011). This vacuum is especially relevant for clusters analysis, a field where the role of leading firms has been shown to profoundly affect the competitiveness of regional industries (Giblin & Ryan, 2012; Klepper, 2010). In this paper, we propose a multi-level analysis of the evolution of a high technology industrial cluster (Galway Medical Devices Cluster - GMDC). To develop EEG theory we present a two-phase analysis: 1) We draw the historical evolution of the cluster by using a unique patent database featuring patents from the origin of the cluster in 1982 to present day; 2) We use a qualitative firm-level analysis to explain why and how the cluster followed distinct evolutionary trajectories in related and unrelated domains. Specific attention in phase 2 is devoted to the innovation strategies of multinational enterprises that have been investing in the GMDC over the past decade and horizontal spinout indigenous firms.

PROSPECTS FOR CITY LEADERSHIP IN REDRESSING THE HEGEMONY OF MARKET JUSTICE IN EUROPE'S REGIONS

Leslie Budd, Open University, United Kingdom

In an era when globalisation is the dominant regime of accumulation and mode of regulation in contemporary capitalism, the rise of atavistic nationalism may seem to defy its logic. However, as Wolfgang Streeck has pointed out, Europe's political elites do not challenge its hegemony as they increasingly embrace Marktstät (market justice) at the expense of Sozialstät (social justice). Consequently, principles of solidarity and subsidiarity, that underpin social justice, become jettisoned as austerity reinforces Marktstät as the unchallenged imperative. In the light of the continuing impact of the Great Unravelling of the Global Financial Crisis (GFC), the Great Uncoupling of Brexit and related manifestations elsewhere Europe can be explained.

What is to be done may have been a Leninist slogan but as the global institutions of neo-liberalism are starting to discover, equality increases growth. As a founding principle of social justice, subsidiarity provides cities and regions with the means to potentially redress Marktstät's hegemony. By becoming trustees of economic citizenship and governance their leaders may create the institutional basis of this redress: city leadership and in particular its civic form as its agency. This paper addresses these challenges through an analysis of the macro-factors outlined above combined with an investigation of city leadership through the multi-level prism of governance of some of the EUs sub-national territories.

VISUALISATION & ANALYSIS OF FIRM NETWORKS: A COMPARISON OF THREE EUROPEAN ICT CLUSTERS

Eoin Byrne, Cork Institute of Technology, Ireland

Linkages and networks are a key component of clusters and determining what networks firms engage in, can improve our understanding of clusters. However, it is difficult to collect firm network data on the various types of networks and at what geographic level (within or outside the cluster) these linkages exist. Furthermore, spatial network maps have considerable potential to improve the visualisation of clusters, thus facilitating dissemination to wider audiences.

This research employs a qualitative methodology (V-LINC) to record, visualise and analyse the linkages that firms in a cluster engage in, to investigate cluster ecosystems. It places firm linkages at the core of the analysis and builds on social network analysis maps. The data is based on in depth interviews with companies and identifies not only the number of linkages firms engage in but also distinguishes the types of linkages, the geographical spread of interaction (local, national and international) and the importance of those linkages to the firm.

V-LINC is applied to investigate three ICT clusters across Europe (Cork, Ireland; Île-de-France, France; Slovenia), which are at different stages of development. The research compares the clusters in relation to three cluster determinants: 1) value chain linkages, 2) knowledge linkages, and 3) economic policy and support linkages. The findings of this empirical research contribute to the understanding of how clusters at different stages of development operate. The results show how examining firm linkages can be used to develop targeted policy initiatives for a specific cluster and are of benefit to cluster researchers, economic policy makers and cluster practitioners.

POLITICAL ECOLOGY AND SOCIO-ENVIRONMENTAL CONFLICTS IN GERMANY: THE CASE OF RE-MUNICIPALISATION FOR URBAN REGENERATION, ECO TOWNS, AND REGIONAL PROSPERITY

Ignazio Cabras, Newcastle Business School, United Kingdom
Gabriel Weber, ISM, Germany

In the past three decades, Germany has made a significant effort by increasing and expanding policies in enhancing ecological awareness and pursuing environmental efficiencies. However, despite Germany's sustainability agenda has been widely acknowledged at a global level, many environmental conflicts (e.g. privatization, extractive activity, energy production, and infrastructure projects) have occurred or intensified in the country since 1990s. This paper investigates the causes of this new wave of environmental conflicts in Germany. It examines their occurrence and distribution. And, in view of sustainability, how these conflicts have been either won or lost by different parties involved. The paper analyses information collected during a field study undertaken as part of a project on Environmental Justice Organisations, Liabilities and Trade (www.ejolt.org).

The analysis presented in the paper includes in-depth interviews carried out with 19 experts on environmental conflicts in Germany between 1990 and 2014. Responses gathered from the experts enabled us to identify 89 cases of environmental conflicts occurred in the country within the period considered. Information was used to classify conflicts in relation to different typologies and with regard to factors causing them; their environmental, social and economic impact; and different groups or parties involved.

Preliminary findings suggest that most of the environmental conflicts are dealing with the struggle of various society groups to achieve a democratic and participative management of (former) public services, public transport or public urban spaces. Definitive results will provide a useful tool for policy makers, private and public companies to assess the reaction of various society groups to environmentally sensitive policies and planning projects. For NGOs, activists, and scientific organizations, it provides an overview of the regional distribution of conflicts and is also a tool to address environmental injustice.

THE SPATIAL & HIERARCHIC URBAN STRUCTURE OF THE ULTRA-ORTHODOX COMMUNITIES IN ISRAEL

Lee Cahaner, Oranim Academic College of Education, Israel
Nissim Leon, Bar-Ilan University, Israel

The segregation of populations is one of the main axes in the research of urban geography, which refers to the spatial and functional relationships between settlements. In Israel this phenomenon has its unique expression in the spatial processes concerning the ultra-orthodox population. This population holds a set of interactions within itself as well as with the non-orthodox surrounding population because of historical and contemporary motivations on its which strength depends for its homogeneousness and separation. Its demographic growth rate and the internal social processes that the ultra-orthodox society undergoes create a new image of the ultra-orthodox concentration and its location in the Israeli space.

The goals of the present study have also been defined with the express intention of filling the scholarly vacuum noted above: firstly, to discuss the development of the Israeli ultra-Orthodox sector's hierarchical and spatial structure as of 2015, in light of the principles and mechanisms that guide it and vis-à-vis the general population's hierarchical locality system; secondly, to map Israel's ultra-

Orthodox population, with attention to its physical boundaries, its subdivisions (Hassidic, Lithuanian, Sephardic) and the geographical and demographic processes that have characterized it in recent years; and thirdly, to shed light on the interactions between ultra-Orthodox localities via several different parameters, e.g. migration, education, transportation, employment, consumerism and community services.

MARSHALL, JACOBS AND THE OTHERS: A TAXONOMY OF THE ITALIAN PROVINCES

Giuseppe Calignano, UiS Business School - University of Stavanger, Italy

Luca De Siena, University of Salento, Italy

Marte Cecilie Wilhelmsen Solheim, University of Stavanger, Norway

This paper aims to analyze the role played by different types of agglomeration economies in the Italian provinces (NUTS 3). Specifically, various approaches (i.e. MAR, Porter, Jacobs) aiming to explain how knowledge diffusion and circulation between firms and geographical areas leads to regional growth will be taken into account. More precisely, the objective of the present article is to examine which types of agglomeration economies (localization/specialization or urbanization) are predominant in the Italian economic and entrepreneurial fabric. Within urbanization economies, it will be also highlighted the impact of related variety on growth processes in comparison with the effects of Jacob's externalities.

Several indices based on number of firms and employed persons will be used to measure agglomeration economies and by employing data provided by the Italian National Institute for Statistics (Istat) from 2012-2014. Subsequently, the effects of the various agglomeration economies on economic growth will be tested by analysing the value added at the provincial level. At the same time, indicators such as skilled labour, R&D investments, and presence of universities and research centres will be adopted to assess their impact on agglomeration economies at the provincial level.

Finally, the ability of the various Italian provinces to resist to the global financial crisis of 2007-2008 will be also assessed.

TRANSFORMING SMART CITIES WITH SOCIAL INNOVATION: PENTA HELIX MULTI-STAKEHOLDERS FRAMEWORK

Igor Calzada, University of Oxford, United Kingdom

The EU Framework Programme Horizon 2020 (H2020), under its Smart City and Communities (SCC) scheme, encourages European cities and regions to activate their given social and economic structures. Although, it goes without saying that the transformation of smart cities seems to be rather difficult as long as socially innovative restructuring does not take place among stakeholders.

Based on a current H2020 SCC project, this paper sheds some light on the theoretical contributions of the triple and quadruple multi-stakeholder helix approaches. As such, it advocates that social innovation could rarely entirely flourish among stakeholders simply because the stakeholders' structures show a fixed interdependence, far enough to contribute to a real transformation based on experimental governance and the urban commons.

Hence, this paper will present the Penta Helix multi-stakeholder framework referring to the transformative alliance between the public sector; the private sector; the academia, science, and

technology sector; and the civic society. Ultimately, especially the novel approach of this paper will be to include the fifth helix: social entrepreneurs, activists, bricoleurs, brokers, and/or assemblers. This paper will attempt to define and locate the profile of this fifth helix as the key element to activating a real socially innovative transformation in smart cities' understanding and practices.

This paper will be based on ongoing fieldwork research by presenting conclusions from some European cities and regions. Within the realm of this paper, social innovation could be presented as a methodological policy tool that could make effective systemic transformations in smart city institutional projects.

A METHODOLOGY FOR EVALUATING THE TERRITORIAL IMPACT OF MINING ACTIVITIES IN BRAZIL

Bernardo Campolina, Federal University of Minas Gerais, Brazil

Anderson Cavalcante, CEDEPLAR/UFMG, Brazil

Brazil is internationally acknowledged as one of the countries with the largest mineral reserves in the world, being an important player in the world production of iron, gold, nickel, zinc, bauxite, niobium, among other minerals such as precious stones. As such, the mining industry is very important for the Brazilian economy, accounting for about 4% of value added in Brazilian GDP. The sector is also important for the inflows of foreign currency in the country, given its relevance in international trade. Mineral exports accrue for more than 10% of Brazilian exports, representing around a third of the country's trade balance. Moreover, the mining activity has considerable (regional) impacts, with both backward and forward linkages in the economic chain. Despite its economic relevance, the particular nature of the activity generates several negative externalities in the areas where mineral resources are extracted and processed, such as the deterioration of landscapes, degradation of soil and river banks, air contamination, water pollution, and waste disposal. In a country with a vast and a very diverse territory, these externalities would vary according to many factors. It is our argument that the management of the mining activity should encompass economic, social, and environmental dimensions that must be based on solid evaluation of its local (diverse) impacts. Thus, the objective of the present paper is to propose a methodology for the management of mining territories that is able to account for the complexity of the mining activity in the country, ranging from the extraction of iron ore in an area that has a high population density such as the Metropolitan Region of Belo Horizonte (with more than 5 million inhabitants) to areas of preservation and low population density, as regions of the Amazon. In order to propose such a methodology, the paper revises the literature and discusses the management of mining territories in the world. Then, it analyses the significance of regional attributes in shaping management plans. Finally, it proposes a set of indicators to evaluate and monitor the regional impact of the activity according to three major axes: environmental, economic, and social.

EASTERN VS. SOUTHERN PERIPHERY IN THE EU – A COMPARATIVE ANALYSIS FROM A NEW ECONOMIC GEOGRAPHY PERSPECTIVE

Helen Caraveli, The 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 periphery. A number of questions are raised in the context of the above development, such as: Which factors underlie the differences in growth paths and 'resilience' between the eastern and the southern periphery? How important has been industrial relocation from the West to the East? And what has been the general impact of the EU's Cohesion Policy? What would be the implications of a possible further expansion towards EU's 'Eastern Neighbours' on its core-periphery pattern? This paper approaches critically some of the above issues, adopting a qualitative methodology with the use of graphical presentations. A number of quantitative and qualitative variables are examined in this context in an attempt to explain the 'catching-up' of the CEEAs (Central and Eastern European Countries) with countries forming the 'center' of the EU. In its conclusions the paper examines the appropriateness of the new economic geography's theoretical strand in interpreting the observed changes and trends in the EU.

CONTRIBUTION TO OPTIMISATION OF LAND USE PLANNING IN CITIES

Marina Carević, University of Novi Sad, Serbia

Contemporary planning approaches treat mixing of uses in cities as a desirable concept because of potential societal, economic and environmental gains. However, there is still a lack of systematic knowledge about how to achieve it. Therefore, the key issue of the paper would be the exploration of methodology for optimization of land use distribution, especially planning of mixed use in cities. Considering the complexity of this problem, the aim of the paper is to suggest a simple solution that would improve the planning process. The paper explores Mixed-use Index model (MXI) – a quantitative indexation of mixed use – and elaborates the arguments for its redefinition. MXI was conceived by Dutch urban planner Joost van den Hoek in order to make the urban mix discussable, instrumental and comparable with other urban indexes. The MXI is reduced to the proportion of housing, working and amenities, and since it puts schools, hospitals, restaurants and many other uses in the same category of amenities, the paper will propose some changes. Suggested modifications are based on Jane Jacobs's theory about primary and secondary uses and on bottom-up character of urban development, which means that uses are classified on residential, primary non-residential and secondary non-residential uses. This categorization, though perhaps not sufficiently exact actually reflects the essence of the phenomenon of combining uses and resultant synergetic effect. The improved methodology would enable optimization of decision-making and direct the answers of the question where and how to intensify activities in order to ensure more equal development of different parts of the cities.

POST-COMMODITY AFRICA: INDUSTRIAL POLICY AS ASSEMBLAGE

Pádraig Carmody, Trinity College Dublin, Ireland

The central problematic of African development is rooted in the continent's economic structure and the nature of the political settlements and unsettlement to which this has given rise. The end of the recent commodity boom has once again revealed the structural weaknesses and vulnerabilities of many African economies and consequently reinforced the imperative to move beyond commodity dependence. Developed countries are typically characterised both by diversified economic and developed class structures. In contrast most African "economies" are characterised by commodity dependence and fragmented class structures. What this conceptualisation neglects however is the way in which territorially embedded development processes can be conceived of outcomes of transnational and transnationalising assemblages of actors and artefacts or actants. A relational

economic-geographic perspective goes beyond binaries, such as development/underdevelopment and core/periphery to examine the ways in which globally imbricated structures are produced and reproduced, with concrete territorial effects.

MIGRATION, ECONOMIC CRISIS AND THE NEOLIBERAL RESTRUCTURING IN EUROPE: THE CASE OF ALBANIAN WORKING MIGRANT WOMEN IN GREECE

Erka Caro, Albania

The global economic crisis and associated austerity policies have enabled the deregulation of labour markets, reviving old divisions of work. The politics of austerity have targeted employment regulatory regimes, allowing employers to demand more from their workers, and increasing worker precarity. We show the effects of austerity policies on Albanian migrant workers in Greece to be highly gendered. While changes to employment regimes are presented as “marketization” processes, which supposedly remove barriers to the operation of free markets, in fact these changes simply intensify exploitation in segmented labour markets.

Austerity related changes have been targeted to hit more sheltered sections of the economy, which include those into which male migrant have gone. Female Albanian migrants, however, did increasingly enter the labour force. This research will contribute to the ongoing discourse on women and austerity in the globalized labour market as affected by the economic crises. Social cleavages such as ethnic and gender divides are used to create labor hierarchies which are sustained in times of austerity becoming factors to keep/find the job and consequently to help restructure and deregulate the pan European labour market.

We aim to understand how the economic crises, neoliberalism and austerity policies have affected the service sector and working migrant women in Greece, a country severely hit by the crisis. By exploring the meanings working migrant women attach to the crisis we will be able to understand how the crisis is affecting the labour markets and employment regimes both from macro and micro level perspectives. We found that migrant women experience forms of equality and empowerment through work. However, in times of crises, migrant women are one of the most vulnerable groups to suffer austerity measures and worsening of working conditions. In Greece the domestic sector, where the majority of migrant women are employed, is mainly informal, demands extreme flexibility, show high levels of exploitation and precarity.

CONCEPTUALIZING COHESION POLICY AS A CASE OF DEVELOPMENT POLICY: A FRAMEWORK FOR THE EMPIRICAL ANALYSIS

Mattia Casula, LUISS G. Carli - Rome, Italy

In the last 50 years, several scholars tried to understand if economic convergence is taking place in Europe, as well as its intensity around the different regions. Assuming that convergence is taking place, in the last decades several studies tried to understand not only the "if", the "how" and the "where" of this phenomena, but also the "why", i.e. which factors can determine and/or can facilitate the achievement of a different economic performance across "old" and "new" Member States and their respective regions. Starting from a working hypothesis, and taking into account Cohesion Policy implementation as a case study, the paper develops an analytical framework in order to explain the elements that help in understanding the success or failure of a development policy. Three factors, among them inter-connected, will be considered, i.e.: i) the institutional solutions elaborated in order

to plan development; ii) the economic policy choices, as well as the normative solutions, adopted in order to improve growth; iii) the administrative change of the actors involved in the different phases of the policy elaboration, i.e. from its elaboration to its implementation and its monitoring and evaluation.

WHO GOVERNS IN SUPRA-MUNICIPAL GOVERNANCE?

Mattia Casula, LUISS G. Carli - Rome, Italy

Political science literature is not unequivocal in recognizing the political, cultural and institutional factors that can determine the different dimensions of inter-municipal cooperation. The paper tries to limit this gap, by presenting the results of a qualitative study on inter-municipal agreements in two Italian regions, based on both an expert survey and in-depth interviews with local administrators and politicians. Covering four different dimensions of inter-municipal cooperation (strategic, structural, of vertical and horizontal governance), and taking into account the international literature on policy instruments, the paper argues that in presence of a structured incentive system local actors tend to align at the regional preferences. On the contrary, in the absence of it, the choices of the single municipalities are to a large extent conditioned by cultural and political factors, as well as by the legacies of the past.

LOCAL AUTHORITIES AND CAPACITY BUILDING ON EU AFFAIRS

Nicola Catellani, SERN, Italy

In the framework of the European integration process local and regional authorities have been playing an increasingly important role over the past two decades. In particular, they are the largest beneficiaries of EU direct and indirect funding and they have developed a stronger actorness in the European context as individual organizations or through transnational networks/organizations representing them. While the emergence of this process has been addressed by scholarly work, scarce attention has been given to understanding how local authorities, as organizations, address the theme of international relations and specifically EU affairs. A key question, still largely unexplored, rests in how does a local authority “learn” and create capacity about EU affairs?

This paper will investigate how local authorities build capacity in the field of EU affairs by looking at three levels of analysis framing the theme of capacity building: the conceptual level, the strategic level, and the operational level.

GOVERNANCE RESCALING & SPATIAL PLANNING: THE AMBIGUITIES OF REGIONALISM & SPATIAL RESCALING IN PORTUGAL

Cristina Cavaco, CIAUD, Faculty of Architecture, University of Lisbon, Portugal

João Pedro Costa, CIAUD, Faculdade de Arquitetura, Universidade de Lisboa, Portugal

During the 1990's and early 21st century, reforms took place at national planning systems in Europe. Although deep differences exist from one country to another, converging trends and commonalities have been widely recognized following a rhetoric that puts the territory at the centre of development policies.

However, a new wave of planning reforms has just come onto the scene, having implications in the multi-scalar organization of planning and governance structures, in the distribution of tasks between the different tiers of government, and in the relative position of the regional level in face of ambivalent moves towards decentralization or recentralization.

Focusing on the Portuguese case, the paper addresses the relationships between spatial planning and governance rescaling and explores the ambiguities between discourses and practices, focusing on the regional level and rescaling dynamics.

Portugal balances between a strong degree of centralization and a firm municipal tradition. The regional level has never been made official, although foreseen in the Constitution and formally incorporated into the hierarchy of the planning system.

Recently, a new wave of reforms took place in the planning and administrative systems, but rescaling movements seem to be short and ambiguous. Although the wording is very much in line with the European mainstream, in practice changes are hardly able to meet the expected goals.

The paper presents a background of the Portuguese spatial planning system vis-à-vis the legal and administrative organization and tradition. It focuses on the ambiguities of regionalism and addresses spatial rescaling in planning and governance rescaling reforms.

THE URBAN DYNAMICS OF FINANCIAL SERVICES: MEASURING THE DETERMINANTS OF CENTRALITIES IN A BRAZILIAN METROPOLIS

Anderson Cavalcante, CEDEPLAR - Universidade Federal de Minas Gerais, Brazil
Renan Almeida, CEDEPLAR/UFMG, Brazil

Many models of urban growth, which assume a constant outward expansion from a city core, have succumbed to an urban reality that is much more varied and complex. The spatial organisation of cities reflects cultural, social, political and economic patterns which, viewed through the lens of time, are in constant motion. Taken altogether, the latter characteristics project the contemporary urban spatial structure as a result of a complex and dynamic system which responds to forces that are simultaneously competitive and complementary. These movements have altered the urban infrastructure and the conversion of land use, changing the urban footprint. The urban centres present, as a clear example of the interrelation between those forces, development dynamics which are marked by spaces of centralised deconcentration. These dynamics suggest that a process of deconcentration usually manifests itself in the emergence of other multifarious centralities, mostly through the clearing out of some areas and subsequent growth of others, in a typical centre-periphery process.

The consolidation of specific places in the urban area occurs without any socially desirable planning, as a by-product of the capitalist logic of production, which is led by the effects of globalisation on regional and urban inequalities throughout the world. Multiple studies on urban development have contemplated sanitary, health, education, and environmental sustainability. Very little, however, has been devoted to the comprehension of the financial dynamics of urban development. It is now fully acknowledged that financialisation processes have gained greater significance in the last three decades, in a context of growing financial relationships between households and firms and an increasing use of financial services that leaves financialisation with greater shares of income. If one suggests that financialisation has regional roots, then urban areas can also be thought of as influenced by the logic of financial capitalism. Therefore, the urban space must change in accordance to

increasingly unequal financial trends, which in turn must be considered in order to understand urban development and the elaboration of cities' development plans.

Financial capital conquers new spaces, mimicking its valuation objectives, and generating an urban dynamic that increasingly promotes inequalities. Thus, the objective of this paper is to elaborate on this perspective, offering arguments comparing the dynamics of financial capital within the urban space. It will first be argued that financialisation follows a centralisation logic, with highly specialised services being offered at central places in the urban space, and less complex services with a more dispersed pattern. This characteristic promotes a centralisation-deconcentration effect on the urban structure: the dispersal of services and urban amenities reduces transport costs and improves urban balance in a few places, while complex services, often of speculative nature, are more highly centralised, promoting unbalanced (centre-periphery) urban development. In order to understand the balance between these two effects, this paper provides an empirical study over the determinants of the localisation of banks in the metropolitan area of Belo Horizonte, in Brazil. In order to do that, the paper discusses location theory and the dynamics of urban growth. In this context, the emergence of new centralities and the suburbanisation process are exposed and summarized. Then, a theoretical link between urban growth, centrality and financialisation is suggested. The final sections offers an empirical analysis of the spatial correlations between financial centralities and their urban determinants, such as income, population, the neighbourhood amenities, and land value.

SHOPPING & WORKING. SHOPPING CENTRES IN WARSAW BUSINESS DISTRICTS

Dorota Celinska-Janowicz, Centre for European Regional and Local Studies (EUROREG), University of Warsaw, Poland

Due to large concentrations of people business areas, central as well as secondary, are important retail locations. Traditionally, geographical analysis of urban retail have been focused on consumers' places of residents. However, this approach seems to be insufficient. Spatial shopping behaviours are also strongly affected by location of jobs. Additionally, due to different characteristics of the central and secondary business areas, as well as their placement in the urban spatial structure, role of the shopping centres in these two types of office space concentrations is also different (in terms of e.g. tenant mix or shopping behaviours of their customers).

The aim of the paper is to present results of the empirical research on shopping behaviours of office employees conducted in central and secondary business district in Warsaw, Poland. The study was based on two types of information: tenant mix of shopping centres located in both business areas and results of the questionnaire survey conducted among employees. The analysis revealed that although the offer of shopping centres in both areas is relatively similar, employees of nearby offices use them in a different way. In the secondary business district shopping centre is not only more often visited, but also plays a greater role as a place of business meetings. Also time spent in the centres and time of the day when they are usually visited differ.

SOCIAL DETERMINANTS OF INNOVATIONS GAP: EMPIRICAL EVIDENCE FROM EUROPEAN REGIONS

Victor Cepoi, School of Advanced Social Studies, Slovenia
Borut Rončević, School of Advanced Social Studies, Slovenia

The growing and persistent gap in innovation levels between the core, semi-peripheral and peripheral European regions, in spite of continued research efforts and countless EU, national and regional

project and initiatives, leaves scholars and policy-makers all but helpless. This is due to the fact that policy-making usually fails to tackle intangible social and cultural factors of regional innovation. In this presentation, we explain innovation gaps by focusing on these intangibles. We conceptualise regional innovation systems from the perspective of economic sociology, understanding them as specific markets – drawing from Jens Beckert’s theory of social fields – which are shaped by the three social forces: institutions, social networks and cognitive frames.

In our presentation we, first, provide theoretical and conceptual account of regional innovation systems as social fields, originality being in inclusion of all three aspects, in contrast to predominant focus on one of them. Secondly, on the basis of this we operationalize and develop tool that allows simple yet robust collection of qualitative and quantitative data on the regional data. This can be applied both as a tool for in-depth analysis of social and cultural factors of regional innovation system in a specific region, as well as qualitative comparative research. Finally, we demonstrate application of this tool on a sample of 12 European regions, by conducting both qualitative and fuzzy-set analysis of necessary and sufficient conditions of innovations.

STUDY ON THE CROSS-BORDER BEHAVIOR OF RESIDENTS BETWEEN HONG KONG AND SHENZHEN

Yu Chen, Shenzhen University, China

The political and economic relationship between Mainland China and Hong Kong went through enormous and dramatic changes in the last 40 years. The Reform of Mainland since 1978, the return of Hong Kong in 1997 and the signing of CEPA (Closer Economic Partnership Arrangement between Mainland and Hong Kong) in 2003, all remarked the continuing deepening of relationship between Mainland and Hong Kong. In the practical level, Shenzhen as the city adjacent to Hong Kong, has been actively playing the role as the gateway of implementing the closer relationship between Mainland and Hong Kong.

In the last decades, Hong Kong and Shenzhen both have prosperous economic development and the economic structure and relationship have substantial changes. With the deepening of regional economic integration, economic space between cities has been gradually merged together. The spatial scale of individual activities has exceeded the boundary of cities. Such cross-border activities have profound impact on the urban and regional economy, and will influence the regional policies of both cities.

Therefore, a more comprehensive and in-depth investigation into the cross-border behavior of residents in both cities, could help us understand the roles of both cities play in the new era. Base on this purpose, this study utilizes social media check-in data, transportation data and governmental cross-border surveys to look into the residents’ cross-border working and entertaining behaviors in both cities, so as to identify new trends of regional relationship between Hong Kong and Shenzhen.

CHINA’S MOVING SLUMS: A HIDDEN GEOGRAPHY OF RECYCLING AND HOUSING INJUSTICE ON THE EDGE OF BEIJING

Guo Chen, Michigan State University, United States

Close to 30% of China’s urban population live in slum conditions according to UN-Habitat (2010). And, China’s rapidly expanding cities face an “urbanization of poverty” characterized by increasing rural–urban migration, intensified competition for space, inadequate social services, and deteriorating

environments at the rural–urban interface. Yet, in its urban slum eradication/upgrade plan, the Chinese state has excluded rural migrant settlements from the definition of what constitutes a slum. By introducing the concept of moving slums in China, we interrogate both the “slum-free” vision in the Global South and the scholarship on China’s slum-absent urbanism. We argue that the spatial mobility of the “slums” as a result of hukou, China’s land politics, and constant urban redevelopment has made addressing their existence problematic and has contributed to the disjuncture of the literature on this subject. Further, inadequate attention to the “hidden” migrant communities contributes to a gap in knowledge that leads to inadequate action against the increasing inequality in China. We draw evidence from years of in-depth fieldwork and participatory research in large Henan migrant–run recycling enclaves that have existed at the edge of Beijing for decades. We contend that engaging with the concept of the moving slum can facilitate collaborative efforts on the part of this long exploited group and other exploited groups in urban China to secure their rights to the city.

LOGAN TOGETHER: A COLLECTIVE IMPACT APPROACH IMPROVING OUTCOMES FOR ALL CHILDREN

Lesley Chenoweth, Griffith University, Australia
David Hogan, Griffith University, Canada

Logan Together is a long term, regional effort to create the best life opportunities for every child in Logan, a city of 300,000 people in South East Queensland, Australia. On most data measures, Logan children are below national and state averages in health, education and social indicators. Emerging from a whole of community initiative to address crucial problems in a disadvantaged region, Logan Together was established in 2015 as a collective impact program. Collective impact (CI), originally documented by Kania & Kramer (2011) is an innovative and structured approach to collaboration across many and diverse stakeholders, but offers a real way forward to achieve lasting change. CI requires a common and shared agenda for change and relies on consistent data collection and sharing using advanced data analytics to inform progress and provide deeper analysis of the problem.

Charged with a vision to improve outcomes for all children from 0 to 8 years, Logan Together has brought together families, children, community agencies, three levels of government and a university in a structural way to achieve positive change. Funded by multiple and disparate sources, Logan Together established governance structures, within the local university as the backbone organisation and has rolled out a number of projects aimed at addressing inequalities and promoting better outcomes for children and their families. This paper presents the journey thus far. We offer insights and our reflections on governance, funding, building the roadmap, establishing chapters, big data sharing and management and engagement with stakeholders. The opportunities for other applications of CI in regional contexts will also be discussed.

THE ENTREPRENEURIAL ENVIRONMENT AND THE PUBLIC POLICY FOR DEVELOPMENT OF ENTREPRENEURSHIP IN SMALL AND RURAL COMMUNITIES IN POLAND. THE COMPLEMENTARITIES AND THE CONFLICTS

Paweł Chmieliński, Institute of Agricultural and Food Economics - National Research Institute, Poland
Marcin Gospodarowicz, Institute of Agricultural and Food Economics - National Research Institute, Poland

One of the main goals of the Europe 2020 strategy is creating more and better jobs as well as fostering entrepreneurship in the EU. One of the key elements of this process is the provision of high-quality

policies and the efficient functioning of private and public entities supporting the development of entrepreneurship.

In the paper we investigate the institutional environment for entrepreneurship. The analysis concerned public and private advisory and financial entities supporting local and rural entrepreneurship. Research material includes the results of a survey conducted among non-public business advisory entities (business environment institutions - BEI) supported by individual in-depth interviews with representatives of regional governments in 2 regions in Poland.

Using the cluster analysis technique, we grouped the units according to their performance, investigating the number of employees, the length of the entity's functioning on the market, area coverage, range of services, funding structure, and collaboration with other entities. The analysis allowed to identify the most effective units (with optimal use of resources in relation to results) and to identify problems in the functioning of such entities as well as their links with public policy tools. We then examined the structure and the process of developing entrepreneurship support instruments at national level and in selected 2 regions.

Entrepreneurship advisors have significant potential that can be used for effective support of business entities. A large number of them are well-organised and well-established on the market entities, having on average of about a dozen years of experience and basing their activity on diversified sources of financing. At the same time they often report the need for highly qualified staff.

We argue that there is a conflict between the policy makers and private business advisers. It results from the flow of qualified human resources from regional governments to private business advisory entities. Lack of a market-based approach to human resources management in regional offices can be a threat to the proper implementation of public policy actions, notably the Cohesion Policy.

RIGHT TO THE CITY-REGIONS-EARTH: EVERYONE, EVERYWHERE WANTS THE BENEFITS OF CIVILIZATION'S BUILT-ENVIRONMENT; THIS IS THE CHALLENGE OF REGIONAL DEVELOPMENT

Tom Christoffel, Regional Intelligence - Regional Communities, LLC, United States

Unique by location on the Earth, a City is a politically bounded, self-governing settlement; the product of generations. It serves a local region beyond its political borders and is a focal point for housing, employment, trade, services, transport connections, culture and history. It is part of a region, a county perhaps, even if politically independent, as well as other nested regional political geographies; a province or state of a nation. It is a party to many regional alignments for service provision and trade, metropolitan or non-metropolitan, both close and distant, natural or man-made, multi-county, multi-state, multi-national. It is self-perpetuating without a chartered end date, a self-improving product of human civilization. It serves citizens and visitors, and is reliant on its regions, as they rely upon it.

As the city does not stand alone, the so-called right to the city, of necessity includes the regions of which it is part, all within the whole earth region. Earth then can be seen as a network of city settlements within a network of regions, all the product and consequence of human civilization. It is the benefits of civilization that people seek at one level or another, regardless of where they live, within a settlement or outside its bounds. Cities must see to it that the hinterlands are nurtured and cared for, that its residents are educated and have the benefits of civilization. The States and Nations must protect the cities, keep them connected and provisioned. This is the work of regional studies.

KNOWLEDGE-INTENSIVE BUSINESS SERVICES, RELATEDNESS, AND REGIONAL SPECIALISATION IN THE EUROPEAN UNION

Jeroen Content, Utrecht University, The Netherlands
Nicola Cortinovis, Erasmus University Rotterdam, The Netherlands
Koen Frenken, Utrecht University, The Netherlands
Jacob Jordaan, Utrecht University, The Netherlands

One of the key findings of the growing literature on drivers of industrial specialisation is that regions are more likely to diversify into industries that are related to the activities already existing within that region (Hausmann & Klinger, 2007; Boschma & Capone, 2015; Essletzbichler, 2015). This notion rests on the idea that it is more likely that related products are recombined to develop new goods or services than that unrelated products are recombined. However, this reasoning does not clarify why and when regions diversify into unrelated industries. Unrelated diversification can be defined as the development of an activity that requires capabilities different from those supporting existing local activities (Neffke et al., 2014). Entrepreneurs may be able to introduce such capabilities and facilitate regions to diversify into unrelated industries. We use a newly constructed dataset for EU regions that combines information of sectoral employment with information on entrepreneurship. Using this dataset, we calculate annual levels of regional sectoral specialisations and subsequently -by assuming that industries are related to each other when regions are more often specialised in them together- look at co-occurrences of industry specialisations. With this information, we can determine the number of related industries that a region is specialised in, which we call industry density. In our analysis, we estimate both the direct effect and moderating effect of entrepreneurship on a region's ability to specialize in new industries, i.e., whether regions with high entrepreneurial activity have a higher propensity to specialise in new industries and unrelated industries. Preliminary results suggest that entrepreneurship in some cases supports regions to develop new and unrelated specialisations.

REGIONAL PERSISTENT INNOVATION & THE NATURE OF AGGLOMERATION ECONOMIES

Carlo Corradini, Aston Business School, United Kingdom

This paper aims to explore the presence and role of self-reinforcing persistent effects in regional innovation activity and how these dynamics may be mediated by the specialised or diversified nature of technological competencies within the region.

A common feature in the evolutionary economics literature is that innovation activities are defined by cumulative effects where previous innovation may become a source or determinant of further innovation. While this phenomenon has received significant attention at the firm level, there is limited evidence on whether such dynamics may also take place within regional systems of innovation. Furthermore, the ability of regions to recombine previous ideas to foster novel innovation may be seen as strongly intertwined with the nature of agglomeration economies that define regional systems of innovation. In this sense, localisation or diversification economies may define different opportunities for exchange in knowledge, and thus may affect the way previous ideas are recombined to foster further innovation.

Using EPO patent data and Eurostat information for socio-economics characteristics across NUTS3 European regions over a 10 year period, the paper moves beyond a simple dichotomy between innovation input and output to test the presence of persistent innovation effects and dynamic increasing returns in regional innovation activity using a dynamic panel model, whilst controlling for unobserved heterogeneity across regions. The results point to a significant role of persistent regional

innovation, offering novel insights on the topics of endogenous regional growth and divergence in regional technological trajectories.

WHAT IS THE RELATIONSHIP BETWEEN PHYSICAL PLACES AND INSTITUTIONAL SPACES IN THE DEVELOPMENT OF ECONOMIES OF AGGLOMERATION AND INDUSTRY CLUSTERS

Jordana Corrigan, Ireland

Deiric O Broin, Dublin Institute of Technology, Ireland

In modern economies, competition is increasingly driven by productivity rather than access to raw materials. The research applies Porter's theoretical framework to the case of an emerging creative cluster on South William Street in Dublin City Centre which in the latter half of the nineteenth century had become known as 'home of Dublin's Rag Trade'. The relocation of production processes in the early 1960s led to the closure of businesses on the street. Lower footfall in the area resulted in high levels of vacancy and physical decline of the streets and buildings. More recently the area witnessed lower vacancy rates and higher levels of footfall. The case study describes a 'bottom up' approach to increasing the economic viability of this declining area. The physical place met the demands of, and complimented the needs of those working across creative activities in the New Economy. Reduced vacancy and increased footfall led to complementarities which further galvanised the emergence of a 'creative cluster'. The research explores how the quality of the physical place determines the attractiveness of a firm to its employees. This is increasingly important as small businesses compete with large MNCs e.g. Google and Facebook to recruit talent. Physical place also contributes to the generation of local buzz. However, it is evident from the research that the value of local buzz is determined by the organization type, and the institution of the industry itself. The research also suggests that the potential advantages associated with these physical interactions can be lost in the absence of formal institutional space and organisational leadership. The research offers an interesting insight into the spatial and institutional demands of SMEs engaged in creative activities in the New Economy and how the city responds to same, especially in the context of cityregion competitiveness and competition within the city itself.

THE CURSE OF NATURAL RESOURCES: AN EMPIRICAL ANALYSIS ON EUROPEAN REGIONS

Nicoletta Corrocher, Bocconi University, Italy

Marie-Louise Deshaies, European Central Bank, Germany

The paper investigates the existence of a natural resource curse at the level of European regions. While the literature has extensively analysed the course of natural resources at the country level, not much evidence exists for regions. The analysis concerns 232 regions and focuses in particular on the impact of the endowment of agriculture and mining and quarrying resources on regional economic growth. Results show that resource-abundant regions exhibit lower economic growth, even after controlling for region and time specific effects and other socio-economic variables. The effect is mostly in the long run, but it holds for both types of resources. However, the magnitude of the curse of natural resources is small, confirming that the differences across regions in terms of economic growth derive more from formal and informal institutional factors that have been decisive in shaping the permanent economic gaps in Europe.

MULTINATIONAL ENTERPRISES, COGNITIVE RELATEDNESS & EMPLOYMENT IN EUROPEAN REGIONS

Nicola Cortinovis, Erasmus University Rotterdam, The Netherlands
Riccardo Crescenzi, London School of Economics, United Kingdom
Frank van Oort, Erasmus University, The Netherlands

In the era of international investments and firms' mobility, the effects of multinational enterprises (MNEs) on the hosting economy figure prominently in the scientific and policy debates. One of the most solid findings in empirical analyses that have taken up this issue (Narula and Dunning 2000, Fu et al. 2011, Javorkic 2015) is the existence and scope of MNE spillovers. These spillovers, linked to the new knowledge and technologies brought in by international firms, are often found to positively affect industries that are vertically related to MNEs. Whereas some attempts to go beyond the input-output conceptualization of spillovers has emerged, nobody has yet merged the relatedness framework to international business studies. In this work, we aim at addressing this gap in the literature, by looking at whether MNE spillovers materialise across cognitively related industries. Following Hidalgo et al. (2007), co-occurrence in industrial specialization is used to define cognitive proximity between industries. We then study how employment in local industries is affected by MNE presence in the industry itself and in cognitively proximate ones. We also address the concerns for reverse causality in our estimations, resorting to a shift-share instrument. Our preliminary results show, along with positive intra-industry effects, the existence of positive MNE externalities across related industries, though only in the case of knowledge-intensive sectors and in more advanced European regions.

REGIONAL DESIGN, VISIONING & PROGRAMMING IN THE LISBON METROPOLITAN AREA'S PLANNING: A CONTINUOUS LEARNING PROCESS OR A NEVER ENDING SOFT PLANNING CASE?

João Pedro Costa, CIAUD, Faculty of Architecture, University of Lisbon, Portugal
Cristina Cavaco, CIAUD, Faculdade de Arquitetura, Universidade de Lisboa, Portugal

The paper addresses Lisbon Metropolitan Area's (LMA) planning, trying to understand how design, visioning and programming have evolved until the present days; envisioning their role on contemporary metropolitan development.

It argues that, despite former approaches, statutory planning always ended up not being the key strategic element to support main metropolitan decision-making. A question arises then: do unsuccessful effects of metropolitan planning represent a continuous learning process? Or do they anticipate that rigid statutory instruments hardly accommodate spatial development demands, while soft planning forms emerged as an answer?

With such an insight, the paper focuses on four documents: the 1964's Lisbon Region Director Plan; the 1991's studies for the LMA Spatial Plan; the 2002's LMA Spatial Plan; and the 2015's Integrated Strategy for Territorial Development. Not being formally a spatial plan and lacking from a spatial vision, although embedded in a strategic perspective, this Strategy coordinates the application of the 2014-2020 European funding. In the absence of a spatial development regional program, other expeditious soft planning modes came to address strategic regional development, very much driven by European structural funds but impoverished in design and spatial visioning.

In times of uncertainty; when governance rescaling rises as an emerging trend; when, in Portugal, regional planning is becoming regional programming; the paper argues that there is a strong need for regional design and visioning, to explore spatial representations around plausible future scenarios, to find common commitments and stimulate the share of responsibilities among planning actors.

MICROSCOPIC NETWORKS OF LONDON BUSINESSES... A CENTURY APART

Clementine Cottineau, UCL, United Kingdom

Elsa Arcaute, University College London - Centre for Advanced Spatial Analysis, United Kingdom

Max Nathan, London School of Economics - University of Birmingham, United Kingdom

The interest in social ties and urban proximity for economic geography has been growing as theoretical contributions emphasize spillover effects and as computing possibilities allow to work at the more granular level of individuals. Individual geolocated data are a means to describe urban economic diversity at a very fine scale and to link it to morphological properties of the city such as the building stock and the infrastructural layout (roads, rails, etc.). This way, we can identify more precisely the urban conditions which favour diversification and adaptability in the local economy. In this paper, I look at the relationship between the industrial mix of London neighbourhoods and their physical structure at two distant points in time, using individual geolocated business data. In particular, I question the evolution of this relationship over time as the economy has evolved into relying more on knowledge-based activities which benefit from local spillovers between high skilled workers. Does this clustering of activities show a more consistent pattern now or a century ago? Is there a resilient pattern of spatial clusters over time as agents embed their interactions into the physical space of the city, shaping buildings and roads which survive them? I use 2015 microdata from the ONS business structure database (BSD) and the 1895 Post Office London Directory to locate industries and trades. I then cluster small areas of the city according to their mix of activities and relate these clusters to roads and buildings local features.

SMART CITY INNOVATION & THE QUADRUPLE HELIX

Paul Cowie, Newcastle University, United Kingdom

Geoff Stevens, Future Cities Catapult, United Kingdom

Gyorgyi Galik, Future Cities Catapult, United Kingdom

There is a growing critique of the dominant technology driven smart city model of development. We will argue that innovation in a smart city context is innovation that includes elements of service or product delivery, but more importantly is fundamentally based on other more societally based innovations such as strategic (new goals, purposes and values), governance (new democratic institutions) and rhetorical (new language, concepts and definitions) innovations. Such transformative innovations require a wider assemblage of institutions and actors to be enlisted in the process of innovation. The quadruple helix model of development, with its focus on networks of public, private, academic and civic actors, is an ideal model to frame an understanding of how societal innovation can be enacted.

This paper will outline the nature of societal innovation and the role of the quadruple helix in understanding and mobilising societal innovation. It will illustrate the practicalities of this using a case study project: 'Plug & Play'. This project was initiated by The Future Cities Catapult but included actors from academia, the private sector, local authorities and civil society. The aim of the project was to understand the innovation process as it related to smart city initiatives in a human centred as appose to technology centred. The project has developed an innovation toolkit for smart city innovations. The pilot phase of the project has produced some valuable insights into the process of transformative innovation and how using quadruple helix framework can help frame such processes.

HOW DOES THE NET IMPACT OF THE EU COHESION POLICY DIFFER ACROSS COUNTRIES? EVIDENCE FROM A SPATIAL RDD

Riccardo Crescenzi, London School of Economics, United Kingdom
Mara Giua, Roma Tre University, Italy

By adopting a spatial Regression Discontinuity Design (RDD) based on the administrative boundaries between Objective 1 and non-Objective 1 regions, we estimate the counterfactual impact of the EU Cohesion Policy on growth and employment in the European regions. The empirical strategy makes it possible to estimate fully comparable coefficients for each individual EU Member State. This allows us to disentangle an EU-wide ‘composition’ effect in the impact of Cohesion policy from a set of country-specific impacts, lumped together in existing ‘causal’ studies. The results suggest that the overall positive impact of the EU Cohesion Policy on growth and employment hides highly heterogeneous country-level specificities. Until the Crisis the EU-wide positive impact of Cohesion policy on regional growth was driven by the impacts of the policy in German regions only. Impacts on employment were instead concentrated in the regions of Italy and the UK. After the Crisis the impact of Cohesion Policy materialized only in Spanish beneficiary regions supporting economic growth and in German regions supporting employment. Overall these results suggest that there is no ‘Union’ when it comes to the impacts of Cohesion policy and indeed national-level differences prevail.

THE EVOLUTION OF KNOWLEDGE SPACE

Joan Crespo, IEP/LEREPS, France
Pierre-Alexandre Balland, Utrecht University, The Netherlands
David Rigby, UCLA, United States
Sergio Petralia, Utrech Unviversity, The Netherlands

During the last years, many works have studied how regions diversify their industrial or technological structure by creating new areas of specialization, new growth trajectories. This has been one of the main concerns of Smart Specialization policies too. Several studies have pointed to inter-industry relatedness as a key driver for regional diversification, because these spillovers are more likely to occur when the industries/technologies are related in terms of skills and capabilities. Similarly, industrial/technological complexity also matters for regional development, although it is more difficult to jump into complex areas, the expected upgrading potential for the regional economy is higher.

However, these studies consider the knowledge space as static or fixed, the relatedness between industries or technological areas are given. Nevertheless, the knowledge space is not static. There are knowledge areas that were unconnected in the past and afterwards become related, or they were related and then become unrelated. Similarly, knowledge complexity changes through time. As recombination continues, new technologies appear and develop while others mature.

The aim of this paper is to study the evolutions and transformations of this knowledge space in terms of relatedness across technological areas and in terms of knowledge complexity. To conduct the study, we use data on the USPTO patents from 1840 to 2010.

POSTINDUSTRIAL COMPETITIVENESS, CUSTOMERS MOBILITY AND REGIONAL DEVELOPMENT

Olivier Crevoisier, (GRET), Universite De Neuchatel, Switzerland

Delphine Guex, University of Bern, Switzerland

Regional development relies on transactions with other places and others scales. Competitiveness, intended as the capacity to sell services and goods in the run on a competitive market, brings incomes revenues into the region and following most place based regional/urban development models, this generates downstream an urbanisation process allowing local workers to spend their money on real estate and other residential services.

However, today's context requires taking more and more into account the growing mobility of those customers. This paper is precisely dedicated to new forms of globalisation and intercity competition induced by consumption flows.

in the line of Camagni (2005) this paper sees cities and regions as places where various demands and supplies give rise to numerous territorial transactions. We build a typology of the latter depending on the local or extra-local provenance of the demands and on the local supplies dedicated either to the production activities or to the consumption activities.

Consequently, territorial development relies on the local capabilities (the "urban milieu") to articulates the tensions developing between competing activities dedicated to local or extra-local markets, local inhabitants and extra-local social groups (tourists, students, new inhabitants,...) and to create synergies between these supplies and demands.

FROM AREA-BASED INITIATIVES TO INCLUSIVE GROWTH: A NEW URBAN POLICY PARADIGM?

Richard Crisp, Sheffield Hallam University, United Kingdom

Ruth Lupton, The University of Manchester, United Kingdom

The election of the Coalition government in 2010 marked the end of 40 years of policy orthodoxy of using area-based initiatives (ABIs) as the primary tool for tackling spatial inequalities. Government focused instead on promoting economic development in areas best positioned to grow whilst tacitly accepting managed decline elsewhere. Concurrently, the 'devolution revolution' enabled new sub-national institutions (LEPs and combined authorities) to access additional funding and 'freedoms'. Some institutions embraced this flexibility to develop agendas around 'inclusive' or 'good' growth to ensure that opportunities created by growth are better shared among low income groups and areas. Our paper critically assesses whether this shift from urban regeneration to inclusive growth constitutes a new urban policy paradigm, and what it means for low income neighbourhoods. We argue that inclusive growth policies are qualitatively different in form from previous ABIs e.g. in terms of governance arrangements, (lack of) scalar targeting and, especially, attention to demand-side economic issues. However, we suggest its function remains broadly the same as a state-driven strategy to 'iron out the deep creases of uneven development' (Pugalis, 2013). Consequently, we caution that - like ABIs before them - the 'inclusive growth' agenda may lead to 'over-responsibilized' (Peck et al., 2013) policy making where local stakeholders face unrealistic expectations to tackle inequalities with limited fiscal and political levers. That said, we conclude there is still merit in trying to achieve the same end (reducing spatial inequalities) through different means (a more interventionist approach to shaping local economies).

GLOBAL PRODUCTION NETWORKS AND REGIONAL ECONOMIC DEVELOPMENT IN THE SEMI-PERIPHERY: A CRITICAL LONGITUDINAL ASSESSMENT OF NORTHERN IRELAND'S EXPERIENCE SINCE THE MID 1990S

Michael Crone, Sheffield Hallam University, United Kingdom

The paper is concerned with the economic development challenges and policy dilemmas facing semi-peripheral regions of developed economies that are connected to the global economy via the attraction of mobile foreign direct investment and participation in global production networks. Building on the tradition of work on branch plant economies and more recent literature on strategic coupling with global production networks, this paper uses a longitudinal case study of Northern Ireland's experience over two decades of structural change to explore the changing position of this small European region within transnational corporate networks and the wider international division of labour. Overlapping, sometimes simultaneous, processes of de-coupling, coupling and re-coupling with various manufacturing and service production networks are identified and analysed. A critical examination of these processes focuses on several key themes, including: the (changing) basis of strategic/structural coupling with transnational capital; the role played by local institutional actors and policies; the ambiguity and equity of resulting regional development outcomes; and the various external and local constraints on regional 'upgrading' possibilities. Evidence is drawn from a variety of secondary data sources, as well as a recent and a much older (late 1990s) study of foreign investors in the case study region.

GEOFUSION- NEW GEOGRAPHY AND GEOECONOMICS IN THE 21ST CENTURY

Norbert Csizmadia, PAGEO - Pallas Athene Geopolitical Foundation, Hungary

The presentation / lecture of Geofusion guides the reader with the help of maps in the global world of the 21st century through the quest for the winning nations, communities, leaders and powers of this age. The explorers and the geostrategists of this century are expected to present guidelines of our world full of global social and economic challenges. To do so, new maps are needed which do not miss the wisdom and tools of the old, but complement it with the new structure of knowledge. Using the lately discovered geographic and economic interrelations, the book tries to give a prognosis of the global processes.

THE UNSUSTAINABILITY OF SMART-CITY GOVERNANCE: NEW HARDWARE, OLD SOFTWARE

Federico Cugurullo, Trinity College Dublin, Ireland

Over the last decade, the smart city has emerged as one of the leading models of urban development in the world. A plethora of smart-city initiatives are currently being developed across different geographical locations, supposedly to improve the sustainability of the built environment and tackle climate change by producing low-carbon, zero-waste urban spaces. This paper challenges the presumed sustainability of smart cities by exploring smart urbanism from a governance perspective. Using the smart-city agenda of Hong Kong (currently a leading example of smart urbanism in Asia) as a case study, the paper first proposes a conceptual difference between the hardware (physical components) and the software (political systems) underpinning smart-city projects. Second, by drawing upon empirical data collected through three months of fieldwork, it argues that while so-called smart cities are built with innovative hardware, such as smart grids and automated transport systems, their development is based on obsolete models of governance.

SPATIAL JUSTICE IN EUROPE: WILL IT ALWAYS MATTER WHERE YOU LIVE?

Gordon Dabinett, University of Sheffield, United Kingdom

This paper attempts to provide insights into the normative constructions of justice that underpin recent territorial policy discourses. Territorial policy in Europe is no longer simply the practices of individual member states but instead might be seen as an instrumental construction of wider geo-political forces that constitute diverse and varied forms of spatial development. The past underlying assumptions of policy: that regions 'are' functional spatial economies; that economic imbalance has both resource efficiency and welfare implications; and that economic imbalance can distort state policy aims and objectives, require critical re-examination. Territorial policy can have different normative purposes and outcomes. It might be assumed that economic growth will always be unbalanced, an inevitable outcome of increasing globalisation, but development can still be inclusive. Alternatively, uneven development might be seen to reflect territorial diversity, and policy should promote place-based cohesion and assets through reforms in governance. A further construct might regard uneven spatial development as not primarily or uniquely a specific territorial problem, but interventions should promote place-based initiatives for worst-off areas, or specific social groups and classes. Similarly, spatial development might be constructed as not the problem but a symptom of national competitiveness and spatial power relationships, and any measures should promote nation-wide infrastructure investment, innovation, skills training, and employment alongside political devolution. To address these 'normative' questions and constructs of territories and policy, spatial justice offers a conceptual framework to critically assess alternatives, explicitly incorporating distributive outcomes.

NEW DIRECTIONS IN REGIONAL PLANNING: SPATIAL AND GOVERNANCE IMPERATIVES AND TERRITORIAL JUSTICE?

Gordon Dabinett, University of Sheffield, United Kingdom

Writing some twenty years ago, having reviewed practices in Europe and North America, Wannop identified the 'imperative for regional planning'. Accepting that there are many different understandings of what regional planning comprises, he argued it was an essential art in continually managing a constantly imperfect system of government. This paper seeks to address the simple question: what will regional planning be like in the future?

Advocates of regional planning have supported their case with a variety of rationales. It is often seen as providing a necessary forward looking and long-term framework within which to take key decisions, recognizing the importance of spatial scale. The goals of regional planning are often associated with the desire to balance interests and the use of resources over large areas. Inter-linkages between functions, in particular transport and land use, and the co-ordination between different actors are often seen as fundamental rationales of regional planning practice, in its attempts to deal with issues that transgress local planning authority boundaries. Further cases for regional planning are put as a form of mediating between contested socio-political outcomes, either by ensuring local interests do not override 'wider-interests' or by making sure national policies might be consistently translated. Recent practices from the USA also suggest a more 'progressive development' can be pursued at this scale.

This paper will review evidence of international practices to provide a critical examination of what future regional planning practice might be and the case for advocating its future role in urban and territorial planning.

CAN EU MONEY BUY EU LOVE? EXPLORING THE REGIONAL DETERMINANTS OF EU IDENTIFICATION

Marcin Dabrowski, Delft University of Technology, The Netherlands

Dominic Stead, Delft University of Technology, The Netherlands

Bardia Mashhoodi, Delft University of Technology, The Netherlands

EU Cohesion policy can be considered as a tool that is contributing to the development of a ‘sense of community’ among the EU citizens as by investing funding into concrete projects across the European territory it is not only a direct and tangible expression of European solidarity but also a policy that has a direct impact on people’s daily lives and their living and working environment. However, it remains unclear whether and how EU Cohesion policy and its implementation in regions actually affects the citizens’ perceptions of the EU. While one may expect that EU Cohesion policy funding supporting a variety of projects across the European territory would have a positive impact on how the citizens view the EU. In practice, however, this relationship is far from obvious, as recently manifested in the voting patterns in the United Kingdom’s 2016 EU referendum showing that some in regions that have been long-time beneficiaries of EU structural funding the ‘leave’ vote prevailed. One may also expect that this relationship varies considerably given the diversity of regional settings in the EU, the differentiated intensity of EU Cohesion policy aid across regions and that other regional factors, whether they are territorial, institutional or socio-economic, also influence the people’s feelings towards and perceptions of the European integration project.

This paper draws on the research that is part of Horizon 2020 COHESIFY , an interdisciplinary project investigating the regional patterns of EU identification and the impacts of EU Cohesion policy on it. The paper, first, explores and maps the regional variation in how citizens view and feel towards the EU, proposing a regional EU identification typology derived from hierarchical cluster analysis. Second, starting from a review of the literature on determinants of EU identification, the study adds to it by formulating hypotheses about how these determinants operate on the regional level. Multinomial logistic regression is then used to test those hypotheses and explore how the features of regions - such as eligibility for Structural Funds or for cross-border programmes, regional quality of government, or socio-economic factors like the share of population at risk of poverty or educational attainment - actually affect EU Image and attachment to EU in regions.

LGBTQ+ HOUSING PRACTICES IN ATHENS

Myrto Dagkoulis, Gran Sasso Science Institute, Greece

Little research is done so far about the housing conditions of the LGBTQ+ community and even this concerns mainly the countries of USA and UK and especially the minors (e.g. Hunter, 2008), the elderly (Adelman, 2006; Sullivan, 2014) and the couples – again mostly the elderly couples (Addis et al, 2009). In Southern Europe and especially Greece this community is regarded mainly as isolated exceptions that tend to be marginalized when they “come out”. Therefore, the housing practices of this group are not distinguishable as their identity is being hidden as well.

In the case of Greece that familistic strategies towards housing are the dominant, it is interesting to investigate in which way this tradition is affecting people from this community. Nevertheless, the family support depends a lot on the family status of the beneficiary, therefore when the later is not complying with the imaginary of the patriarchal heterosexual family, the support might be never offered.

Moreover, ethnographic research in the field can reveal some insides of the housing reality that they are facing in a familistic society like the Athenian especially as crisis tend to impose conservative, traditional social patterns all over the world and it may lead them to return violently to past habits (Serracant, 2015) like hiding or suppressing themselves.

BRAZILIAN FUNCTIONAL REGIONS AND THEIR DYNAMICS IN THE 1980-2010 PERIOD

Cassiano Dalberto, CEDEPLAR - Universidade Federal de Minas Gerais, Brazil
Pedro Amaral, Cedeplar-UFMG, Brazil

As spatial dynamic processes - such as commuting to work and study - have impacts on more than one location, often these impacts will not be confined into the political and administrative boundaries, increasing the spatial complexity of the implementation and evaluation activities of spatial planning. It is on this ground that the concept of city-region becomes fertile, as it brings focus to an expanded geographic area that enable more proper investigations of such dynamic phenomena. In practical terms, the delimitation of city-regions can be achieved by regionalization methods, which commonly make use of labor market characteristics and commuting flows to define the spatial economic reach of an urban center, creating what it is called a functional region. Perceiving a lack of studies investigating empirical questions within that scope in the Brazilian context, we aim to identify functional regions that reflect the spatial economic reach of major Brazilian urban centers. To achieve this, we use data from commuting to work and study between municipalities, and we apply methods of network analysis for the periods of 1980, 2000 and 2010, in order to find regions that have the maximal internal consistency of its commuting flows in each period. Our results provide functional regions based on the main metropolitan areas, and subsequently will allow us to characterize them in terms of their sectoral composition, their role on the national division of labour, and investigate how different urban attributes may have influenced their economic and spatial dynamics over the recent decades.

WELLBEING ECONOMICS AND LOCAL GOVERNMENT

Paul Dalziel, AERU, Lincoln University, New Zealand
Caroline Saunders, AERU, Lincoln University, New Zealand
Joe Saunders, IDEA, Leeds University, United Kingdom

In November 2010, then Prime Minister David Cameron launched the United Kingdom's National Wellbeing Programme, saying: "From April next year, we'll start measuring our progress as a country, not just by how our economy is growing, but by how our lives are improving; not just by our standard of living, but by our quality of life". This reflected worldwide trends, following the judgement of the Stiglitz, Sen and Fitoussi report that "the time is ripe for our measurement system to shift emphasis from measuring economic production to measuring people's well-being".

That same year, however, the British government also introduced 'austerity measures' that included large cutbacks in social welfare and other spending. These measures were expanded in later years, with local governments feeling a large part of the brunt. There has been a large jump in the number of charity food banks, alongside other indicators of social distress. This leads to obvious questions: if we measure progress as a country by how lives are improving, how can austerity policies be justified that result in increased suffering, and what are the alternatives?

In this context, the authors are writing a book on Wellbeing Economics, to be published as part of the Palgrave Pivot series in late 2017. It is based on an earlier book by the authors written for a New Zealand audience. This paper explains the theoretical framework being used in the new book, with particular reference to its chapter on wellbeing economics and local government.

WORKER'S PARTICIPATION IN REGIONAL ECONOMIC CHANGE FOLLOWING PLANT EXIT

Therese Danley, Umeå University, Sweden

Rikard Eriksson, Umeå University, Sweden

Lars-Fredrik Andersson, Umeå University, Sweden

Martin Henning, University of Gothenburg, Sweden

There is a strong interest in regional studies on how regional economies evolve and adapt over time. Previous research, however, have mainly focussed on the spatial evolution of industries, knowledge and technology. The workforce is in fact greatly neglected and mainly used as an input to broader processes of regional branching.

The focus of this paper is to assess how the workforce adapts to economic change by asking to what extent workers affected by economic destruction in regional economies, participate in the creation of new and more efficient organizations? Since redundancies puts great pressure on workers and regions this is done by analysing the employment outcomes of workers leaving exiting firms in Sweden at the turn of the millennium. We investigate if and when the workers move to more productive firms in the region, if they become self-employed, leave the region, or become displaced.

A series of multinomial probit models show that the majority of redundant workers face destructive employment outcomes from a Schumpeterian point of view. However, we do also find indications of a creative destruction. More productive plants have a tendency to accommodate the younger, but less educated workers, whereas experienced and tenured workers more often make entrepreneurial efforts or become employed in younger plants. There are significant spatial differences where metropolitan regions excel as loci of creative change, while smaller and peripheral regions face far less creative outcomes of economic transformation.

POTENTIALS OF INFORMATION AND COMMUNICATION TECHNOLOGIES FOR EAST AFRICAN SMALL-SCALE FARMERS TO INTEGRATE IN AGRICULTURAL VALUE CHAINS

Peter Dannenberg, University of Cologne, Germany

Madlen Krone, University of Cologne, Germany

An insufficient access to markets and a lack of knowledge often restrict the opportunities for small-scale farmers to integrate into commercial value chains as a chance for economic growth in Africa. Advances in information and communication technologies (ICTs), especially mobile phones and the internet, have expanded the possibility to communicate across geographical distances and to integrate into commercial value chains.

By using the example of different Kenyan and Tanzanian horticultural value chains, this paper assesses to what extent small-scale farmers improve their position within these chains by using ICTs. Further, it examines how the use of ICTs by the farmers is influenced by different conditions depending on different types of chains. The results indicate that ICTs positively affect the integration of the small-scale farmers into the value chains in four ways: The ICTs improve the conditions for financial

transactions, market transactions and the access to simple information and complex knowledge. However, our results also show that the effects depend on the different types of value chains the farmers are integrated in and the farmers' relational proximity to their direct buyers. Concerning transactions in particular, our results show the tendency that the producers integrated in a market-based chain derive more benefits from ICT use than their counterparts in the captive chains. In this way the paper contributes to an understanding of the potential of ICT4D as well as on dynamics in value chains in East African agriculture.

DO CROSS-BORDERS WORKERS FROM FRANCE, BELGIUM & GERMANY FOSTER IN THE SAME WAYS FIRM'S INNOVATION ACTIVITIES? EMPIRICAL EVIDENCE FROM LUXEMBOURG

Vincent Dautel, LISER, Luxembourg

This paper deals with the impact of cross-border workers from France, Belgium and Germany on the likelihood of firms, operating in Luxembourg, to innovate. These three groups of workers account together for 59% of the private sector's workforce, the share of cross-border workers from France (26%) being even bigger than the share of the Luxemburgish workers (18%). The results, controlling for the potential impact of the socio-economic characteristics of the workforce, the non-randomness of firm's location, the confounding effect of firm's characteristics and using an instrumentation strategy for the share of cross-border workers, highlight the positive effect of the cross-border workers from France. A relatively high share and a lower dispersion of these workers between firms, two pieces of evidence in line with the stylized facts of the homophily literature (see Currarini et al. 2009), support this positive effect on firm's propensity to innovate. Conversely, the effect of cross-border workers from Germany is negative when controlling also for common support, while the effect of cross-border from Belgium, using usually French as a mother tongue, is rather neutral. All this suggest, on one hand, the positive effect of homophily on innovation success, and on the other hand, the language and non-language distances between the three groups of cross-border workers inducing varying supports of firm's innovation activities.

PRELIMINARY LESSONS FOR LOCAL, REGIONAL & EUROPEAN POLICY MAKERS FROM ANALYSIS OF INNER PERIPHERIES

Thomas Dax, Federal Institute For Less Favoured and Mountainous Areas (BAMF), Austria
Francesco Mantino, Consiglio per la Ricerca in Agricoltura e l'Analisi dell'Economia Agraria (CREA), Italy
Sabine Beißwenger, Research Institute for Regional and Urban Development (ILR), Germany
Ingrid Machold, Federal Institute for Less Favoured and Mountainous Areas (BAMF), Austria

The paper is conceived as one in a series of reports from work-in-progress within the ESPON-funded project "PROFECY – Processes, Features and Cycles of Inner Peripheries in Europe" (Special Session 17). It follows conceptual work on defining different types of Inner Peripheries across Europe and assessing challenges and opportunities of these areas through a set of case studies in seven partner countries. The focus of the paper is to draw first lessons from the project's analysis with regard to inform local, regional and European actors and policy makers on strategies to overcome peripheralization processes.

Main aspects in formulating strategies for inner peripheries will be presented, and thereby build strongly on seeking understanding of the set of different influences on the emergence of inner peripheries in various European contexts and their implications for place-based policy and action.

Regional governance and its inter-connectedness with other levels as, well as further institutional aspects are considered of core relevance for shaping appropriate policies. As challenges arising from features determining location and the emergence of inner peripheries are driven externally and hard to change locally, it will be important to use lessons from cases where available territorial assets and potentials could be harnessed and contributed to regional performance.

A further aspect in the analysis to be presented is the discussion of the relevant geographical scale and administrative levels to be addressed in policies. Due to the complex set of policy arrangements and interactions a differentiated perspective on individual policies and coherence is required, pointing to an integrated approach.

ENTREPRENEURSHIP AND REGIONAL ECONOMIC RESILIENCE

Marcus Dejardin, University of Namur and Université catholique de Louvain, Belgium

Regional economics research focusing on the sources of regional economic resilience is still rather occasional and dispersed. In some respects, the various analytical frameworks that are proposed might appear partial and static. As a result, the analytical tools that it may deliver look rather unable to account satisfactorily for the dynamic interrelationships under study. In this contribution, we are attempting a conceptualization leading to the proposal of an inclusive and dynamic schematic model that includes a comprehensive set of arguments.

Entrepreneurship, being understood in the sense of Schumpeter, is relatively well documented both by theoretical and empirical studies to be a vector for innovation, growth and economic development. In return, growth and economic development are involved in determining entrepreneurship. It is also suggested that the importance and the effects of entrepreneurship and of economic growth is to be linked with the formal and informal institutional context in which these dynamics fit.

Culture is one factor among others in the informal institutional context involved in the determination of entrepreneurship and development. When the focus is on regional economic resilience, the aggregate psychological traits approach and the social legitimation approach, included in an analytical framework that is theoretically linking culture and entrepreneurship, might appear as potential fruitful building blocks. Besides, the empirical results known to date show in particular the persistence of business dynamics in association with culture.

If there is a body of theory and empirical estimates examining the relationship between culture and entrepreneurship, and between culture and development, it appears that, on one hand, the regional context and, on the other hand, the output expressed in terms of regional economic resilience have both received relatively little attention to date.

We provide some insights that we derive from dynamic modelling and empirical research (linking entrepreneurship and the transformation of contextual institutions, including culture, and the creation and renewal of specific assets for regional economic resilience). We conclude with milestones for research to go forward in that direction and we explore the conditions for resilient processes to emerge.

COASTAL CITIES IN EASTERN SPAIN. DEALING WITH MATURE TOURISM DESTINATIONS

Hèctor del Alcàzar Indarte, Universitat de València, Spain

Joan Noguera, University of Valencia, Spain

During the second half of the XX century, large parts of Mediterranean coastal areas of Spain suffered a dramatic shift from primary activity-based small settlements, to an urban, tourism-based urban continuum. The shift caused fundamental changes at all levels, with economic benefits in terms of employment and creation of economic activity. However, the benefits have not been costless due to the severe lack of local and regional planning behind the urban growth process.

Due to the current obsolescence of many tourism-based settlements and the emergence of new competitor destinations, the whole territorial model is decreasing in tourist attractiveness. Many of these settlements are “trapped” in their dependence of tourism flows, and authorities and local actors find it difficult to introduce changes in the territorial model and in the economic base. Two alternatives arise to reverse the trends towards long term failure: one option would be to focus on an innovative, tourism-based strategy that could foster some tourist destinations by improving the characteristics valued by current tourists; other option could be based on diversification of the economic base and the transformation of the “tourist resort” into a diversified urban area at medium-long term. Inaction implies spoiling the important investments on construction and infrastructure and loss of population and economic activity.

The first option is the easier to be applied but it needs to be maintained during the years because of the permanent competition of other tourism destinations. The second strategy is harder to implement but it assumes its past and accepts its natural evolution. Two case studies in Spain will be used to show both options: Benidorm and Gandia.

KNOWLEDGE-DRIVEN INNOVATION: INVESTIGATING UK NETWORKS

Blanca L. Delgado-Márquez, University of Granada, Spain

Maksim Belitski, University of Reading, United Kingdom

Luis Enrique Pedauga, University of León, France

Innovative organizational networks constitute crucial antecedents of firms’ entrepreneurial efforts and success. Existing literature on research and development (R&D) alliances focuses on formation motives and performance impacts of these alliances but hardly on diversity of the partners’ portfolio (functional diversity). This paper contributes to fill this gap by examining two research questions: (1) the impact of functional diversity of R&D partners on innovation performance of product and process innovating firms, and (2) whether this impact varies across different levels of spatial proximity (regionally, nationally, and internationally). In doing so, this paper sheds light on the importance (or not) of various R&D partners and their geographical proximity to innovation performance. The empirical analysis is based on a matched sample of the UK Community Innovation Survey and Annual Business Survey over 2002-2012. A two-stage model with self-selection bias correction is used through a two-stage Heckman procedure. Given the differences in innovation mechanisms and location, specific collaboration partners within vertical and horizontal chain have idiosyncratic impacts on product and process innovation, with the insights valid for product innovation does not necessarily apply to process innovation. Results reveal an inverted U-shaped innovation performance induced by functional diversity, and that this effect is also conditional on the geographical proximity of R&D partners.

TOWARDS AN ANCHOR INSTITUTION INFLUENCED APPROACH TO INCLUSIVE GROWTH

David Devins, Leeds Beckett University, United Kingdom

Slow growth, high unemployment and widening inequalities have placed Inclusive Growth at the heart of the policy debate in many parts of the world. Central to this debate is the aspiration to develop policies that deliver stronger economic growth together with better sharing of the benefits of increased prosperity among all social groups. One policy response to this has been the mobilisation of Anchor Institutions into local social and economic development processes with multi-stakeholder collaboration by public services or not-for profit institutions such as universities and hospitals supporting the creation of place-based economic, social and environmental value.

This paper draws on systems-thinking to provide an overarching framework that is founded upon principles of inclusive growth and institutional thickness. It charts the anchor landscape and finds that all major cities have multiple public and private sector anchor institutions that have fundamentally shaped their city's character. The paper draws on appreciative inquiry of 'what works' in the development and delivery of anchor interventions through analysis of case study data from the United States and the UK. This analysis is combined with primary data and reflections collected through action research with representatives of ten anchor organisations in the Leeds-City Region. Practitioner-academic theory building, based on the analysis of secondary data and the inquiries carried out by the anchor representatives provides a foundation for the articulation of an evidence-informed model that highlights the key characteristics that underpin the development of an anchor intervention eco-system to support inclusive growth.

DID THE GOOD GOVERNANCE OF EU FUNDS HELP THE RESILIENCE OF LOCAL LABOUR MARKETS DURING THE GREAT RECESSION? EVIDENCE ON ITALIAN REGIONS

Paolo Di Caro, University of Catania, Italy

Roberta Arbolino, University of Naples "L'Orientale", Italy

Ugo Marani, University of Naples "L'Orientale", Italy

The role of regional policymakers is crucial for understanding how and why particular places were more resistant to and are bouncing back faster from the Great Recession than others. This paper achieves two main results by studying the recent dynamics of Italian local labour markets over the period 2008-2014. First, evidence is provided on the contribution of the place-specific management of the EU cohesion policy for explaining the uneven patterns registered among Italian local labour markets. The effects on both the extensive and intensive margin are examined. Second, the empirical results support the view that regional differences in institutions influence the asymmetric governance of the EU cohesion policy across Italy and its impact on local labour markets. The focus on the Italian case allows for the reduction of practical issues present in cross-country settings by relying upon the availability of detailed geo-referenced data on EU funds and historical information. Estimates are robust to endogeneity, cross-sectional dependence, and alternative specifications. The summary of the main results and future research areas are conclusively discussed.

TECHNOLOGICAL REGIMES AND THE LONG-RUN DYNAMICS OF PATENTS' SPATIAL CONCENTRATION

Dario Diodato, Utrecht University, The Netherlands

Andrea Morrison, Utrecht University, The Netherlands

Previous literature has shown that some patterns of innovative activities can be explained by the technological regimes, identified with four properties of the technology: technological opportunities, the appropriability of the innovation, the cumulativeness of the progress and the characteristics of the knowledge base (Breschi, Malerba and Orsenigo, 2000). In this paper we show that the spatial concentration of innovation can be remarkably well explained by technological regimes: using USPTO patent data from 1836 to 2010, it is observed that – over such long period of time – the changes in concentration within a technology are just as significant as the differences across technologies. We then find that time-varying technological regimes correlate strongly with these changes in concentration, and this is especially true with technological opportunities, which has a negative relationship and alone explains almost 80% of the R-squared. Finally, since opportunities – measured as growth of patents – have a well-defined behavior along the life cycle of the technologies (first they increase, then decline), we highlight that innovative activities have the tendency to deconcentrate at early stages of the life cycle, to re-concentrate after maturity is reached.

THE REGIONAL IMPACTS OF A CUT TO COMPANY TAX IN AUSTRALIA

Janine Dixon, Victoria University, Australia

Jason Nassios, Victoria University, Australia

In Australia's 2016 federal election campaign, the incumbent conservative government sought a mandate to cut the rate of company tax from 30 per cent to 25 per cent. Our simulations based on a detailed dynamic computable general equilibrium (CGE) model of the Australian economy show that this would stimulate growth in GDP and pre-tax real wages, but would cause a fall in domestic income.

The key is that a cut to company tax changes the relative treatment of local and foreign investors. Because of Australia's system of dividend imputation, the rate of company tax is largely irrelevant to locals, who receive a tax credit for any company tax paid on non-retained earnings. This is not available through the Australian tax system to non-resident investors, although some scope for similar credits exists through double taxation treaties. As such, cutting the company tax rate dilutes the advantage that the dividend imputation system confers on local investors, who are predominantly the owners of SMEs and family firms. The company tax cut both attracts FDI and confers a permanently lower post-tax rate of return on Australian-owned capital.

At the macroeconomic level, we find that the higher proportion of foreign ownership must be balanced by a move to trade surplus to maintain a stable current account position. Therefore we find that trade-exposed industries expand more than population servicing industries. Our regional analysis, based on a hybrid bottom-up and top-down regional CGE model, translates industry impacts into regional impacts, taking into account localised multiplier effects.

LIVERPOOL CITY REGION SPATIAL ECONOMIC AUDIT - PERFORMANCE OF RETAIL CENTRES

Les Dolega, University of Liverpool, United Kingdom

The emergence of a combined authority represents a fundamental change in the governance of the Liverpool City Region. In parallel the wider 'Northern Powerhouse' agenda provides a context in which central government has signalled a commitment to engineering a step change in the economic performance of northern England. The case made in this research is that the emergence of these agenda makes this a propitious moment to take stock of emerging economic trends in the Liverpool city region. The proposed Spatial Economic Audit will provide crucial supporting evidence for the LEP-authored Single Growth Strategy and the subsequent Liverpool City Region Spatial Framework in providing new intelligence on the changing economic geography of the combined authority area. Perhaps the most significant change in the economic geography of Britain, as with much of the wider world, is the changing face of retail. For centuries city centres have functioned as market places. The advent of online shopping and premises designed to accommodate multi-channel retail is having a profound – and highly uneven – effect on the British high street. As such, this study provides new evidence on economic performance of retail centres in Liverpool City Region and creates a multidimensional typology of these centres. The ultimate objective of this study is to provide policy makers with intelligence in designing the next generation of interventions designed to support the future development of retail landscape within the city region.

MEASURING THE CONTRIBUTION OF CULTURAL & CREATIVE SERVICES TO THE DEVELOPMENT OF REGIONAL ECONOMIES IN THE UK.

Daniel Donoghue, Canterbury Christ Church University, United Kingdom

As the call for papers to this special session identifies, "service industries in regional economic development has become the subject of renewed debate". Much of that debate focused on ongoing economic globalisation while in recent times debates have shifted towards an exploration of the nature of free trade and the movements of goods, services and labour. Particularly in the UK this tension suggests that there may be changes forthcoming in specific service sector trajectories within the wider spatial economy. In many quarters Cultural and Creative industries, however defined, have been identified as having the potential to make a contribution to the promotion of regional growth. Using data from the UK's Business Register and Employment Survey (BRES) this paper sets out to explore the current role cultural and creative industries may play in the labour markets of UK regions. Levels of employment change in a number of sectors identified in the SIC as cultural or creative industries are measured over a number of years. In particular, the contribution of these sectors and their changing levels of specialisation and concentration and their relationship to job creation and regional performance will be assessed. Results tend to show that a policy focus on these sectors has displayed limited success, and traditional factors such as relative location, levels of urbanisation and population size, irrespective of global or local tendencies, are more important to our understanding of their contribution to regional economic development.

IRELAND'S REGIONAL INNOVATION SYSTEM: A FIRM-LEVEL IMPACT EVALUATION OF THE INNOVATION POLICY INSTRUMENT MIX IN USING PANEL DATA

Justin Doran, University College Cork, Ireland
Kevin Mulligan, University of Limerick, Ireland
Helena Lenihan, University of Limerick, Ireland

Governments deploy a mix of different innovation policy instruments to stimulate firm-level innovation additionality. Firms often receive multiple innovation policy instruments simultaneously, and additionality tends to be dependent on interactions within this instrument mix. Depending on how consistent different policy instruments are with one another in terms of their underlying policy rationales, goals, and implementation modes, interaction effects can be complementary, substitutive or neutral. Therefore, achieving consistency among policy instruments is an important means of ensuring the policy instrument mix is effective and efficient at reaching policy objectives. However, policy instrument interactions emerge and evolve over time and unfold both with and across different geographical spaces (including regions), levels of government, and policy domains. In this dynamic multi-level, multi-scalar context, achieving consistency among policy instruments is a complex process that requires analysis. Despite this, to date, the empirical literature has neglected the concept of consistency. We address this gap in the literature by establishing a conceptual framework for the ex-ante and ex-post impact evaluation of innovation policy instrument mixes. Drawing on policy mix theory, we place consistency between interacting policy instruments at the heart of this framework. To test this framework, we construct a unique panel dataset capturing the core innovation policy instruments available to firms in Ireland's regional innovation system. Using this dataset, we employ a specific microeconomic technique to test for dynamic complementarities between different innovation policy instruments. Our results highlight the importance of temporal dynamics when evaluating innovation policy instrument mix consistency.

SHIFTING INTER-CITY CONNECTIONS PRODUCED IN THE ALTERING CORPORATE NETWORKS OF GLOBAL SERVICE FIRMS

Sabine Dörny, Luxembourg Institute of Socio-Economic Research, Luxembourg
Ben Derudder, Ghent University, Belgium

The interlocking network model (INM) for studying inter-city relations has become a rallying point in the literature on urban networks. The model, initially devised in the context of the 'world city network' research of the Globalization and World Cities (GaWC) network, essentially aggregates hypothesized interactions in organisational networks to guesstimate the strength of inter-city relations. Although the model has been applied across scales and actors, its most consistent application remains tied to its initial specification: exploring city networks through the lens of corporate networks of business services firms. The purpose of this paper is to critically explore one of the core assumptions underlying this model: that there is enough consistency in the nature and spatial organisation of the corporate networks of business services firms to allow for their integrated treatise in a unified quantitative model. We draw on the literatures on trans-border corporate management and shifting divisions of labour in, and the changing nature of, the service industries to critically explore the remit of this core assumption. We stress-test the model by considering some concrete examples, and discuss the relevance of our findings for research on both urban networks and the regional economy.

INTERREGIONAL KNOWLEDGE FLOWS OF TOP CORPORATE R&D PERFORMERS

Mafini Dosso, European Commission - Joint Research Centre, Spain

Didier Lebert, ENSTA ParisTech, Université Paris-Saclay, France

The ability of local actors to access diverse knowledge sources and position themselves within global innovation networks is an important driver of regional performances. This paper examines the structural and geographical properties of the corporate knowledge flows across regions. Combining the social network analysis and the influence graph theory, it first assesses the centrality of individual regions and large R&D-driven firms in the interregional corporate knowledge flows. The centrality refers to the ability to control the flow of knowledge within a network (gatekeeper). Then, the contribution of leading R&D investors to the centrality of regions is assessed. Our dataset covers the regionalized EPO and PCT patent citations of 1000 world's top R&D investors from 30 countries and considers 495 NUTS 2 regions worldwide.

Our results confirm the prior literature in terms of regional and national concentration, complexity and regional hierarchy in the inter-territorial organisation of knowledge flows, also initiated by large R&D-driven firms. Interestingly, our analysis reveals that among the six main regions creating the cohesion on the European market for technologies, four actually come from Asia. Moreover, the most central firms appear more geographically diversified than what it could have been expected from the hierarchy of most central territories. Furthermore, domestic firms clearly drive the regions' centrality, though initial results show that it is less pronounced in Europe than in Asia. Finally, an illustration of most central firms' networks brings relevant insights on the way large R&D-driven firms organise their knowledge sourcing and generation across world regions.

SMART SPECIALIZATION STRATEGIES TO RECONCILE INNOVATION POLICY AND URBAN PLANNING: THE CASE OF THE BRUSSELS-CAPITAL REGION

Nicola Francesco Dotti, Université Libre de Bruxelles (ULB), Belgium

The European 'smart specialization strategy' (S3) aims to promote 'entrepreneurial discovery process' (EDP) across Europe: conceived as a flexible tool, S3 acknowledges the heterogeneity of European regions moving beyond traditional innovation policy. Despite being at the core of the EU, Brussels is a borderline case: very high level of GDP and very high unemployment rate, a service-dominated economic structure but with an over-representation of public sectors (both Belgian and European ones), and a regional innovation strategy already oriented to specialization since the early 2000s. Furthermore, the Brussels-Capital Region benefits from large autonomy within the Belgian federalism, but the regional government is only in charge, among others, of economic development and urban planning, while fundamental research and higher education policies are under the competences of the linguistic communities.

The case of the Brussels-Capital Region will be discussed to present the experience of university incubators and regional business centres, which are shaping regional (smart) specialization since more than a decade, even before the S3 initiative. In a highly dense city-region, new emerging businesses have difficulties to find a location and support to scale-up, against more rentable activities. On the other hand, start-ups have the higher potential to create new jobs in a region with high rate of unemployment. Nevertheless, this is possible only because Brussels has an already advanced economy, which allows choosing regional specialization path. By this specific case, the S3 approach is reconceptualised as a way to combine innovation policy and urban planning.

FAST GROWTH FIRMS AND THE WIDER ECONOMIC IMPACT: THE UK EVIDENCE

Jun Du, Aston University, United Kingdom

Enrico Vanino, Aston University & Enterprise Research Centre, United Kingdom

There is strong and growing evidence of the significant contribution of small groups of fast growing firms to the job creation and economic growth. However we know little of the growth patterns of fast growing firms and their broader impact on the economy. To fill this gap, the paper provides the first evidence of such an impact using the UK firm level data. Drawing on the linked longitude data of ONS BSD, regional and industrial aggregate data from several sources over 1997-2013, we apply econometric approaches to identify externalities of high growth phenomenon on firms' up-scaling and productivity growth performance in the region, controlling for a wide range of firm level, regional level and industrial level characteristics. For the first time we provide the first evidence of high growth firms have externalities to other firms in the region, within industrial sectors and along the supply chains. We identify strong negative employment growth externalities within the same industrial sectors due to fast employment growth firms, indicating possible competition-led crowding out effects for skills and labour. There is consistent evidence of positive productivity spillovers within the same industrial sectors and across the sectors of production chains, indicating knowledge spillovers and competition-led efficiency improvement induced by fast productivity growth firms. The positive externalities may also be signs of reallocation of inputs to more productive (and likely more innovative) firms within sectors.

CREDIT FLOODS, LIQUIDITY STARVATION, AND SURPLUS RECYCLING: A SPATIALIZED MINSKY APPROACH TO REGIONAL DEVELOPMENT

Gary Dymski, Leeds University Business School, United Kingdom

Post-crisis economic policy in the UK and in Europe has been dominated by three trends: macroeconomic fiscal austerity, devolution of budgetary authority to local governments, and quantitative easing. These policy trends have been accompanied by an emphasis on the centrality of cities in economic growth due to factors ranging from agglomeration to 'creative economy' to new technology 'nudges'. There is no doubt that making policy space for creativity in private and public sector initiatives at the local level can boost growth, well-being, or both. However, every spatial area, no matter the scale, operates under two intertwined sets of cross-border constraints: the presence or absence of surplus recycling and the level of financial flows.

This paper sets out the simple – and inescapable – analytics of these dual constraints. Because imbalances between debt obligations and income flows matter so critically in calibrating these constraints, we term this a spatial Minsky approach. The upshot is that no region can prosper if simultaneously starved of credit inflows and surplus recycling. Insofar as the contemporary policy mix in the UK and Europe involves fiscal austerity (blunting surplus recycling) and the recuperation of megabanks' balance sheets via quantitative easing (without guaranteeing the spatial spread of sustainable credit flows), this implies that peripheral (non-core) regions will face declining income levels and imminent stagnation. This conclusion obtains at different spatial scales – for peripheral areas at the national level, and for peripheral communities within any regional hub. The subprime and Greek economic crises provide pertinent examples of this dual logic at work.

The policy implication for the present moment is that Europe's Horizon 2020 strategy and the UK's Northern powerhouse initiative have critical flaws; unless identified and counteracted, these flaws will

undermine these policies' intentions and lead to further economic polarization rather than more widely distributed growth and well-being.

UNLOCKED URBAN DISSENSUSES: BRINGING THE CITIZEN AS EXPERT BACK TO URBAN DEMOCRACY

Franziska Eckardt, University of Twente, The Netherlands

Paul Benneworth, University of Twente, The Netherlands

Willem-Jan Velderman, University of Twente, The Netherlands

This paper explores the functioning of citizen knowledge in urban democratic decision-making processes in order to understand how urban governance can best respond to pressing urban challenges of the 21st century. Contemporary urban decision-making processes are increasingly criticised for being too technocratic and expert-driven rather than democratic and participative. This directly constrains the ways in which citizens can contribute their knowledge to influence strategic urban development processes. Even though various types of citizen knowledge can be highly valuable to the resolution of environmental and social urban problems, their exclusion is driving an emerging urban crisis of both legitimation and representation in the relationship between urban governance, knowledge, and expertise. By drawing on theories of knowledge sociology, urban politics and sustainable development to foreground the issue of urban dissensuses, the paper aims to explore new ways to solve this urban crisis. It does this by examining how various types of citizen knowledge can be better integrated within the knowledge architecture of sustainable and smart urban decision-making processes. We present a controversial urban case within the Knowledge Matters research project from the Dutch Twente region, located in the East of the Netherlands. In this case, citizens mobilised themselves to challenge a prevailing expert consensus that a specific activity (waste-water injection) performed by a Dutch oil company is safe. The Dutch waste-water injection case provides a good example of how urban-regional governance can become “smarter” by making better use of existing citizen knowledge, thereby choosing a political approach rather than a technocratic approach.

CO-WORKER NETWORKS AND AGGLOMERATION EXTERNALITIES

Rikard Eriksson, Umeå University, Sweden

Balazs Lengyel, MIT, United States

Inter-personal linkages are crucial for the generation of new knowledge and the mobility of workers is often argued to be a direct medium to diffuse unstandardized knowledge in space. This paper explores how social networks influence regional economic development on the base of different types of knowledge externalities. To address this issue, we construct a weighted co-worker network for the entire Swedish economy 1990-2008 and aggregate tie weights on plant- and industry-region levels. Based on previous literature, we argue that co-worker networks across plants within industry-regions are important for creating MAR externalities while networks across industry-regions should be important for Jacobs externalities. We find evidence that growing density of the plant-level network is a key feature explaining the presence of MAR externalities as it positively influences productivity, particularly in large regional industry-clusters. While diversity as such is not related to productivity, we find that regional co-worker ties to related industries compensate for the absence of industry clustering. Conversely, industry diversity of co-worker ties is positively related to employment growth. A feature especially prominent in strong industry clusters. Finally, we show that linkages to the same industry in other regions are important for productivity in cases where regional specialization is absent, while specialized non-local ties are more beneficial for employment. Thus, while the type of

linkage (specialized or diverse) influence the performance of agglomerated plants differently depending on how performance is defined, we also find that the linkages to other firms in the region and to other regions depend on the degree of industry clustering.

RESILIENCE IN TOURISM CITIES: EVIDENCE FROM ANTALYA TOURISM CITY

Hilal Erkuş Öztürk, Akdeniz University, Turkey

Kemal Türkcan, Akdeniz University, Turkey

This paper is about resilience in tourism cities and argues that tourism responds differently to shocks than other sectors. The interest in resilience of tourism city has increased in time, particularly because their economies are dominated by localization economies.

The increasing frequency of political shocks in 2016 has had significant impacts on the economic growth of tourism cities in Turkey. Antalya, the leading mass tourism city which attracted more than ten million tourists per year till to 2015, has been negatively affected by the political crisis between Turkey and Russia as well as the bomb attacks in other parts of the country. The aim of the paper is to show how such the single-asset tourism city of Antalya has been affected by different crises, and to compare different crisis periods since 2000. In line with this, this paper specifically aims to analyse the following questions. (i) How did recent crises affect different sectors in the single-asset city of Antalya and (ii) what are the different resilience and adaptation mechanisms in different sectors? By using city level firm entry and exit data for crisis periods taken from Trade and Industry Organization of Antalya, reactions and adaptation mechanisms of different sectors in the city will be evaluated.

DEVOLUTION AND THE VARIABLE GEOGRAPHY OF SMART CITY

Aksel Ersoy, Oxford Brookes University, United Kingdom

Alex Marsh, University of Bristol, United Kingdom

While devolution discussions are reshaping the ways in which new powers and responsibilities are devolved in cities, they have also created platforms for more collaborative engagement. While financialisation is only one dimension of this process, it tends to absorb a lot of attention. Recently, there has been an increasing interest in the way the smart city concept and the accompanying benefits and challenges are affected by a larger geographical scale. Studies point out how different networks within which smart cities operate extend their city boundaries and how different rationales, agreed principles and legitimacies of smart city policy can be combined in a collaborative, network based approach at a regional scale. A key challenge remains how and where local knowledge can be exploited and integrated across different scales. The aim of this presentation is to examine the ways in which debates and developments in the smart city arena intersect with current aspirations and plans regarding devolution. The paper explores the extent to which arguments in principle about the benefits of collaboration at scale in the smart city resonate with the practicalities of developing the "actually existing" smart city". It draws on interviews in three English case study cities: Manchester, Bristol and Milton Keynes. The cities were selected because they have become very visible in this policy domain, and are positioned differently in relation to the on-going English devolution agenda.

WHY CITIES SPECIALIZE

Christopher Esposito, UCLA, United States

Cities specialize as a natural outcome of their economic development. Using U.S. patent data, I find that cities diversify their knowledge bases when their annual earnings per worker first start to climb. But at a consistent threshold level of earnings, near the \$30,000 mark, cities switch to increased technological specialization. By linking the patent data to housing market indicators, I show that the switch to specialization is driven by shortages of developable land in cities: land constraints appreciate local housing prices, displace dated and footloose inventive activities, and narrow cities' technological trajectories. The results are robust across modeling settings, including IV models that address potential endogeneity. Together, the findings beg the question of whether the high housing costs in today's innovative cities will slow their innovative growth in the long run.

GROWING APART? STRUCTURAL TRANSFORMATION AND THE UNEVEN DEVELOPMENT OF BRITISH CITIES

Emil Evenhuis, University of Cambridge, The Netherlands

Peter Tyler, University of Cambridge, United Kingdom

Ron Martin, University of Cambridge, United Kingdom

Peter Sunley, University of Cambridge, United Kingdom

Ben Gardiner, University of Cambridge & Cambridge Econometrics, United Kingdom

Structural change is now widely considered to be an important aspect of national economic growth. Yet the issue is not only of relevance at the macro-economic level; it also has a direct bearing on the growth of regions and cities. In this paper we examine the relationship between structural transformation and economic (output) growth across British cities over the last half century. During this time, the British economy has gone through a series of extensive structural transformations, most notably an historical shift from an industrial to a post-industrial structure, over the period of from the early 1970s until now. In especially the 1970s and 1980s the economy experienced a process of accelerated deindustrialisation, which resulted in manufacturing going from nearly 22% of output in 1971 to just over 10% of output in 2014 (and in terms of employment from about 29% to under 8%). But also within the now dominant 'post-industrial' service economy some sections of the service economy activities have been growing at a faster rate and appear to be more dynamic, than other parts. In this paper we show how the structural transformations in the national economy have played out quite differently across the cities in Great Britain, shaping to a considerable extent their divergent growth trajectories over the past five decades. At a broad level, it is possible to distinguish between a number of distinct growth clubs of cities, and these also display significant differences in the extent and direction of structural change and reorientation. However, while differences in structural change have certainly been important in shaping city growth paths, other, 'city-specific', factors appear also to have exerted an influence, and thus require investigation.

INSTITUTIONS AND POLICIES IN CITY ECONOMIC EVOLUTION: EVIDENCE FROM BRITISH CITIES

Emil Evenhuis, University of Cambridge, The Netherlands

Andy Pike, Newcastle University, United Kingdom

David Bailey, Aston University, United Kingdom

Peter Sunley, University of Southampton, United Kingdom

Despite growing acceptance and recognition of the integral roles of economic policies and institutions in city change and development, identifying the precise ways in which certain policies and specific institutions did or did not make any difference remains a weak spot in urban and regional analysis. Bedevilled by problems of isolating causal relationships, non-standardised and difficult to compare data and a tendency to particularist accounts reliant on qualitative case studies, grasping the extent and nature of specific policies and institutions in city evolution and adaptation is a thorny issue. Drawing from a collaborative project on structural transformation, adaptability and city economic evolutions, this paper elaborates and exemplifies our research methodology and strategy for analysing the roles of policies and institutions in city evolution and adaptability. Empirical evidence is drawn from the experience of UK cities exhibiting different evolutionary pathways: Glasgow, Middlesbrough, Birmingham, Bristol, and Peterborough. The argument is that seeking to construct plausible explanatory accounts of the causal roles and processes of policy and institutional agency can benefit from: constructing diagnoses of the particular problems and formulation of policy responses and institutional design in each city; periodisation and the identification of episodes of relative stability and crisis or turning points in city economic trajectories; categorising the utilisation of different policy types and institutional architectures; and, teasing out illustrative evidence where policy and/or institutions have meaningfully shaped city evolutionary pathways and adaptive processes.

FRENCH REGIONAL ELECTIONS: PLUS ÇA CHANGE?

Elodie Fabre, Queen's University Belfast, United Kingdom

The 2015 regional elections in France took place in an unusual context, happening as they did less than a month after the November 13 terrorist attacks on Paris and under the state of emergency. They also happened in a new institutional context in which the number of metropolitan regions was reduced from 22 to 13. However, in many ways, these regional repeated old patterns: moderate-intensity campaign in the regions, nationalisation of the political debate, second-order election-type results. This paper will ask why, thirty years after the introduction of decentralisation in France and after the powers of the regions were increased over the years, regional elections remain stubbornly second-order. It will look at a number of factors that contribute to the nationalisation of these elections, including an institutional design that prevents the expression of regional identities and party strategies that use regional elections as early electoral tests ahead of presidential elections.

ROLE AND SUPPORT OF SPORT IN AN AUTOMOTIVE CITY

Beatrix Faragó, Széchenyi István University, Hungary

Márta Konczos-Szombathelyi, Széchenyi István University Győr, Hungary

The theme of the present study is explores a part of a complex research the utilization of regional sports talents in the labor market. As part of the examination of local automotive companies sponsoring sports activities whose presence in the sport sets of local sports culture. Sport became part of the economic development of the sports industry. Development of sports economy is stronger than

the annual economic growth of the country, so it is worth can be measured in the GDP economic impact. Sports as a professional sport and "media sports" are part of the entertainment industry have been a particular area as interpreted. In the business world, managers of economic globalization on the economic outlook resulting from the makers of the whole world are taken into account and draw from them in the market.

Current study aims is mapping in sports sponsorship of Győr of automotive companies and exploration of motivation and functioning. The issue of further studies to play a role in the sports industry companies, and that is what led to this area of the economy in the sport formation.

This study is based on media reports and analysis the companies appearances, and interviews with sports leaders. Results show the economy is explained by sports implantation of local characteristics. Sport and successful relationship with the company shows an example of how these two issues are operational and can be seen, which are the elements which facilitate cooperation and which ones need improvement. Disclosure of the sports economic factors will help to make the "best practices" model for extending in the country. One example of pattern of industrial development of the sport in Hungary sports market of Győr, where companies and sports cooperation is effectively present.

HOUSEHOLD VULNERABILITY AND RESILIENCE AFTER A GLOBAL ECONOMIC SHOCK: EVIDENCE FROM IRELAND

Jon-Paul Faulkner, University College Dublin, Ireland

The 2008 financial crisis revealed the increasing exposure of rural economies to exogenous disturbances caused by unpredictable global markets. Academic literature suggests that the economic downturn has been more protracted in rural regions with emerging structural unemployment resulting in longer-term economic disturbance. This paper explores the impacts and coping mechanisms of households in rural regions through the application of a socio-economic instrument which combines various strands of scholarship to generate a model that is applicable to alternative economic contexts. The instrument was administered to a sample of 386 farm and non-farm households in rural Ireland across three case study locations chosen to reflect potentially high, moderate, and low resilient areas based on a spatial analysis of employment rate change over the past 30 years. The results focus on identifying: (1) important indicators of perceived sensitivity and adaptive capacity; (2) indicators of objective sensitivity and adaptive capacity; and, (3) components of exposure and capacity of response.

REGIONS AND INNOVATION POLICY: BEYOND THE OBVIOUS

Cristina Fernandes, Instituto Politécnico de Castelo Branco, Portugal

Luis Farinha, Universidade da Beira Interior &NECE-UBI Research Centre, Portugal

João Ferreira, Universidade da Beira Interior &NECE-UBI Research Centre, Portugal

Mário Raposo, Universidade da Beira Interior &NECE-UBI Research Centre, Portugal

In addition to the recognition of the contribution made by research into national innovation systems (NIS), there is also the suggestion that, for both conceptual and methodological reasons, above all due to scale and complexity, this approach might get meaningfully complemented by a sub-national level of focus. This research thus aims to study regional innovation systems (RIS).

Taking an evolutionary economics point of view, this article specifies the concepts of "region", "innovation" and "system" prior to embarking on a wide reaching discussion of the importance of financial capacities, institutionalised learning and productive culture to innovation. Through recourse to bibliometric analysis, we thus seek to consolidate this still recent and fragmented field. Bibliometric analysis deploys a range of quantitative methodologies based on statistical means of analysis and further taking into account the citations made of academic journal articles to evaluate their impact through measuring the extent of their dissemination (Thomsom Reuters, 2008).

This present study seeks to map and chart the scientific publications, the intellectual structure and trends in research on regional innovation systems (RIS). Hence, we correspondingly aim to: 1) define the intellectual structure to this research and bi-dimensionally map the RIS intellectual structure through visualising the spatial distances among the subjects related to this theme; and 3) determining the lines of research that constitute the intellectual structure and identify possible relations between these fields. Our contribution stems directly from encountering the theoretical approaches in the different research projects on this field and better enable discussion about regional innovation focused policies.

FOREIGN INVENTORS IN THE US AND EU15: DIVERSITY AND PRODUCTIVITY

Edoardo Ferrucci, Université de Bordeaux, France

Francesco Lissoni, Université de Bordeaux - CRIOS, Bocconi University, France

We live in an era of mass-migration, one that involves an unprecedented number of highly skilled individuals. These include professionals such as scientists and engineers, who are directly involved in research and innovation activities. Policy-makers and scholars in top destination countries, enquire on the net benefits generated by these inflow. Those in countries whose inflows are much more limited, and possibly offset by substantial outflows, investigate on how to increase them, and toy with the idea of selective, highly-skilled oriented immigration policies.

In this paper, we explore the innovative performance of a category of migrant professionals, inventors, which both comprises scientists and engineers, and whose engagement in innovation activities is self-evident. Aiming at a comparison between European and US based dynamics, we define Europe as the European Union at its 1995 boundaries, which encompasses the largest economies of the Continent, as well as its most patent-intensive countries. We make use of original data, which consist of all patent applications filed at the EPO, by US- and EU15-resident teams of inventors. Information on the inventors include their nationality, as derived from the WIPO-PCT database. Preliminary results show that migrant inventors are on average associated with better patents. Moreover, patents receive more citations if the inventor team is composed of both foreign and local inventors, this last result holding particularly for European based patents. As a robustness check, we make use of the exogenous variation in income tax rates within European countries and US Federal States to instrument our main dependent variables.

THE ROMAN EDITION OF THE MAKER FAIRE: AN ENTREPRENEURIAL OR AN INSTITUTIONAL EXPOSURE?

Stefania Fiorentino, UCL, United Kingdom

The rise of 'makers' - small businesses and entrepreneurs active in the digital fabrication and creative industry field – speaks to the re-emergence of the urban economy. Many regional institutions all over

the world are supporting and promoting entrepreneurialism and innovative start-ups. Top-down policies approaches and bottom-up processes are joint in those raising ecosystems in a complex puzzle of global and local interactions. At the global scale, trade fairs – and similar major events - as temporary clusters have been central to the dynamics of these makers. Locally, a variety of actors including new business intermediaries have assumed a central role in mediating between grassroots ventures and the global investment trends. This paper draws on a survey of exhibitors at, and interviews with organisers of, the 2015 MakerFaire of Rome to describe the characteristics, locational choices and economic linkages of the makers movement. The second section aims instead to connect and compare these emerging patterns with the institutional choices and policy trends. The findings indicate that, although cities are the nexus of contemporary innovation trends, these are also deeply intertwined with the surrounding socio-political context and struggles therefore, it is especially in broken economies that a new innovation hub could emerge. Here, the role of institutions is crucial to operate the jump from an institutional projection of a local political and economic panacea to a real new urban economic dedication.

LOCAL GOVERNMENT MERGERS IN NORWEGIAN CITY REGIONS: A PUBLIC CHOICE PERSPECTIVE

Rune Dahl Fitjar, University of Stavanger, Norway

The administrative boundaries of the central city almost universally cover a smaller area than its functional boundaries. As mobility patterns go mainly into the central city, local governments in central cities supply public goods beyond their own residents. They should want to extend their boundaries in order to internalize more of these externalities, while suburban municipalities should oppose this. This implication is clear from a theoretical perspective, but can rarely be tested given that local government reform is infrequent and typically top-down. However, the Norwegian municipal reform, which started in 2014 and was still ongoing in 2017, offers a rare opportunity for empirical evidence to test this proposition. The paper examines the decisions made by municipalities in all 20 large or medium-sized city regions in Norway on mergers involving the central city. The analysis provides support for the proposition that central cities want to internalize more of the externalities from their public goods production, while suburban municipalities oppose this: First, the analysis shows that central cities tend to have higher property tax rates and to provide more public goods compared to suburban municipalities. This creates an incentive for suburban municipalities to continue to free ride on the investments of the central city and thus to oppose merging. The case study shows that central cities were much more interested in merging than suburban municipalities: while the central cities wanted to merge with a total of 75 suburban municipalities, only 15 of the latter were positive to merging with the central city.

TECHNOLOGY TRANSFER PRACTICE & REGIONAL INNOVATION SYSTEMS: LESSONS LEARNT FROM TT-OFFICERS IN THE FIELD OF MARINE BIO-ECONOMY

Arnt Fløysand, Western Norway University of Applied Sciences, Norway

Stig-Erik Jakobsen, Mohn Centre for Innovation and Regional Development, Western Norway University of Applied Sciences, Norway

This paper analyses the innovation system linked to technology transfer (TT) practices that are currently being implemented in the field of marine bio-economy in several peripheral regions in Europe. Theoretically we frame technology transfer practices as an interactive process including idea scouting and development; patent licensing and firm start-ups; investments and sales, taking place in regional innovation systems RIS; i.e. interactive and relational systems of R&D institutions, industry

actors and supporting organizations (financial institutions, consultants, TT-officers, etc.) promoting innovations. Commercialization of research outputs are viewed as development of ideas and projects with the intention of introducing them to a market. The intention of the paper is to reveal learning points and support the development of guidelines for better and more effective commercialization strategies based on reports on how TT-officers experience the technology transfer practice. The paper demonstrates that technology transfer is an 'emerging field' turning the practices of TT-officers into something very dependent on the art of regional networking. Thus, policy approaches for promoting commercialization of research (i.e. TT-practice) needs to fit with characteristics of the regional system. Nevertheless, there seems to be evidence that the practice of TT-offices are dependent on certain RIS features (organizational thick vs thin RIS).

SPATIAL INEQUALITIES: CONNECTION BETWEEN MORTGAGE & HOUSING MARKETS BEFORE & AFTER 2008

Balazs Gyorgy Forman, Corvinus University of Budapest, Hungary

Spatial inequalities: connection between mortgage and housing markets before and after 2008 in Hungary. Stages and cycles of housing policy in last 30 years. From state dominated markets to clear market oriented situation. What kind role played a next factors in housing market? Interest rate, currency swap, economic crises, cycles of economic policy, expectations, labour markets, migration.

ACTORS, LEVELS & CAPABILITIES IN EVOLUTION OF REGIONAL INNOVATION SYSTEMS: A POLICY EXAMPLE

Jens Kristian Fosse, Western Norway University of Applied Sciences, Norway
Rune Njøs, Western Norway University of Applied Sciences, Norway

Whether regional innovation systems evolve bottom-up or top-down is a debated topic. This is also reflected by RIS policy, where there has often been a focus on stimulating either the micro-level (firms and organisations.) or system structures (i.e. partnerships and governance structures promoting interaction between actors in the system). In this paper, we discuss the role of policy in RIS evolution, and from a theoretical point of view identify the perceived importance of balancing micro- and macro-level policy approaches when attempting to stimulate RIS development. Inspired by evolutionary theory, we employ the 'capability' concept as a frame of reference for conceptualizing the role of learning as a focal outcome from such policy measures. We argue that, from a RIS perspective, learning should take place both in firms and organisations and in regional partnerships. To illustrate our argument, we perform a comprehensive qualitative analysis of the Norwegian RIS policy program 'VRI' (Programme for Regional R&D and Innovation). The VRI program is unique in that it aims to combine a micro and macro approach to RIS development. However, we find that that the success of the program varies between different regions, but that, overall, VRI has mainly contributed to learning on the macro level of regional partnerships. Furthermore, we argue that RIS theory should acknowledge the challenges of combining a micro-macro approach in RIS evolution and that the balancing act between developing the micro and the macro level should take into account that experiences with innovation system instruments and partnership development a priori policy intervention appears to be of particular importance.

A SPATIO-TEMPORAL ASSESSMENT OF PERI-URBAN AGRICULTURAL LAND USE CHANGE USING A GIS OVERLAY METHODOLOGY: A CASE OF KIGALI CITY, RWANDA

Olulade Fosudo, Lagos State Polytechnic, Nigeria
Oladayo Ibrahim, Lagos State Polytechnic, Nigeria

The extent of peri-urban agricultural land use change calls for a global concern; (climatic physical, ecological, environmental) particularly in spatio-temporal terms, to ensure that the rate of loss of agricultural land in peri-urban areas are reduced to the barest minimum or well managed. Adopting appropriate methodology for land use change detection is equally of utmost importance. Therefore this research adopted a Geographic Information Systems methodology to carry out a detailed and accurate measurement of a peri-urban agricultural land use change. to assess how much of agricultural land use changed to other uses within an epoch. Stratified sampling method was adopted, by taking two cells of two different sectors in Gasabo district of Kigali city, Rwanda as case study. The research took two different development periods of 2008 and 2013 to determine the spatio-temporal agricultural land use change using a GIS methodology of vector on raster data overlay. Fragmented land parcels of the two cells were measured to determine how much change occurred. The study reveals that within that epoch 993 parcels out of 2074 agricultural parcels representing 48% of the agricultural land parcels changed, while 103 hectares out of 452 hectares representing 22% of the total land area in hectares changed from agricultural land within the selected 5 years. This sends a critical signal on the rate of extinction of agricultural land uses in the peri-urban area showing that in 10 years peri-urban agricultural lands may be absolutely extinct. The author posits that agricultural land within the peri-urban area should be preserved as much as possible to avoid loss of the green economy of the peri-urban areas.

MAPPING INNOVATION NETWORKS IN THE FINANCIAL INDUSTRY: GEOGRAPHIES OF BLOCKCHAIN CONSORTIA

Simone Franzi, Virginia Tech, United States
David Bieri, Virginia Tech, United States
Dan Simundza, Virginia Tech, United States

This paper uses two prominent blockchain consortia – R3 and Hyperledger – as lenses through which to study the geography of the blockchain fintech industry. Our goal is to map the network of firms and government agencies involved in the blockchain industry. We categorize the firms in these consortia along various dimensions and develop techniques to analyze the networks created by these consortia as abstract spaces, detached from the physical world. To this end, we employ measures of distance based on regulatory influence, infrastructure utilization, and product similarity to generate alternative geographies of the network. Our analysis proceeds by recasting these networks under the geographies induced by our alternative measures of distance. We create graphical representations of our networks to visualize the resulting landscape created by the connections and hierarchies of the agents involved in the blockchain fintech industry.

Our focus on the R3 and Hyperledger consortia enables us to study approximately 200 companies, their relationships both inside and across consortia, and their geographic proximity in multiple dimensions. While these consortia have similar aims – broadly, the development of a distributed ledger platform to support global financial transactions – the structure of their membership is quite different. The R3 consortium is composed entirely of large banking and financial services companies, while Hyperledger is a more heterogeneous conglomerate of firms. These consortia are believed to bring about innovative and possibly disruptive products and technologies in the financial sector. Our

analysis illustrates the complex industrial environment in which the blockchain fintech industry operates.

THE INFLUENCE OF THE LOCAL CONTEXT ON THE IMPLEMENTATION AND IMPACT OF EU COHESION POLICY

Ugo Fratesi, Politecnico di Milano, Italy
Julia Bachtrögl, VU University of Vienna, Austria
Giovanni Perucca, Politecnico di Milano, Italy

Most literature on the impact of Cohesion Policy analyses it as an homogeneous body, implemented in the same way across Europe. This is true especially for those studies whose approach is macro and whose target is detecting the aggregate impact of Structural Funds on European regions.

Yet, the principles of Cohesion Policy are the same everywhere, but the way in which the policy is implemented, and its effectiveness, can amply change due to the context of implementation, as shown by some recent papers (e.g. Rodríguez-Pose and Garcilazo, 2015).

In this paper the aim is to show that not only the policy is implemented differently in different parts of Europe, but that even when the policy is implemented in the same way, with similar projects and similar beneficiaries, the interaction between the policy and the territory makes the policy differently effective.

To show this, the paper merges three databases: a comprehensive database of EU projects and structural funds beneficiaries in 25 EU countries for the programming period 2007-13, a database of firm-level information for the period 2005-2015 and a database of territorial assets and characteristics for all European regions.

Using evaluation econometric techniques, the results of the paper show the different effectiveness of Cohesion Policy in different countries and in regions characterized by different territorial characteristics and regional endowment of public and private complementary assets linked to growth.

THE ROLE OF HISTORICAL TRADITION IN ENTREPRENEURSHIP FOR ENTREPRENEURSHIP CULTURE

Michael Fritsch, Friedrich-Schiller-University Jena, Germany
Martin Obschonka, Queensland University of Technology, Brisbane, Australia
Michael Wyrwich, Friedrich Schiller University Jena, Germany

Policymakers around the world strive for creating the next Silicon Valley in their region. The Valley is a synonym for a vibrant local entrepreneurship culture and innovativeness. Research has shown that extraordinary entrepreneurial hotspots like the Silicon Valley developed due to “historical accidents” or have a very specific history that makes it difficult to replicate the success of these places elsewhere. We ask in this paper whether there is also a systematic historical component explaining regional differences in entrepreneurship culture today.

We measure entrepreneurship culture by aggregate regional personality traits. To be more precise, research has identified a combination of certain personality traits that can be regarded as making people entrepreneurship-prone. We regard regional differences in the average entrepreneurial personality profile as indicator for regionally different entrepreneurship culture. Comparing aggregate

psychological traits across space is a well-established concept in psychological research that was recently also applied to the study of entrepreneurship (e.g., Obschonka et al, 2013). Mapping the average entrepreneurship-personality profiles across German regions reveals huge differences. In our econometric analysis, we are interested in understanding the role of historical conditions for explaining current spatial variation for the entrepreneurial personality profile of the regional population or entrepreneurship culture. In a nutshell, we investigate whether historical self-employment rates explain regional differences in entrepreneurship culture today. Earlier research demonstrates that historical self-employment rates are strongly correlated with current levels of new business formation and self-employment (Fritsch & Wyrwich 2014, 2017). This persistence indicates the presence of a local entrepreneurship culture that is self-perpetuating over longer periods of time. To analyze this pattern we are interested in whether there is indeed a relationship between historical levels of entrepreneurship and aggregate personality traits of today's local population. We also consider migration of people with an above-average entrepreneurial personality score and different measures for historical self-employment rates in our empirical assessment.

Our findings reveal a positive relationship between historical entrepreneurship and current entrepreneurship culture. These results have two important implications. First, regional differences in entrepreneurship culture are to a significant degree determined by historical factors. Second, for this reason, it may be rather difficult to promote an entrepreneurship culture in the short run.

Our research calls for understanding the spatial differences of historical entrepreneurship, for example, over the course of industrialization. Why have some regions become more entrepreneurial than others? The role of migration from and to entrepreneurial places is also an issue that deserves further attention. It also calls for sustainable long-term oriented policy designs to make places entrepreneurial in the future.

WHY DO WOMEN EARN MORE THAN MEN IN SOME REGIONS? EXPLAINING REGIONAL DIFFERENCES IN THE GENDER PAY GAP

Michaela Fuchs, Institute for Employment Research, Germany
Anja Rossen, Institute for Employment Research, Germany
Antje Weyh, Institute for Employment Research, Germany
Gabriele Wydra-Somaggio, Institute for Employment Research, Germany

Among the manifold aspects of why women earn less than men, the question why the gender pay gap (GPG) varies considerably with the place of work within a country has received very little attention so far. This paper aims to shed light on the determinants of the large regional disparities in the GPG within Germany that encompass a range between 39 % and -19 % and on their changes over time. Besides providing detailed descriptive evidence for the NUTS3-regions, we quantify the impact of region-specific characteristics in addition to factors related to the individual or the occupation, plant, or sector affiliation. Our decomposition approach rests on a comprehensive data set encompassing all employees liable to social security contributions between 1994 and 2014. First results confirm that regional specifics are important determinants of the spatial variation in the GPG. The regional economic structure picks up the gender-specific occupational choices, with women tending to work in the services sector and men in manufacturing. Especially in the East German regions, the services sector provides relatively well-paid jobs mainly for women. The local plant structure that includes the size of plants as well as the degree of specialization also plays a role. The GPG increases along with the average plant size in a region. Furthermore, it is higher in regions with higher overall wages and lower in regions with high unemployment.

REPRESENTATION & NARRATIVE IN SPATIAL PLANNING: A COMPARISON ON METHODS OF CONSTRUCTION OF SPATIAL VISIONS

Raffaella Fucile, University Of Florence, United Kingdom

The paper aims to investigate the narrative dimension and the methods of construction of representations as instrument of discussion in spatial planning process: can we interpret spatial visions as design space metaphors? This research question was conceived during the process of definition of the Strategic Plan for the Metropolitan City of Florence, which is currently under construction.

The institutional rescaling operated in Italy by recent government reforms led to the emergence of metropolitan cities and strategic spatial planning. The institution of Metropolitan Cities poses some questions as the defining of a conceptual and spatial image of the urban region, because often the functional metropolitan area does not coincide with the institutional border, that is the same of the older Provinces. In this process the visions in a cartographic representation can be used as spatial metaphor and represent a useful tool to make visible what is latent, by showing fuzzy boundaries areas and potential interactions in the territory.

To understand the role of visions in a spatial metaphor perspective a comparative qualitative approach is used in relation to two areas: the metropolitan region of Zurich and the metropolitan region of the Ruhr.

These case studies have been used as reference to build a vision for the Metropolitan City of Florence, able to go beyond institutional limits, and to define a new role for different territories in an overall strategy for the metropolitan area.

ACTUAL URBAN POLICY IN HUNGARY

Gergő Gajzágó, Széchenyi István University, Hungary

With the centralization of Hungarian development policy new type of great national actions appear. Such an action is the Modern Cities Program, which affect the Hungarian cities with county right. These cities are the determining parts of the Hungarian settlement network, a special kind of a counterweight facing the capital city of Budapest.

So the development of this network is very important from the viewpoint of the Hungarian spatial structure and the development of the countryside. Thanks to this program these towns will be the winner of the actual EU-budget cycle in Hungary.

In my presentation I would like to show the former and actual situation of the Hungarian urban policy, the details of this Modern Cities Program, and the predictable effects and impacts of this program, which costs almost one billion Euro, and is financed from EU and national sources.

STRATEGIC SELECTIVITY AND REDEFINITION OF TERRITORIAL SCALES IN DANISH SPATIAL PLANNING

Daniel Galland, Aalborg University, Denmark

From inception, the Danish spatial planning system portrayed discrete, permanent and fixed

scales, conventionally depicted by nested hierarchies – a characteristic associated with ‘comprehensive-integrated’ planning systems in aiming to achieve territorial synchrony (Hajer 2003). A decade ago, however, the system underwent a series of radical reorientations after the implementation of a reform of local government structure that modified the geographies of inter-governmental arrangements through the merging of municipalities and the abolition of the county level. The reform altered the roles of policy institutions as well as the substance of plans and policies at different administrative levels, and thereby triggered ad hoc processes of territorial and governance rescaling. The planning reorientations product of the reform implied: i) the downward rescaling (from regional to municipal levels) of most functions and responsibilities related to spatial planning; ii) the upward rescaling (from metropolitan to national level) of spatial planning functions associated with the Greater Copenhagen region; and iii) the revocation of ‘formal’ regional planning as well as the institutional disassembling of the metropolitan level.

To develop an understanding concerned with rescaling implications as well as the increasing differentiation of spatial planning roles at different administrative levels since the structural reform, this study explores the grounds behind evolving conceptions of scale and representations of space portrayed in Danish spatial plans and strategies. The study explains how the allegedly ‘fixed’ Danish spatial planning system has been instrumentally reinterpreted since the structural reform in coping with changing territorial dynamics. Moreover, it discusses how territorial scales have been redefined via the dual adoption and articulation of legal instruments and spatial strategies at each administrative level. This is analysed through: i) the strategic spatial role attributed to each level of planning; and ii) forms of strategic selectivity as depicted by changing political objectives and spatial relationships occurring between planning levels. The study concludes that the hierarchical ‘cascade-shaped’ ideal of policy implementation (i.e. the comprehensive-integrated approach to spatial planning) has been superseded even though the vertical spatial anchor of the system remains as a façade depicting a formal ‘stable’ structure.

IS COGNITIVE PROXIMITY A DRIVER OF GEOGRAPHICAL DISTANCE OF UNIVERSITY-INDUSTRY COLLABORATION? A COMPREHENSIVE ANALYSIS

Renato Garcia, Institute of Economics - University of Campinas, Brazil

Veneziano Araujo, Federal University of São Paulo, Brazil

Suelene Mascarini, Federal University of São Carlos, Brazil

Emerson Gomes dos Santos, Federal University of São Paulo, Brazil

Ariana Costa, Polytechnic School of University of São Paulo, Brazil

The role of geographical proximity in fostering innovation is widely recognized, and local flows of information and knowledge sharing play a very important role in interactive learning. However, geographical proximity can be supplemented by other forms of non-spatial proximity shaped by, for example, cognitive proximity among actors. In this way, the aim of this paper is to examine the relations between geographical and cognitive proximity in university-industry collaborations in Brazil. A dataset of 4,337 collaborations between firms and academic research groups in Engineering and Agricultural Sciences in Brazil was used to examine how geographical and cognitive proximities shape their interactions. Main results show that cognitive proximity is a substitute for geographical proximity because shared capabilities and expertise between university and the collaborating firm stimulate long distant collaboration. Moreover, findings also add a new driver, cognitive proximity, which affects long-distance university-industry collaboration.

Based on this assumption, this paper aims to contribute to the debate on the different dimensions of proximities and university-industry collaboration, by presenting new empirical evidence on the

relations between cognitive and geographical proximities. This subject is applied to a developing country, in which the university has been playing an increasing role in fostering innovation. It is also applied to university-industry collaborations, and findings allow adding evidence regarding a new driver of the geographical distance of collaborating firms and academic research groups, that is the cognitive proximity between the two partners. Finally, a new index to measure cognitive proximity is proposed, by using correspondence analysis techniques.

BUSINESS AND PROFESSIONAL SERVICES IN A CITY-REGION: ON BEING PROFESSIONAL IN 'BIG' ACCOUNTANCY

Emma Gardner, Birmingham Business School, United Kingdom

John Bryson, University of Birmingham, United Kingdom

Prior research has uncovered the socialization processes within professional services and how assimilating with institutionalized norms legitimizes the presence of actors within their social context as time management systems, progression models and client service are used to control and justify the expectations placed upon professionals outside of what is considered 'normal'.

The accountancy industry is changing as a result of the incoming audit rotation policy, and the increasingly diverse nature of services offered by larger firms is transforming them from accountancy to multi-disciplinary professional practices. As firms seek to win new audit clients, they are also concerned with retaining those who rotate-off as clients of other service lines as independence considerations are dispelled.

Based upon 60 semi-structured interviews conducted in the West Midlands, this research has sought to understand how these changes are affecting the expectations placed upon professionals and the implications for the boundary between work life and home life. Although the literature has focused on professionals within their organizational context, there is a scarcity of research focusing on the impact of institutionalized norms upon the non-work lives of professionals. By adopting an evolutionary perspective, this research addresses this gap by investigating how the changing nature of accountancy affects both organisational mechanisms and routines, as well as the impact upon individual routines by looking at working hours, work-life balance and the job satisfaction of employees as expectations and legitimacy change. It also addresses the interplay between the two, as well as implications for the regional labour market.

ADAPTATION TO URBAN INNOVATIONS, SMART CITIES

László Gere, PAGEO - Pallas Athene Geopolitical Foundation, Hungary

The presentation focuses on the state and perspectives of cities in the 21st century. The role of cities is increasing: their population, their economic-social-political significance, as well as their challenges growth continuously. The aim of cities is to create a liveable, attractive environment for their citizens and their companies, thus be competitive and powerful units.

Technological innovations are the key drivers of the 21st century. The concept of 'smart city' is something that also cannot be avoided – urban planners and urban management professionals have to deal with it, in my argument it is a prerequisite in the future urban planning (which is slightly different as it is defined generally in the literature). Therefore, the most important thing in this respect

is to manage this issue (i.e. the emergence of smart solutions in urban spaces and services) consciously, in close co-operation with other actors.

Recently, there appeared new players in urban planning and development: tech-companies tend to step out from the virtual space to the “real world”. The urban planners have to be prepared for that change, and have to come up with clear and simple concepts about what the ‘smart city’ means exactly to them, how it works and what kind of challenges and opportunities this concept has.

The presentation will show the challenges raising through the application of smart city solutions, and also will show examples from all over the world, how the smart city concept works in practice.

TRANSITION REGIONS AND THE DEVELOPMENT OF THE GREEN ECONOMY

David Gibbs, University of Hull, United Kingdom

Recent years have seen growing interest by policy makers and academics in the development of the green economy, defined as “low carbon, resource efficient, and socially inclusive” (UNEP (2011: 16). The aim has been to move beyond the economic development vs. environmental protection impasse to develop new economic forms providing economic and environmental benefits. This paper draws upon case study research in four regions (Styria, East of England, Flanders, Copenhagen) where transitions towards a green economy are occurring. To date, we have limited understanding of how these developments occur over space, and little purchase on the ways local and regional governments are promoting their green economies. The paper aims to deliver new insights into the processes of transition towards green regional economies, through exploring how regional actors aim to bring about transitions and how the processes of transition affects those places (e.g. adopting renewable energy; community-based economic initiatives; promotion as green economy exemplars). From an academic perspective, shifts towards a green economy have been explored by research using the conceptual framework of sustainability transitions. However, these largely lack spatial context and fail to capture the evolution and development of networks of institutions, entrepreneurs and innovations into stable forms to challenge and replace existing regimes. It is argued that green economies are socio-spatially embedded in particular locations, but constituted by links between local and wider scales. The role of purposive actors and institutions is important, not just within the local area, but also to help transcend the city and regional scales.

RENEWABLE ENERGY: THE GREAT LEVELLER?

Elizabeth Gingerich, Valparaiso University, United States

While trade liberalization has advanced considerably over the last several decades, emerging economies have disproportionately borne the brunt of trade inequities. However, with a growing consensus that the world must quickly and collectively combat the threat of climate change, certain unexpected phenomena in trade relations are occurring. More developed economies are experiencing a wave of nationalism and self-imposed isolation, jeopardizing the very existence of regional trading blocs and agreements and impeding market liberalization objectives. As technological innovations transform clean energy into a thriving export-import item, emerging economies are discovering a new place in the world market. Fossil fuel gluts and shortages, catastrophic oil spills, poisonous methane leaks, and fracking-based earthquakes have created an existential threat eclipsed only by the grim peril of nuclear annihilation. But clean energy development and distribution have experienced significant breakthroughs. With more affordable materials, subsidized infrastructure networking,

advantageous topographies, and coveted mineral deposits, least developed countries (LDCs) may be on track to become formidable trading partners, generating revenue for their own nation-states while assuming greater leadership parity in the universal quest to decarbonize the global economy. And with the widespread acknowledgement of planetary degradation and species extinction, 195 countries – representing developed, developing, and least developed economies alike – successfully negotiated the 2015 Paris Agreement to address greenhouse gas (GHG) emissions mitigation and adaptation. Using endemic resources to generate clean energy will not only help participating countries attain their Agreement pledges, but emerging economies may now have a prime opportunity to actively participate in the global marketplace.

THEORISING AND RESEARCHING BORDER (RE)ASSERTION

Benito Giordano, University of Liverpool, United Kingdom

Jennifer Johns, University of Liverpool, United Kingdom

Adriana Nilsson, University of Liverpool, United Kingdom

There is an inherent paradox to the new set of challenges facing the UK and Europe. On the one hand, there is increasing recognition that national states remain central to tackling the effects of the recession, for example, with the de facto nationalisation of banks and major financial institutions in the UK and other countries (Hudson, 2016). On the other hand, competitive pressures in the global economy are intensifying and firms are increasingly seeking new ways to configure their global production networks (Coe & Yeung, 2015). Innovation in various forms, including new production processes, upgrading existing and introducing new products, new organisational forms, and switching economic sectors from material production into finance, is becoming increasingly important. This paper presents ongoing work towards a theoretical and methodological framework to examine the socio-economic implications of this apparent shift on how: 1) national policies related to innovation and the ‘knowledge economy’ are being adopted in the context of current global economic uncertainty; 2) socio-economic actors, including firms are responding to shifts in policy; 3) the territorial implications of economic development policies are influencing (or not) intra-national socio-economic trajectories and disparities in particular places; and 4) these issues influence challenges and opportunities for policy makers, at varying geographical scales, to foster economic development interventions in times of considerable institutional upheaval. This overarching framework combines both the firm and the city as levels of analysis, as well as interdisciplinary perspectives from management, geography and public policy. The research aims to unpack innovation in firms and territories and to examine the interplay between the two.

DEVELOPING GENDER INCLUSION IN THE ARAB WORLD: POLITICAL AWARENESS AS A SURVIVAL STRATEGY AMONG SYRIAN WOMEN FROM AUTHORITARIANISM TO EXILE

Angela Gissi, University College Dublin, Ireland

The issues of women’s marginalization and gender inequality are at the core of sustainable development plans targeting Middle Eastern countries. In Syria, such plans have come to a standstill due to the escalation of the 2011 uprising into a brutal armed conflict which has led various country specialists to privilege the debate about conflict resolution over reflections on gender and development. At the same time, however, the vast mobilization of female protesters in the Arab revolutions, including the Syrian uprising, has rekindled academic interest in Arab women’s political activism and their involvement in grassroots organizations for socio-political and economic change. Despite these recent breakthroughs in the study of Arab women’s political agency, the experience of

the political among non-politically-active women continues to remain underexplored. This paper seeks to redress such oversights by focusing on an examination of Syrian women's political awareness in three main contexts: 1) authoritarianism in pre-war Syria under the leadership of the Asad regime; 2) political unrest and warfare since the outbreak of the Syrian uprising in 2011; 3) exile in multisectarian and consociational Lebanon. Based on the analysis of the interviews that I conducted in 2014 with 70 Syrian refugee women in Lebanon, I argue that political awareness plays an important role in Syrian women's elaboration of survival strategies in highly politicized contexts. By casting a critical eye on well-established conceptualizations of the terms 'political', 'political awareness' and 'survival strategies', this novel paradigm allows me to visualize and investigate the political agency of ordinary Syrian women.

MEASURING REGIONAL INEQUALITY: TO WEIGHT OR NOT TO WEIGHT?

Konstantin Gluschenko, Novosibirsk State University, Russia

While estimating regional inequality, many economists use inequality indices (coefficient of variation, Gini index, Theil index, etc.) that involve weighting by regions' shares in the national population. Despite this approach is widespread, its adequacy has not received attention in the regional science literature. This paper proves that this approach is conceptually inconsistent. Instead of an estimate of regional inequality, we get a rough estimate of interpersonal inequality among the whole population of the country (and this estimate makes sense only if it deals with indicators applicable to an individual). Therefore the population-weighted estimates of inequality are biased with respect to estimates of both regional inequality (as they measure a different value) and interpersonal inequality (as they do not and cannot take account of within-region income disparities). In both cases, the result may be not only distorted, but also quite misleading. Thus, the population-weighted inequality indices never give adequate results.

Moreover, the population-weighted inequality indices do not satisfy requirements for an adequate inequality measure. The paper strictly proves that they violate three of four basic axioms, namely, the population, anonymity and transfer principles. This may lead to estimates of inequality evolution that contradict common sense. One more consequence is the absence of unambiguous maxima of the population-weighted inequality indices. This makes it impossible to standardize estimates of inequality with the aim of cross-time or cross-country comparability.

Numerical examples illustrate mathematical proofs, using artificial data as well as actual regional data for different countries.

MOBILISING UNIVERSITIES TO ADDRESS URBAN CHALLENGES THROUGH CITY FORESIGHT & QUADRUPLE HELIX PARTNERSHIPS: A CASE STUDY

John Goddard, Newcastle University, United Kingdom

Europe faces a number of multi-faceted grand challenges such as environmental change and demographic ageing and which are particularly manifested in cities. The paper argues that addressing these challenges requires building capacity for collaborative working between universities, business, government and civil society in so-called quadruple helix partnerships. But doing this requires overcoming many barriers to collaborative working within and between institutions. Attention is drawn to the tensions between the economic and social spheres in this domain by contrasting the focus on business competitiveness underpinning smart specialisation strategies and the need for

social innovation to address long term grand challenges. The argument is illustrated by an approach to building a quadruple helix partnership through a city futures urban foresight process underway in Newcastle, focussing on the challenge of an ageing population but also exploring the links to an emerging place based national innovation strategy, devolution and a new higher education landscape.

CHANGING CONTEXTS OF IMMIGRANT INEQUALITY IN THE US IN THE NEW MILLENNIUM

Jamie Goodwin-White, UCLA Geography, United States

As the geography of immigrants to the US changed through the 1990s, researchers questioned what new immigrant destinations would mean for immigrant livelihoods. The Great Recession and geographically-varying immigration restrictions meant that answers to the question were increasingly complicated, and more likely to deviate from more conventional arguments about human capital, immigrant concentration, and spatial assimilation. In short, the varying demographic, economic, and political contexts of reception faced across the US were increasingly important to immigrants' socioeconomic outcomes. In this paper, I focus on the geographic contexts of economic inequality faced by immigrants in the US as the recession proceeded. Using pooled 3-year American Community Survey sample, I construct pre- and post-recession counterfactual wage distributions for immigrants across US states and metropolitan areas, enquiring to what extent their wage gaps with similar native-born workers are explained by compositional effects of group differences rather than local labor market and state immigration policies. I also explore the selection of internal migration and immigrant vulnerability at the intersection of compositional and geographic effects.

A SYSTEM OF ANOMALY INDICATORS FOR THE ITALIAN PUBLIC PROCUREMENT MARKET

Giuseppe Francesco Gori, IRPET Institute for the Economic Planning of Tuscany, Italy

The issue of the efficiency of the public procurement market has become increasingly important in recent years in the face of the financial crisis and the subsequent squeeze on financial resources available to national and local authorities. In this context, the increased stringency of fiscal constraints, has mainly hampered public works. The crisis, in particular, has raised awareness of the importance of public investment as a growth-enhancing form of public expenditure, and at the same time has encouraged greater attention to the question of its effectiveness.

Moreover, expenditure efficiency and legality find a substantial overlap in the case of the public procurement market where, for instance, cost overruns or delays in the public works' completion are often a result of corruption.

In this respect, Italy has recently experienced an increase of the monitoring activity on the public procurement market carried out by the National Anti-Corruption Authority (ANAC). However, alongside the activity of specific controls on legal aspects of the individual contracts, a control system based on purely statistical indicators is still lacking.

In this paper we present a new approach to the definition of a system of anomaly indicators for the Italian public procurement market. The purpose of the system of indicators is to allow a punctual check of the adequacy of the characteristics of contracts with respect to requirements which are not of formal nature but directly arising from market practice. The anomaly indicators – defined at the contract level - are in fact obtained using a data-driven approach, which consists in the definition of anomaly thresholds that vary along two dimensions: in relation to the observation period and in

relation to the observed characteristics of the homogeneous sets of contracts to which the contract belongs. For each variable of interest (e.g. the award rebates in percentage terms) the value recorded by a single contract is defined as abnormal if it is significantly far from the average of the values recorded in the same period by a group of contracts which are similar according to i) their financial amount, ii) their type and iii) the adopted selection procedure.

Our analysis relies on the dataset of the Italian National Anti-Corruption Authority (SIMOG - Sistema Informativo Monitoraggio Gare) which includes data on all procurement contracts in the country and is the major information source for all scholars interested in public procurement in Italy.

In addition to the definition of the system of anomaly indicators, the work has dealt with the issue of their use for predictive purposes. In particular, it has been tested for their ability to explain some of pathological phenomena related to the theme of the efficiency of public contracts market (i.e. the incidence of delays in carrying out works and the incidence of cost overruns).

The importance of this specific analysis is twofold. On the one hand makes it possible to expand the set of information available for the study of these phenomena. On the other hand, it allows to validate the anomaly indicators, providing the market's monitoring authority a priority ranking of the variables to be considered in order to identify the actual cases of anomaly.

'TO BE OR NOT TO BE' LOCATED IN A CLUSTER? - A META-REGRESSION OF THE FIRM-SPECIFIC CLUSTER EFFECT

Nils Grashof, University of Bremen, Germany
Stephan Bruns, University of Göttingen, Germany
Dirk Fornahl, University of Bremen, Germany

Modern economies without clusters seem to be an oxymoron in the 21st century. In light of the success of some clusters, as for example Silicon Valley, several cluster initiatives have received strong financial support from national governments, the EU, and other public institutions. However, the scientific results about the effect of clusters on firm performance are indeed highly contradictive. This inconsistency in the empirical results prevents general conclusions about the firm-specific cluster effect. The aim of this paper is therefore to reconcile the contradictory empirical findings and thereby contribute to closing the research gap concerning the alleged effect of clusters on firm performance. By conducting a meta-analysis of the empirical literature, dealing with the firm-specific cluster effect, we investigate the actual effect size as well as possible moderating influences. In contrast to similar approaches, we consider four different performance variables from four separate publication databases. Furthermore, the focus within our analysis lies on a more statistically profound meta-regression. Consequently, the effect of being located in a cluster on firm's success can be analyzed from a broader and more sophisticated perspective. First evidence is found for moderating variables, such as the industry context, which contribute to the rather mixed empirical results.

A THEORETICAL FRAMEWORK FOR TERRITORIAL RESILIENCE

Paola Graziano, Università Cattolica Del Sacro Cuore, Italy

Territorial resilience is the focus of an intense debate that involves political matters and different scientific objectives. Literature on resilience is characterized by fragmentation and absence of a dominant paradigm so that interdisciplinary research approaches are emerging from ecological,

sociological, economic and spatial sciences. In regional studies these approaches can be summarized into two research lines (Foster, 2007). The first one identifies resilience as a performance measure, based on the comparison between the capacity of a region to recover from a stress and an average recovery performance, during and after the shock (Bailey and Turok, 2016; Martin, 2012 and 2016). The second one describes resilience as a capacity, based on the analysis of the resources which make a region able to respond and it is often applied to analyze the sustainable development of territorial systems, identifying resilience as a complex and multidimensional ability (Foster 2011, Graziano and Rizzi 2016). The aim of this work is to define a theoretical framework for the representation of the complex phenomenon of resilience. The applied methodology consists in the definition of different domains and the association of themes and variables in order to reach an empirical quantification of the concept (Graziano 2014; Maggino and Zumbo 2012). Descriptors, theme and variables are identified in the three spheres of sustainability (Economy, Society and Environment) which compose the idea of resilience capacity. The conceptual framework is applied to the case of European regions to get a descriptive map of the phenomenon.

YOUNG PEOPLE'S CHALLENGES IN TRANSITIONING TO EMPLOYMENT: SPATIAL AND TEMPORAL PERSPECTIVES

Anne Green, Institute for Employment Research, University of Warwick, United Kingdom

In a competitive labour market, young people's early labour market experience has become progressively more protracted, unstable and fragmented. Arguably, the context within which young people make career and employment decisions is increasingly complex, opaque and difficult to understand for young people, their parents and other key influencers, and also for employers.

Between education and employment, unwaged work, temporary work and involuntary part-time work have become more common for young job seekers, whatever their qualifications. Increasingly employers demand evidence of 'employability skills', and work placements and internships have become part of early labour market experience for some young people. Geographical variations in prevailing labour market conditions and in opportunity structures mean that young people resident in some areas face more challenges in successfully transitioning into the labour market than in others.

This paper explores how young people's experience of unemployment and their economic position more broadly is categorised and recorded (or not) in official statistics, and how this has varied geographically and over time, with particular reference to the UK. It examines which young people where fall within the 'official public gaze' regarding youth employment and unemployment, and how this has implications for the scale and nature of policy interventions to address issues of youth unemployment, non-employment and poor quality employment. In particular it highlights how in contemporary local labour markets those who are 'hidden' from official statistics may be helped to transition into employment.

THE RISE OF THE ENTREPRENEURIAL UNIVERSITY: IMPLICATIONS FOR REGIONS

Geoff Gregson, Northern Alberta Institute of Technology (NAIT), Canada

An important conceptualisation of twenty-first century higher education (HE) is that of the entrepreneurial university; a concept which embodies both a change in the way we think about the university and its rationale and modus operandi, and the contribution of the university to the wider society of which it is a part. While there is now a considerable literature on the topic, scholars have

focused primarily on the commercial orientation of universities, which considers university-industry collaboration, technology transfer, spin-offs and start-ups, incubators and science parks. More recently, scholars have turned their attention to the role of universities in regional economic development and developing local entrepreneurial capacity. This paper seeks to make a scholarly contribution to the topic through a critical assessment of the entrepreneurial university as an institutional form and mode of collective entrepreneurial activity, which places a market-driven emphasis on the capitalization of knowledge in a broader and more theoretically-based context. Three different perspectives are used in the paper to guide analysis and discussion. The 'internal' higher education (HE) management perspective examines the institutional structures deployed to support the development of the entrepreneurial university. The 'entrepreneurial' perspective considers the different activities, which include research collaborations, licensing and exploitation of intellectual property, new venture creation and entrepreneurship education in which a university engages. The 'science' policy perspective examines the outcomes and impact of such activities in terms of knowledge generation, knowledge dissemination and social and economic development. The paper draws on a series of detailed case studies of research-led universities in Europe and North America and further data on university technology transfer, commercialisation and entrepreneurial activities.

DIAGNOSING INNOVATION NETWORKS IN AGRI-FOOD SECTOR WITH EXAMPLES FROM SELECTED COUNTRIES

Renata Grochowska, Institute of Agricultural and Food Economics - National Research Institute, Poland

The gradual contestation of linear approaches towards a more complex and network-like vision of knowledge, learning and innovation processes can be observed today. The new concepts try to address the more sophisticated reality of innovation, as well as the emergence of a new paradigm based on sustainable development rather than on productivism in agriculture.

The paper seeks to introduce better understanding of the structures and functions of the agricultural innovation systems in the selected countries, with particular focus on the Polish case. It also discusses the impact of main actors involved on the creation and diffusion of innovations in agri-food sector. Moreover, some aspects of promoting innovations by the European Innovation Partnership (EIP) 'Agricultural Productivity and Sustainability' as a new instrument under the rural development pillar are taken into consideration.

The analysis underlines a lack of sufficient incentives and instruments fostering cooperation between different actors in agri-food sector. The governance of agricultural innovation systems could be improved both with better integration within the general innovation strategy and with stronger coordination of the various actors and related policies.

In the Polish case, difficulties of smaller agri-food companies with low profit margins and little or no research capacity are visible in qualifying for government support, which is largely designed for more intensive modes of production. Simpler and shorter procedures, reducing regulatory transaction costs for small business are needed.

LEADERSHIP THROUGH VISIBILITY, EXPLORING THE CHALLENGES OF PLACE LEADERSHIP IN ESTONIAN & DUTCH PERIPHERAL PLACES

Martiene Grootens, University of Tartu, Estonia

This paper concentrates on processes of place leadership in peripheral rural areas of Estonia and the Netherlands. Going beyond a mere functionalistic account of what leadership ought to look like, this paper focuses on understanding processes of place leadership in non-urban contexts; contexts that in times of an increased attention for the urban agenda seem to especially need the promise of leadership. Understanding leadership as a multi-actor process of place-making, this paper shows that place leadership has focused in all four cases on visibility practices. While these practices can certainly play an important role to overcome stigmatisation of these areas, it also creates new challenges. Overall it tends to neglect the inherent heterogeneous nature of all places, which has consequences. First of all, it creates new exclusions; images can only represent certain parts of the community. Secondly the “polished” images created of these places tends to hide the material difficulties of living in these places. Moreover, the emphasis on best-practice leadership and active coping tends to heroise local leaders as development agents and urges them to take on responsibilities for coping with their peripheral situation that are difficult to fulfill in structurally disadvantaged rural areas. As a result, this paper shows the challenges and limits of place leadership in structurally disadvantaged rural contexts. This contribution is based on fieldwork conducted in two Estonian and two Dutch peripheral places from 2015-2017.

CO-OPTATION AND REGULATION DURING AUSTERITY: CARDIFF AND SAN SEBASTIAN-DONOSTIA COMPARED

Valeria Guarneros-Meza, De Montfort University, United Kingdom

Asier Blas, University of the Basque Country, Spain

Imanol Telleria, University of the Basque Country, Spain

Madeleine Pill, Sydney University, Australia

The paper will argue that approaches to neoliberal regulation alongside co-optation are an interesting way to study how the state in urban governance struggles in maintaining power in times of fiscal austerity, one of the major challenges resulting from the 2008 economic crisis. This power depends on the local state's capacity to negotiate with stakeholders and the resources (financial, assets and human) it needs to select collaborators to carry out regulatory activities, determine goals set by policy and regulation, and promote adequate types of professionalism to accomplish the latter goals. The analysis of the paper will focus on citizen or community participation initiatives promoted by the local governments of Cardiff, Wales and San Sebastián-Donostia, Basque Country. Both cities symbolise pride necessary to consolidate national identities characterising the UK and Spain. We will contrast how power struggle to maintain co-optative and regulatory powers is shaped by the cities' constitutional (in)dependence from national and sub-national tiers of government -which have protected them against or delayed the effects of the 2008 financial crisis. Furthermore, their reliance on the tourism industry (sport or gastronomy) and 'weak' social movements, albeit for different historical reasons, will contribute to frame debate on how participation alongside boosterism unfold during austerity.

THE GEOGRAPHY OF URBANISATION IN EUROPE: DOES DEMOGRAPHY REALLY MATTER?

Gianni Guastella, Fondazione Eni Enrico Mattei, Italy

Continuous urbanization pressures in metropolitan cities and their functional areas have caused severe consequences for the agricultural and ecological systems of the EU territories rising questions about the need to limit urban spatial expansion. Building on the theoretical framework of monocentric urban development, an extensive literature found that in both the US and the UE the urban spatial expansion was strongly related to the socio-economic determinants, arguing that limiting urban spatial expansion will only narrow household utility. Using most recent data and land use we investigate the determinants of urban spatial size in the sample of European Union Large Urban Zones with more than 50,000 inhabitants. The primary objective of this work is to understand whether such determinants, among the others population and income, are still so important. Some evidence for the EU cities suggest, for instance, that many cities grow even if population is shrinking. The second objective is to explore potential sources of heterogeneity between cities of different size or located in different areas of the region. For this purpose, we use more flexible non-linear econometrics models. The results suggest that while the standard determinants of urban spatial expansion are still important, the overall picture masks considerable heterogeneity. On the base of these results we conclude that limiting urban spatial expansion may be important but policy actions really need to be place-specific.

CAPITAL FLIGHT AND ECONOMIC AGGLOMERATION

Rhys Gwilym, Bangor University, United Kingdom

In this paper, we develop a New Economic Geography (NEG) model in which the driving force behind agglomeration is the moral hazard endemic in financial markets.

We extend the standard model to include both mobile and immobile capital. Mobile capital is drawn towards more highly developed regions, where the collateral value of immobile capital is higher and mitigates against moral hazard.

Since the global financial crisis, there has been an increasing understanding of the role of financial frictions in determining levels of economic activity. In particular, the role of financial markets in explaining the behaviour of macroeconomic variables has been an intense area of research, and there is a growing recognition that macroeconomic modeling needs to encompass the modeling of financial markets (see, for example, Borio 2014).

There has also been a long tradition of studying the effects of financial development on spatial inequalities (e.g. Guiso et al. 2004). However, barely any attention has been paid to the role of financial markets in the New Economic Geography (NEG) literature. Commendatore (2013) is the only paper that we are aware of which incorporates a financial sector into an NEG model, but in that case the financial sector simply serves to amplify agglomeration rather than acting as its source.

In this paper we focus on the effects of moral hazard in driving divergent levels of development.

ENTREPRENEURSHIP IN THE PERIPHERY: THE ROLE OF PRE-ENTRY EXPERIENCE AND HOME ADVANTAGE FOR NEW FIRMS

Antoine Habersetzer, University of Bern, Switzerland

Heike Mayer, Institute of Geography, Center for Regional Economic Development, University of Bern, Switzerland

Rikard Eriksson, Department of Geography and Economic History, Umea University, Sweden

The aim of this paper is to assess the importance of industry experience and home advantage of entrepreneurs for the competitiveness of new firms in the periphery. As the entrepreneurship literature in economic geography strongly focuses on agglomeration externalities and entrepreneurial ecosystems, explanations for successful entrepreneurship in the periphery are rare. We advocate for a stronger emphasis on industry experience (spinoffs) and home advantage (locally embedded entrepreneurs) and argue that firm founders in peripheral regions especially profit from these traits. In this logic, they might be able to compensate missing agglomeration advantages by focusing on industry experience and home advantage. Consequently, we assume that spinoffs founded by local entrepreneurs are generally the most competitive form of entry, and show the highest comparative advantage in peripheral regions. We use matched employer-employee data for Sweden to test the effect of industry experience and home advantage on firm survival (logistic regressions) and job growth of surviving firms (OLS regression) during the period 2004-2012. Preliminary results suggest that industry experience is more important than home advantage for firm survival, but interestingly, the effect is relatively equal in core and peripheral areas. Regarding job growth, home advantage seems to be more important than industry experience. However, being a local entrepreneur is detrimental in urban areas and advantageous in rural areas. Thus, for surviving firms, the positive effect on job growth of being locally embedded seems to be confined to peripheral entrepreneurs.

VARIOUS MENTAL IMAGES ABOUT THE GEOGRAPHICAL EXTENSION OF CENTRAL, SOUTHEAST AND EASTERN EUROPE (A MENTAL MAP SURVEY IN EIGHT COUNTRIES)

Tamás Hardi, Széchenyi István University, Hungary

We asked university students in Hungary and the seven neighbour countries about their opinion on the macro-regional position of their own countries and their neighbours. The results that we got only partially reflect the concepts taught in the geography lessons of the respective countries; the students often classify the respective groups to one category or another on the basis of their own opinions, prejudices, and their information gained from the media and other sources. Accordingly, the goal of our paper is not the designation of the macro-regions; it is the introduction of what opinions geographical, historical and politological literature had on the extension of Central Europe, Eastern Europe etc., and how these concepts are reflected in the mental maps of the students in our survey. We can clearly state in advance that our paper is not on exact geographical units but on areas that were born in the community conscience on a historical, political and cultural base, and as such may change, and seem different from alternative viewpoints. In the first part of our paper we analyse the concept of the macro-regions, in the second part we look at literature, to select from among the variations of the concepts of Central Europe, Eastern Europe, Southeast Europe and the Balkans region and to summarise the directions of approaches, while in the third chapter the opinions of the students about the extension of the respective macro-spaces, surveyed just recently, are introduced.

ONLINE GOVERNMENT, BUT 'OFFLINE' OLDER ADULTS: UNDERSTANDING THE IMPLICATIONS

Irene Hardill, Northumbria University, United Kingdom

Roger O'Sullivan, The Institute of Public Health in Ireland, Ireland

One response to the recent economic crisis has been that governments across the world are moving more services online, in the hope of delivering cost savings. While the Internet has become an increasingly important route for accessing information, goods, services (including public services) for growing numbers of citizens, the successful transition to e-government is dependent on citizens having access to the necessary infrastructure (computer and Internet connection) and developing a level of competency in using Information and Communication Technologies (ICTs) to enable them to access public services online as and when they need them. The entitlement to public services and fully participate in a society are key aspects of social citizenship. Social citizenship offers the capacity for an exploration of the dynamics of social divisions/exclusion when assessing both the levels and causes of inequality within a society; to which in this paper we include a further dimension, digital engagement and examine the impact of e-government on the lives of older adults, and critically reflect on the impact of the move of more and more public services online on social citizenship and social exclusion in urban and rural locations. We do so by drawing on a recent study of the impact of e-government in the island of Ireland on the lives of older adults (aged 50+ years), a group with lower levels of Internet use than other age groups, drawing on in-depth qualitative work undertaken with older men and women across the island of Ireland.

CONSTELLATORY REGIONALISM & RELATIONAL REGIONS IN THE MAKING

John Harrison, Loughborough University, United Kingdom

While important work has examined the merits of territorial and relational approaches to conceptualising the region, one aspect of this continuing debate where fewer inroads have been made is in exacting a deeper understanding of how these processes unfold in practice. Despite well-defined scholarship examining how territoriality and relationality are negotiated, constructed and contested in the formation of regions, how these regional spaces evolve and stabilize is only just being understood. Exacting a deeper understanding of how the process of institutionalising new regional spaces is unfolding in practice is essential given the interplay between territoriality and relationality is largely inconsequential if new expressions of regionalism do not develop spatial integrity and the deeper-rooted sense of regionalism necessary to be considered meaningful in any significant way. This paper draws on ongoing research in the policy spheres of spatial planning, economic governance and higher education to reveal the need for concerted theoretical and empirical attention required to develop vocabulary and frameworks better able to comprehend emergent regional worlds. The first part distinguishes between territorial, archipelagic, de facto and constellatory regionalism to exact more precise interpretations of unfolding configurations of relational regions. The second part develops the notion of constellatory regionalism as a way of understanding how and why some spatial imaginaries might be short-lived and ultimately disappear, which might 'harden' towards strongly institutionalised forms, and which might remain 'soft' over a long period.

LABOUR INSPECTION AND LABOUR AGENCY: FINDING SPACE FOR WORKER AGENCY IN LABOUR LAW ENFORCEMENT

Thomas Hastings, University of Sheffield, United Kingdom

State regulatory architecture and compliance approaches represent an under-researched area of labour geography. The following article argues that labour inspectorates and enforcement strategies for regulating sectors of the economy represent pertinent, under-researched institutional spaces in which worker agency can/does effect change and contribute to the upholding of labour standards. The following article explores this contention via empirical research of wine production in South Africa and the role of third party certification schemes. A focus on one agency in particular – the Wine and Agriculture Ethical Trading Association – is used to demonstrate the value of regulatory institutions as conduits of worker agency. In doing so the article demonstrates the relevance of state and third party regulatory structures in the context of governance approaches to regulation for labour geography.

INSTITUTIONS & REGIONAL DEVELOPMENT IN NORWAY

Silje Haus-Reve, IRIS, Norway

Rune Dahl Fitjar, University of Stavanger, Centre for Innovation Research, Norway

Inter-regional differences in economic development have grown in recent decades. There are striking disparities among national economies, but also between sub-national regions within countries. Because of the regional divergence, regional policy-makers across the world are developing policies to promote innovation and attract labour and capital, and national and international governments are trying to promote development in lagging regions. Innovation has become one of the key strategies for economic development, and one of the aim is to foster new knowledge and technological development. The quality of institutions affects the innovation potential of a region. Innovation is one of the central driver of economic renewal and change, and institutions affect this activity. Regional institutions develop and operate against the backdrop of national institutional framework, but there are also possibility for local initiatives and policy to influence the innovative climate locally. This paper aims to shed light on how institutions shape innovation capacity, by focusing on how quality of regional government affects innovation performance in regions in Norway. Studies on regions in Europe have used an index Quality of Government, QoG, as a proxy for measuring different level of government quality (E.g. Charron et al. 2013) In this paper we will conduct a multilevel analysis of Norwegian data and analyze how regional institutions will affect firm-level innovation for firms located in regions in Norway.

EDUCATION-LED TOURISM AS A LOCAL DEVELOPMENT STRATEGY

Kevin Heanue, Teagasc Rural Economy Research Centre, Ireland

The Irish government's Action Plan for Rural Development (2017) contains an action focused on 'examining the potential to promote rural Ireland as the destination of choice for US colleges wishing to avail of a rural based learning or study abroad experience'.

Conceptualised as education-led tourism, this paper examines the rationale for, and potential of, such education-led tourism as a local development strategy in rural areas of developed economies. To do so, the paper develops a framework drawing on the SAVE (Scientific, Academic, Volunteer and Educational) literature on tourism markets together with the community capitals literature on local

development. Second, the paper confirms that little is known about the impact of the SAVE market on local development. However, illustrated by a niche education-led tourism case-study from North West Connemara, Ireland, this paper provides some evidence on the impact of such tourism on local development. Moreover, this particular case study shows how if strategically addressed, the impact of SAVE visitors to an area can be expanded to increase local capacities and services and, therefore, add to local development.

In the literature, the SAVE market is perceived to be 'low maintenance' and require little infrastructure. However, based on the case-study evidence this paper argues that the SAVE market is more complex than that and that relatively sophisticated infrastructure is required for some education-led tourism in rural areas. In fact, it is necessary in order to secure the competitive advantage of such rural as opposed to urban locations for niche education-led tourism.

WHO AND WHERE ARE THE SELF-EMPLOYED JOB CREATORS?

Andrew Henley, Cardiff University, United Kingdom

In the UK self-employment has been growing fast. If this is beneficial and indicative of entrepreneurial dynamism, then a critical indicator of success is in the extent to which the self-employed are able to venture business activity capable of sustaining employment. This paper assesses changes in the recent patterns of job creation by self-employed business owners across the UK and the extent that this is influenced by economic conditions in the local area. Aside from the skills and characteristics of the self-employed, local economic conditions may be important, influencing both competition for employees as well as business growth opportunity. Associations at the local level will reflect a conflation of both demand-side and supply-side influences. They may also reflect differences in local attitudes towards small business and entrepreneurship. British longitudinal micro-data covering the period 2009-2014 from Waves 1-5 of the ESRC Understanding Society survey, linked to local area data on economic conditions are used to analyze these questions. The longitudinal nature of the data is exploited to control for unobservable individual confounding influences, allowing stronger assessment of potential antecedents of business job creation activity. The analysis offers insights into the extent to which the self-employed job creators in more prosperous localities are both assisted by stronger local opportunity and hindered by tighter local labour markets. The findings suggest that appropriate strategies for supporting self-employed job creators may need to be carefully designed to individual context to avoid the law of unintended consequences.

LABOR MOBILITY AFTER MAJOR REDUNDANCIES: GEOGRAPHY, INDUSTRIES AND TIME

Martin Henning, School of Business, Economics and Law, University of Gothenburg, Sweden
Rikard H Eriksson, Umeå University, Sweden
Emelie Hane-Weijman, Umeå University, Sweden

This paper studies which redundant workers choose, or become subjected to, different kinds of mobilities, and with what consequences. The dataset covers all workers becoming redundant in major shutdowns in Sweden between 1990 and 2005. In the paper, the frequencies of the industrial and geographical mobilities are described over time, and the influence of some important characteristics that make workers more likely to be subject to particular forms of mobilities are assessed. Also, the effects of particular mobility histories to individual earnings, and the sensitivity of workers to future crises are measured. Going back to the same or related industries is the most common route to re-employment for workers who are re-employed in the first year after becoming redundant. Workers

who do not benefit from quick employment are increasingly squeezed out to new job fields and regions. However, while older and workers with high vested interest in their original industries can usually employ a “same industry-same region-strategy”, the highly educated span wider skill spaces when taking on new jobs with success. The appealing same-industry strategy comes at a cost however: individuals pursuing this have a much higher risk to suffer another major redundancy. For the region, diversification in related industries after major redundancies seems a much more important strategy than getting people back to work in exactly their old field of knowledge.

MAPPING INTERNATIONAL NETWORKS FOR URBAN RESEARCH: CITIES, DATA AND CLOUDS

Diogo Pereira Henriques, Faculty of Engineering and Environment, Northumbria University, United Kingdom

Today urbanisation is facing complex challenges, such as environmental, economic, and social changes, and this is also influencing theorists, researchers, and practitioners to understand cities as complex systems (Batty 2013, Jacobs 2001). Furthermore, the possibilities of data to measure, model, manage, and foresee complex urban systems are promising: more than 90% of all the data in the world was generated by people and/or things since 2011, thus augmenting the advantages for inter-disciplinary research (Dragland 2013). As such, there is a momentum to share urban data among local communities, public sector organisations, universities, and transnational ICT corporations, for research collaborations through international networks.

How are inter-disciplinary networks of researchers generating and sharing data and knowledge on urban systems today? How can this study help us to predict and foresee new models for future research collaborations? In this paper, we survey current trends for knowledge sharing, and we explore the potential role of visual mapping and data visualisation to develop new models for future research networks.

As considerable economic fault-lines are re-emerging between and within national economies, both in Europe and worldwide, we study how international networks for urban (inter-disciplinary) research have contributed to imagine, model, manage, and foresee new directions for a changing society. We defend the urgent need of ‘blue sky thinking’ within academia and public sector organisations, in order to parallel the exponential growth of transnational ICT corporations, which seem to be currently dominating infrastructures (and possibilities) for future social and economic networks of knowledge sharing for the 21st century.

COMMUTEFLOW: THE ANALYSIS OF A NEW GEODEMOGRAPHIC CLASSIFICATION OF COMMUTING FLOWS FOR ENGLAND AND WALES

Stephen Hincks, University of Manchester, United Kingdom

Numerous research studies have used interaction data, collected through the Census, to understand the socio-economic structure of commuting flows in the UK. Yet there is untapped potential for such data to be used to advance a flow-based approach to geodemographics that can be used to shed light, in this case, on the spatial dynamics of commuting across England and Wales. Using k-means clustering applied to 49 commuter variables, a nested commuting classification was generated consisting of nine Supergroups and 40 Groups.

Analysis of a selection of trends underlying the nine-fold Supergroup configuration demonstrates the variegated structure and patterning of commuting in England and Wales and illustrates the potential utility of this new commuting classification in transport and infrastructure planning. This descriptive application is taken a step further the use of multinomial logistic regression. In this final stage of analysis, consideration is given to how this new geodemographic classification can shed light on the dynamics of commuting linked to types of commuters, the characteristics of their residential and workplace locations and the distances travelled to work.

RESEARCH NETWORKS & REGIONAL DIFFERENCES IN INNOVATION ACTIVITIES

Nina Hjertvikrem, University of Stavanger, Norway

This study contributes to the understanding of regional differences in research and innovation activity, and regional differences in collaboration patterns and networks, using detailed data on all the funding given from the Norwegian Research Council in the years from 2002 – 2013. There is a consensus that governments need to fund research and innovation activities to correct for market failures, however there is a discussion on how, where and who to give funding. In the Norwegian national budget 2017 proposal, the government claims that research will lead to regional development. Research has also shown that research projects that involve several actors more often leads to innovation. The data includes more than 23000 different projects and 17000 collaboration actors, with the actors' address and industry, project size and timeframe, and project summary. In Norway, there are regional differences when it comes to urbanisation, industry mix, knowledge base and demography. Using maps and network analysis, we analyse regional differences when it comes to collaboration within industry, between industries, industries and universities, and collaboration networks on regional, national and international levels, controlling for regional characteristics.

WHAT ACCOUNTS FOR THE ECONOMIC SUCCESS OF REGIONS?

Gerald Holtham, Cardiff Metropolitan University, United Kingdom

Brian Morgan, Cardiff Metropolitan University, United Kingdom

Selyf Morgan, Cardiff Metropolitan University, United Kingdom

Robert Huggins, Cardiff University, United Kingdom

The paper presents a statistical analysis of data from 461 regions around the world demonstrates the strong association of investment in education with economic success, measured by a combination of GVA per head, monthly wages, labour productivity and economic activity rates. Research and development by private business is also an important element distinguishing more successful regions from others. Generally, it is easier to trace the factors differentiating poor from middling regions than those that differentiate the middle from the most successful. Some variables appear important in making the transition from poor to middle but have less effect thereafter. They include broadband access. Public spending on primary and secondary education is much more significant for poor to middling regions than investment in higher education but spending on higher education becomes somewhat more associated with success when comparison is confined to wealthier regions. The results were derived from cluster and discriminant analysis with regression analysis of clusters and of the whole data set.

THE NEW REGIONAL GOVERNANCE DILEMMA: RETHINKING HOW TO FACE HIGH COMPLEXITY & UNCERTAINTY IN POLICY-MAKING

Paul Honeybone, UCL, United Kingdom

As the UK faces unprecedented uncertainties that will set the stage for and strain regional change, the implications for governance arrangements under reform will be considered. Opportunities and risks for both Whitehall and new Combined Authorities will emerge and challenge finding the best governance mix for coherent outcomes. With new formulations of regionalism effectively on probation, the landscape offers fresh opportunities while unsettling existing assumptions and practices. This paper explores the following central question: Is the current convergence of issues driving the need for new ways to re-conceptualise public policy-making and governance practice? A consideration of how to re-conceive the design of public policy-making in a democratic Westminster-style system will be pursued.

Functioning as intermediaries between the nation-state and the traditional local level of community governance, the Combined Authority layer faces issue-related complexities that require convincing rendering as new alliances are forged. Bearing witness to the rate of change considered viable, these authorities may be party to negotiating the acceptable degree of power devolution possible while the centre tries to maintain national coherence and centralised accountability. Meanwhile economic divisions in the context of the 'new economy', alongside stark social inequalities and divergent cultural circumstances, remain largely suspended in the purview of central government settings. This will test the emerging regional governance project, where understanding problems and solutions can benefit from new perspectives.

YOU ARE WHAT YOU HAVE: MULTIFACETED ACTORS IN ENTREPRENEURIAL ECOSYSTEMS

Meiling Hong, Jilin University, China

Ben Spigel, University of Edinburgh, United Kingdom

Entrepreneurial Ecosystem have emerged as a buzzword within research and policy communities. Current research on ecosystems is often based on successful case studies in order to create general definitions of ecosystems and identify the crucial actors and factors that drive high growth entrepreneurship. However, there has been relatively little research about the types of individual and organizational actors within ecosystems. This paper investigates the different roles ecosystems actors take on in different economic and cultural contexts. Ecosystem actors include individuals such as financiers, employees, and mentors as well as organizational actors like universities and local government. Through a qualitative analysis of 78 interviews with technology entrepreneurs in three Canadian cities, this paper deals with the ambiguity of actors in ecosystems, especially in the resources they provide in different types of ecosystems. The paper develops a typology of different roles ecosystems actors play within ecosystems and the types of resources they produce or contribute. We find that actors take on different multifaceted roles based on their ecosystem's institutional structure. This suggests that there are a variety of different ways actors can contribute to firm survival and growth, requiring a more nuanced understanding of how ecosystems operate.

HOW TO ATTRACT STEM WORKERS TO A HIGH-TECH BUSINESS PARK IN A SHRINKING REGION? PLACE AND LIFE SATISFACTION

Inge Hooijen, Maastricht University, The Netherlands

Frank Cörvers, Maastricht University, The Netherlands

Despite the importance of STEM workers to the vitality of the regional economy, scientist and policy-makers have a limited understanding of why this target group prefers to reside in certain areas. This study explores the impact of characteristics of municipalities on the overall life satisfaction of STEM workers. This paper argues that an individual's evaluation of life satisfaction is related to features of the geographical unit in which they reside, assuming that individuals make utility-maximizing decisions given their constraints. We use the case of a high-tech business park in a shrinking region in the periphery of the Netherlands to give some clues about how municipalities can make living conditions attractive for STEM workers. Relative to non-STEM workers, STEM workers seem to prefer to live in – what we call – places of low extraversion. This is illustrated by the finding that the average STEM worker, relative to the average non-STEM worker, prefers to reside in a place with a short commuting distance, with a young and wealthy social composition of the population and without much emphasis on production and consumption. To attract STEM-workers local policy makers and spatial planners should focus on the quality of life in suburban areas, which are often characterized by quiet, green and open areas and with low exposure to consumption and production hubs.

CITIZENS INITIATIVES: PLACE LEADERSHIP IN A 'POST-POLICY' CONTEXT?

Lummina Horlings, RUG (University of Groningen), The Netherlands

This paper considers the emergence of citizens initiatives as place leaders in local and regional development. Leadership is often described as individuals 'who make it happen'. In contrast, place leadership has been referred to as shared, cooperative or collaborative, as a consequence of dealing with a variety of stakeholders and vested interests in places. While place leadership is recognized in terms of formally constituted hierarchical power, leadership is also expressed more informally by voluntary citizens initiatives taking matters in their own hands. The central question in this paper is: how can we understand the emergence of citizens initiatives as place leadership and the consequences for spatial planning?

We focus on the rise of collectives in the Netherlands in the context of energy, care, food, neighbourhood development and landscape, which are part of a wider trend, termed by scholars as the 'do-democracy', the 'energetic society', 'collective action', the 'participative society' or 'social innovation'.

This trend refers to a society of articulate citizens, with reaction speed, learning ability and creativity, embedded in resourceful communities, and with a transformative capacity in shaping more sustainable places. Citizens initiatives are willing to be actively involved in creating their own environment, partly as co-creators in spatial planning, partly as forms of self-governance, by-passing governments roles. This raises questions if the emergence of these initiatives can be understood from a 'post-policy' perspective. The paper explains how these initiatives express leadership, enable place-based approaches to local and regional development and discusses the consequences for spatial planning.

SOUTH-SOUTH WIN-WIN? INDIA'S "PHARMACY TO THE DEVELOPING WORLD" IN AFRICA

Rory Horner, University of Manchester, United Kingdom

South-South trade is rapidly expanding, potentially offering new development opportunities beyond Northern end-markets. India, the third largest pharmaceuticals producer in the world, is known by activists and industry groups as the "pharmacy to the developing world" for its large-volume of supply of relatively low-cost, generic medicines to countries in the global South. This paper explores Indian pharmaceuticals' South-South production networks and implications for local development outcomes in sub-Saharan Africa. It draws on primary research, including a large number of in-depth interviews with key stakeholders in India, Ghana, South Africa, Kenya, Uganda and Tanzania. Moving beyond "win-win" understandings of South-South trade, or concerns over neo-colonialism in Africa, the paper demonstrates how Indian pharmaceuticals reach end markets in Africa and their variegated impact. Generic medicines supplied from India can be lower-cost for consumers and the governments' public health supply. The Indian industry can be a key source of technology, ingredients and industry knowledge for efforts to establish local pharmaceutical production within sub-Saharan Africa, yet can also be a key competitive threat to such efforts in Africa at entering into and upgrading within the pharmaceutical industry. The paper seeks to provide an in-depth, empirically supported examination of South-South value chains and their development outcomes.

THE UK SW REGION FOOD AND DRINK: THE IMPACT OF SOCIAL NETWORKS ON SMES COMPETITIVENESS

Lise Hunter, Plymouth Graduate School of Management, United Kingdom

Jonathan Lean, Plymouth University, United Kingdom

Derek Shepherd, Plymouth University, United Kingdom

The South West Region is essentially rural and food and drink sector is a significant contributor to economic growth and employment, with a multiplier effect across different sectors such as tourism and hospitality. Food and drink also fulfils a purposeful social function of bringing communities together, often with a strong shared sense of identity. However, the argument that interconnected communities provide a vibrant environment for businesses to flourish is open to question. In the global landscape where businesses compete, information technology, changing demographic and lifestyle choices affect consumers' decision in a way that often challenges rural businesses due to their location. Business owner/managers who compete successfully are driven by a vision that guides them to adapt their social interactions to the specific stages of their business venture.

This study investigates the interaction between social networks and rural business characteristics to shed more light on the leadership process based on a survey collected from 359 SMEs in the food and drink sector in the South West Region. Using a structural equation modelling, the findings show that leadership explains the effect of structural and relational network ties on business competitiveness. This main finding has implications for policy and practice for an industry sector of strategic importance at regional and national levels. The increasing recognition of the role of media in social networking in the region points to some positive actions in addressing some constraints such as the information and knowledge deficit and location.

MULTINATIONAL ENTERPRISES, SERVICE OUTSOURCING AND REGIONAL STRUCTURAL SHIFTS

Simona Iammarino, London School of Economics, United Kingdom

Andrea Ascani, Department of Human Geography and Spatial Planning, Utrecht University, The Netherlands

This paper offers a joint analysis of two phenomena characterizing most advanced economies in recent decades: the rise of foreign direct investment (FDI) and the pervasiveness of the service economy. The aim is to examine the structural transformation of regional industrial structures within the UK by focusing on the role played by inward manufacturing FDI in facilitating shifts towards service activities. From a conceptual perspective, this research brings together different strands of literature, including studies on the impact of FDI on recipient subnational regions, research on structural transformation, as well as contributions on the identification of local multipliers. From an empirical standpoint, the paper considers a specific demand-side channel for structural change: namely, the forward linkages established by foreign multinational enterprises (MNEs) operating in manufacturing industries with local service providers. The paper uses data at plant level in the UK as reported in the Annual Census of Production Respondents Database (ARD), a business-level database collected by the UK Office of National Statistics. Our findings confirm that foreign MNEs do establish prominent demand linkages with service providers, and that FDI in manufacturing is accompanied by notable multiplicative effects in service employment within UK travel-to-work-areas. This effect is strongly concentrated in tertiary activities that produce intermediate services, rather than final demand services. Furthermore, while the composition of this effect tends to be homogeneous in terms of the knowledge content of service activities, it becomes highly heterogeneous once the degree of concentration of tertiary activities across space is considered.

FDI & EDUCATION: COHORT EVIDENCE OF HUMAN CAPITAL ACCUMULATION IN MEXICO

Eduardo Ibarra-Olivo, London School of Economics, United Kingdom

Inward Foreign Direct Investment has been regarded as the major vehicle of international technology and knowledge diffusion and is often associated with potential benefits within the host economy. The creation of attractive employment opportunities by MNEs might play an important role in the formation of local human capital if they incentivise students to acquire further formal education. At the same time, increased foreign presence is usually associated with an increase in the demand for skilled labour, and therefore a change in the relative wages of skilled and unskilled workers. If inward FDI tends to raise the local demand for certain sets of skills, increasing these workers' wages and hence raising the returns associated to a particular level of education, it can arguably contribute to the country's development path through skills upgrading and human capital formation. However, the new relatively higher wages might offset said returns and instead increase the opportunity cost of further schooling, thereupon dropping the average level of education of exposed cohorts. This paper combines biannual data on educational attainment of young cohorts spanning over a period of 30 years with inward FDI data. To investigate the effects of FDI in different industries on education, the variation in the timing of foreign direct investments across municipalities is exploited by comparing educational levels of adjacent age cohorts that had different exposures to foreign wage premia. It is expected that FDI in Mexico is, on average, negatively associated with human capital outcomes with significant heterogeneity across industries.

NON-MOTORIZED TRANSPORT (NMT) AS AN IMPORTANT BUT NEGLECTED ASPECT OF URBAN TRANSPORTATION SYSTEM IN NIGERIA; THE EXAMPLE OF LAGOS MEGACITY

Oladayo Ibrahim, Lagos State Polytechnic, Nigeria
Olulade Peter Fosudo, Lagos State Polytechnic, Nigeria

The Urban transportation system in Africa's cities and urban centers suffer from inadequate financial resources, lack of effective regulatory frameworks, institutional weaknesses, inefficient public transportation systems, unequal allocation of road space and inadequate traffic management systems. Indeed, one of the main challenges today, in Nigeria's main cities is how to balance the provision of traffic infrastructure for both Motorized Transportation (MT) traffic and Non-Motorized Transportation (NMT) traffic. The road infrastructures within Lagos metropolis were majorly designed for MT with little attention to NMT. The aim in this paper is to investigate the current opportunities and challenges facing the promotion of the NMT in providing a sustainable urban mobility within the Lagos Metropolis. The paper specifically examines the potentials of NMT for effective transportation planning and its ability to reduce traffic congestion brought about by complete reliance on MT as a mechanism for urban mobility. The methodology employed involved the review of literature, primary and secondary data collection and analysis. The paper found that although, there is high NMT traffic in Lagos metropolis, but lack of NMT infrastructures has led to unsustainable urban mobility and development within Lagos metropolis. The paper further found that provision of NMT infrastructure would be beneficial to the individual commuters and the society in general, in the areas of: health, reduced traffic congestion, economic costs, quality of life reduce, quality of environment and promotion of sustainable transport development. For these benefit to be realized, it will require changes in transport investment patterns, infrastructure design standards, street space allocation, credit and financing systems, regulatory policy, public education, marketing and enlightenments.

NEW OPTION FOR URBAN INFRASTRUCTURE FINANCING IN NIGERIA: UNLOCKING OF LAND VALUES

Oladayo Ibrahim, Lagos State Polytechnic, Nigeria
Olulade Peter Fosudo, Lagos State Polytechnic, Nigeria

Raising funds to finance urban infrastructure is a challenge in developing country like Nigeria. Several approaches are being tried but one approach that has not received a deserved attention is unlocking urban land values—such as by selling public lands to capture the gains in value created by investment in infrastructure projects. The aim of this paper is to discuss the challenges and prospects of land based financing option for infrastructure development in Nigerian major cities. This is done through literature exploration of best practices of land based financing option of urban infrastructure in other developing countries. The paper observed that land-based financing of infrastructure could be approached through three main ways: developer exactions, value capture, and land asset management. It is further observed that as a complement to the plethora of the capital financing mix, land-based financing has significant practical advantages that recommend it as a veritable tool of urban infrastructure financing in a developing country like Nigeria. Moreover, land is life and a platform for economic activities. However, adoption of land-based financing of infrastructure must take cognizance of a number of risks associated with it: Volatility of urban land markets, lack of transparency and accountability and temptation by government to use restrictive zoning to drive up land values. The paper concludes that a starting point for land based financing of infrastructure is a deliberate inventory of land assets owned by government and its agencies, identification of current land use and the market value of land before public land are offered for sale. For infrastructure provision and services to be sustained, land should be professionally administered and managed.

THE VALUE OF GREEN AREAS IN THE CONCRETE JUNGLE: A SEMI-PARAMETRIC SPATIAL APPROACH FOR SAO PAULO

Danilo Iglori, Universidade de Sao Paulo, Brazil
Sergio Castelani, DataZAP, Brazil
Jeanne Costa, DataZAP, Brazil

This work aims to analyze the value of green areas in São Paulo through spatial modeling for estimating their implicit prices. We conduct a semi-parametric model of the offers on the portal 'Zap Imóveis' with different features and amenities of residential apartments in the metropolitan area of São Paulo. The model applies the hedonic pricing method to estimate the percentage change in the price of a property taking into consideration its proximity to parks and availability of green areas in the neighborhood. The results provide evidence that the value of green areas vary considerably across the metropolitan area and indicate that policies aiming to increase those areas are likely to enhance the welfare of dwellers.

AN INVENTING INTER-REGIONAL MONEY FLOW MODEL TO APPROACH LOCAL ECONOMIC LEAKAGE

Yoshifumi Ikejima, Yokohama National University, Japan
Kenji Ogai, Hokkai Gakuen University, Japan
Hitoshi Miwa, Kyushu International University, Japan

While megacities accumulated headquarters of transnational corporation, money and banking, population and information and have been prosperous, local economies in suburban and rural areas have been contrastively declined. When local businesses or residents purchase goods and service from distributors outside the area, money for payment ends up to flow out, and this reduces transactions with local stores or businesses. This economic leakage is one of the reason why local economies have been declining recently. To prevent accelerating economic decline, from which part of industrial sector money flow out or how much money flow out should be found out concretely.

Inter-regional input-output table is major government statistics data for economic relations among regions. However, inter-regional input-output table is mainly compiled as bi-region (one area and the rest), and multi-regional IO table (mutual interaction among multiple areas) is compiled in a broad area level like combination of multiple prefectures. So it's hard to assess money flow in detailed municipality level.

This paper tries to invent a model for illustrating economic relations among regions named inter-regional money flow model, and demonstrates how and where local money moves to across municipalities in a case of Japan. This paper uses sales data in each municipality from economic census and also processes sales destination data from basic survey for small and medium business and so on. From this model, money flow for "B to B" or "B to C" across municipalities in Japan would be highlighted, and visualized spatially using Geography Information System.

BENEFITS AND NON-BENEFITS FROM THE EUROPEAN INTEGRATION

Constantinos Ikonou, University of Athens, Greece

The European integration appears to be at stake due to the recent global crisis, policies implemented and more general problems from economic theory requiring solutions, especially in relation to the

Eurozone. The rising social and political turmoil and extremism is likely to bring a dangerous for Europe period.

Problems in Eurozone, suggested as its “designing” failures, include the loss of a state’s control to issue debt on its own currency, which can drive economies in default, the self-spiraling fall in money demand in peripheral states, substantial liquidity constraints and the formation of multiple equilibria (De Grauwe, 2011; 2013; Kopf, 2011, Veron, 2012). Strong spatial intra-state and inter-state imbalances emerge in post-crisis Europe.

The present text adds in this list the neutralisation of the Pigou effect and Greece’s fall in a liquidity trap, the rise of monopolies suffocating smaller in size economies, increasing unemployment and the inability to simultaneously advance employment, inflation and balance of payments targets, at state and Eurozone level.

The benefits and non-benefits of states at the early phase of the monetary union are identified for 34 states in geographical Europe, using an analysis of correlations of a series of macroeconomic variables (from AMECO) with GDP per capita, GDP growth rates and distance from Brussels, in the 2000-2008 period. The results unveil persistent problems in most integrated and advanced EU states before the crisis and an accumulation of benefits in non-EU members that profit from refraining from integration. Countries like the UK, have gained limited benefits since 2000. Purely from this perspective, it was reasonable to expect the “Brexit” choice.

SOVEREIGN RATINGS, FISCAL POLICY & DESTABILIZING ECONOMIC DYNAMICS. INTERACTIONS WITHIN A STOCK FLOW CONSISTENT FRAMEWORK

Stefanos Ioannou, University College Cork, Ireland

Credit Rating Agencies (CRAs) have long been recognized as an important driver of financial and macroeconomic dynamics. Since the outbreak of the East Asian crisis several authors have highlighted their role in over-downgrading crisis-hit countries, and re-enforcing recessionary spirals. Others have pointed out the role of CRAs as the ‘gatekeepers’ of the financial market and have emphasized the political dimensions of their power in prescribing the “right” sets of policies.

However, not all countries are equally exposed to the sentiment of the financial market and the prescriptions of CRAs. Focusing here on the Eurozone, our paper claims that the influential role of CRAs is closely related to the institutional configuration of the Union and the policy stance of the European Central Bank. It is primarily the lack of a lender of last resort facility for Eurozone governments and the asymmetric pressures existing between surplus and deficit economies that make the sovereign rating instruments of CRAs particularly powerful towards the governments of member states.

To illustrate the above in an analytical manner, we construct a stock flow consistent macroeconomic model, aiming to represent the north and south dichotomy of the Eurozone. Our model shows how in contrast with the north, the European south comes to be constrained on its fiscal policy by the dictates of CRAs. Most importantly, our model illustrates how in response to a recessionary shock, CRAs participate in promoting fiscal austerity and in further intensifying financial and economic instability. Key results hold for a number of alternative closures.

FIRM GROWTH & REGIONAL FACTORS: EVIDENCE FROM IRELAND

Olubunmi Ipinnaiye, University of Limerick, Ireland

Helena Lenihan, University of Limerick, Ireland

Justin Doran, University College Cork, Ireland

Heterogeneity in the performance of firms is well acknowledged in the firm growth literature (Bartelsman and Doms, 2000). Although several studies (see Coad, 2009; Peric and Vitezic, 2016) have linked firm growth heterogeneity to variations in firm characteristics and resources embedded within firms, as well as fluctuations in the business cycle, the role of regional characteristics in explaining these observed differences is yet to be fully explored (Bogas and Barbosa, 2015). This paper explores the role of regional factors measured in terms of market conditions, innovation conditions and human capital embedded in those regions. It contributes to existing knowledge by employing a large scale firm-level panel dataset, the Census of Industrial Production (CIP), which is merged with data on region-specific characteristics. This allows for an analysis of the impact of regional characteristics on a balanced panel of 1,492 firms over the time period 2008-2012. Quantile regression is used as this allows for the investigation of the entire firm growth distribution. Using this methodology it is possible to identify whether the observed impact of regional factors on firm growth varies along the growth rate distribution. The results show that firm growth is systematically shaped by the firm's location. Specifically, workforce quality, innovation conditions, industry specialisation and market conditions were identified as the key region-specific characteristics that drive the firm growth process. Further evidence is provided that the impact of location on firm growth varies along the conditional growth distribution, with the effect being more pronounced for local units at the lower parts of the growth distribution.

ECONOMIC RESTRUCTURING RESULTING FROM HUMAN AGENCY AND INNOVATION SYSTEM CHANGES. A CONCEPTUAL PAPER

Arne Isaksen, University of Agder, Norway

The paper discusses mechanisms leading to economic restructuring. The paper conceptualises economic restructuring as new path development; the transformation of existing industries or the creation of new industries for a region or nation. A main idea in the paper is that new path development requires both actors that start new firms or initiate innovation activities in existing firms and organisations and the further development and reorganisation of innovation systems, that also requires entrepreneurial activity. The research questions are how economic restructuring is shaped through the joint effort of niche entrepreneurs and system entrepreneurs in creating new growth paths that are supported by relevant innovation systems

Innovation systems tend first of all to support the further development of existing strong regional or national industries. Individual entrepreneurs are also not able to create new growth path or fuel major path changes on their own as long-term growth has to be sustained through innovation systems adapted to emerging industries. Based on this understanding, the paper aims to develop a conceptual framework to understand economic restructuring as a result of human agency and adaptation of innovation systems to support new growth paths.

DECENTRALIZATION AND REGIONAL GOVERNANCE THROUGH POLITICS AND LOCAL DEVELOPMENT POLICY

Doddy Iskandar, Universitas Gadjah Mada, Indonesia

Decentralization, long seen as a means to foster regional growth, democracy, and accountability, gradually became a political arm for polities in negotiating additional power and political rights with the central government. Local autonomy thus is perceived as negotiation processes between local and central government, between global forces and local pressure and between the idea to expanding political and economic opportunities at the local level vis-à-vis the argument of consolidating power to retain regional and local identity. Against this argument was our intent to assess the ability of politics and local development policy in addressing pressing regional and local development issues within the context of local autonomy and decentralization.

We argue that the existing regional governance, indicated by the practice of spatial planning and the implementation of local development policy in Indonesia is inadequate to address the contemporary issues and problems that regions currently confront. Drawing from the practice of local autonomy in the last 15 years in Indonesia, regional proliferation did not create the intended impacts envisioned by proponents of decentralization; rather, it exacerbated regional disparity and increased social and economic gap between rich-resources regions and those unable to compete in the globalized economy. Furthermore, a combination of local development policy and institutional arrangement as proxy of local politics, at the local and regional level influenced regional governance mode which in turn affected economic growth rate both at local and regional level. We conclude by making the case that certain governance mode is preferred due to external economic forces and internal socio-economic pressure and this approach ultimately contribute to the increasing regional disparity in Indonesia.

SMART BY ONESELF? ANALYSIS OF RUSSIAN REGIONAL INNOVATION STRATEGIES WITHIN RIS3 FRAMEWORK

Ekaterina Islankina, National Research University Higher School of Economics, Russia
Evgeniy Kutsenko, National Research University Higher School of Economics, Russia
Alexsey Kindras, National Research University Higher School of Economics, Russia

Purpose

The article aims at exploring the ability of regions outside the EU to design individually smart specialisation strategies (RIS3) based on the case of Russia.

Hypotheses

1. Most RIS3 principles are considered in current regional innovation strategies without following formal guidance.
2. With (supra-)national level missing (i.e. uniform rules for choosing priorities, common analytical database, organisational support, expertise and synchronisation) a strategy is hardly to become smart.

Methodology

1. Hypotheses were tested on 7 innovation strategies designed by Russian regions; we used adapted methodology of RIS3 Assessment Wheel®.

Findings

2. Russian regional innovation strategies generally followed all 6 RIS3 design steps, but failed to complete each of 18 critical factors within.

3. The documents highlighted framework conditions, had priorities identified and monitored, but lagged in most analytical, governance and visioning.
4. Russian strategies were mostly R&D-based, declarative rather than instrumental: off-balanced KPIs, no road maps, updating.
5. Most regions prioritised “fashionable” sectors (e.g. ICT, nanotech). However, ICT was evidence-based in only one strategy.
6. Even regions – strong innovators or regions that formally considered many of common RIS3 principles failed to find their smart specialisation, since they were outside the system ensuring uniform evidence-based comparability (analogue of RIS3 Platform).

Discussion

‘Smart’ is a characteristic for the system of regions and not a single region (impossible to be “smart by oneself”). Uniform rules and organisational support for RIS3 design are required at the superior level of governance (national or supra-national).

SPATIAL VARKAUS: A STUDY OF HUMANKIND, ENVIRONMENT AND COMMUNITY

Matti Itkonen, University of Jyväskylä, Finland

Home means more than just a roof over your head. It means the place a person considers quintessentially his own (more his own than anything) which is ever-present in his being a human. Its loss may gouge rough grooves into a person, leaving a sense of permanent deprivation. Then the presence of the missing element will appear as an indelible absence. Something that was is now represented in a person by a trace, an experiential groove. That trace is a sign that at some time something real existed in that place. So longing is born: a ceaseless yearning for a lost home. Perhaps at the same time the person is longing for his distant childhood which still lives inside him as a remembered landscape. Is then the very idea of an adulthood home impossible?

Perhaps in today's world a person thinks he owns several homes and home localities. Presumably though he is capable of ranking them in some kind of order of proximity. In other words, there is probably always one particular milieu that has made him into the very person he is: the defined subject that cannot be interchanged with anybody else. You could call it one-and-onlyness. How then can we characterize that dimension of uniqueness? Language, of course, is the existential home of both individual and community, and with its help we can describe individual experiences in a shared understandable form. Harmony and discord are also part of the existential home of language. They are fixed components of human existence. Of course, the ideal of harmony is the goal at all times.

Experienced time contributes, as does the spirit of time, to the contents and tone of a spatial experience. They in turn give birth to that nuance according to which we look at our own milieu. Sometimes we merely stare inwardly and focus on the excellence of our ownness. Sometimes there again we gaze outwards and stress the importance of universality. Is it then that the prevailing spirit of each and every age makes people think and act in a certain way? Or does the spirit of each period lie in how people think and act precisely then? And what of the picture of an age and picturing an age – how do we manage to examine them thoroughly? It requires a cultural-philosophical contemplative approach. And neither should we underestimate an essayistic-poetic starting point in this context. They open the door to the essence of things.

WHEN MIGRANTS ESTABLISH FERTILE SOIL FOR INNOVATION: THE LONG-TERM IMPACT OF MIGRATION ON THE INNOVATIVE CAPABILITY OF US REGIONS

Alexander Jaax, London School of Economics, United Kingdom

Viola von Berlepsch, London School of Economics and Political Science, United Kingdom

The relationship between migration and technological development used to be a field primarily covered by economic historians. Yet, improved data availability increasingly motivates economic geographers and economists to explore this topic (Lissoni, 2016).

This contribution investigates the link between 19th-century migration flows and the evolution of U.S. regional sectoral specialization and innovative capability over the short, medium and long term. Based on conceptual and empirical contributions highlighting path-dependence in regional technological trajectories (e.g. Rigby and Essletzbichler, 1997; Iammarino, 2005) and emphasizing long-run implications of subnational variation in human capital composition (Maloney and Caicedo, 2016), one would expect past migration inflows to impact regional development paths.

This paper combines several datasets: U.S. census data provide information on birth places of a county's residents in the late 19th century allowing for the computation of county-level migrant shares by nationality. County-level control variables, including initial sectoral composition, are retrieved from IPUMS and ICPSR databases. Migration and regional characteristics are merged with two datasets (Marco et al., 2015; Petralia et al., 2016) providing information on the location and technological class of U.S. patents filed since 1840. Using national-level historical data for six European countries, the paper first shows that immigrants' countries of origin differed in terms of human capital composition. We then test the explanatory power of a county's late 19th-century migrant stock regarding its subsequent sectoral specialization and patenting at different times in the 20th century. A combination of a Bartik-style instrument and information on topographic features is used to address endogeneity concerns.

SOCIALLY INCLUSIVE GROWTH IN INDIA'S NEW SERVICE ECONOMY

Al James, Newcastle University, United Kingdom

Philippa Williams, Queen Mary University of London, United Kingdom

Bhaskar Vira, Cambridge University, United Kingdom

Fiona McConnell, Oxford University, United Kingdom

At the forefront of international debates around 'jobless growth' and youth unemployment in the global South, the rise of white collar professional services in India has been celebrated as: providing new opportunities for 'decent work'; a vital means to absorb India's growing cohort of educated unemployed; and spearheading India's transition to a global economic power. However, scholars have recently questioned the degree to which India's 'modern services' offer socially inclusive employment opportunities for skilled workers minority backgrounds. This paper presents new evidence from a survey of over 1000 graduate professionals from minority backgrounds working in India's National Capital Region, across multiple growth sectors: IT / ITES-BPO; Tourism, Hospitality and Travel; Organised Retail; Real Estate; Media and Entertainment; Healthcare; Banking, Insurance, Finance. For the purposes of this presentation we focus on a subset of Muslim graduates (n=467), who represent the largest religious 'minority' community in India. Encouragingly the analysis evidences the ability of Muslim graduates to secure permanent employment in a diverse range of roles across multiple service sectors, and with impressive entry level salaries. But in contrast to the extensive patterns of job hopping and career advancement previously documented amongst India's Hindu middle class elite

(James and Vira 2012), constrained patterns of labour market (im)mobility are also evident. Within this context, the paper concludes with a number of important research questions that might usefully frame the growing labour geographies research agenda in the Indian context, as this body of scholarship seeks to decenter its analytical focus beyond service workers in the 'core' economies of the global North.

AWAKENING TOURIST DESTINATIONS: CHANGING POLICY PRACTICES IN DENMARK

Laura James, Aalborg University, Denmark
Henrik Halkier, Aalborg University, Denmark

Across the world tourist destinations attempt to stimulate their local visitor economy, and the academic literature suggests that a policy shift has occurred in recent decades. While originally public bodies were simply promoting existing experiences to potential visitors through marketing and PR, destination management organisations now engage in developing new experiences through innovation policies in order to attract additional visitation.

As the focus of research on DMO has been predominantly on institutions and stakeholders (Dredge & Jamal, 2015), the factors keeping DMOs from engaging in developing tourist experiences have tended to be associated with the institutional set-up and the conservative short-termism of private tourism actors (Pike & Page, 2014). This paper aims to increase the scope of investigation by exploring an aspect of tourism policy that has hitherto been given limited attention, namely the various micro-practices involved in different forms of DMO interventions to further destination development.

Drawing on practice theory (Reckwitz 2002; Nicolini 2012), we develop an analytical framework that focuses on four key aspects of tourism development practice identified through readings of the existing DMO literature, namely promoting the destination to existing/potential visitor, developing experiences within the destination, coordinating stakeholders within the destination, and understanding existing and potential visitor through market intelligence. We use this approach to analyse empirical data collected through interviews and text sampling from ten coastal tourist localities around Denmark that in recent years have undergone changes in terms of their policies, with the emphasis gradually shifting from promoting existing towards developing new tourist experiences.

SPACES BEHIND SPACE: REVEALING THE VERTICAL & HORIZONTAL TOPOLOGIES OF POWER BEHIND BELGRADE WATERFRONT

Stefan Janković, Institute for Sociological Research, University of Belgrade, Serbia
Jorn Koelemaj, Department of Geography, Ghent University, Belgium

The currently emerging urban megaproject Belgrade Waterfront (BW) offers a unique opportunity to unravel complex and actual dynamics of spatial production. These encompass the intersection of various scales and power-hierarchies, but also include various controversies and struggles. This paper provides unique insights into the very course of the project implementation, based on the analysis of policy documents (General Urban Plan(s) and Laws) as well as in-depth interviews conducted in 2015/6 with the key actors and groups that are involved: politicians and state- and city officials, urban planning experts, representatives of BW enterprise and NGO activists. Prior to our empirical analysis, we argue against contemporary prevalent theoretical approaches in urban theory, advocating a pluralistic topological approach that is capable of acknowledging both vertical and horizontal dimensions of (social) space. By relying on Bourdieu's matrix of vertical asymmetries of social power

composing differentiated social spaces (fields), we first categorize the main actors and groups accordingly. Furthermore, we explore the horizontal dimension of the production of social space by relying upon Lefebvre's concept of the spatial triad, revealing the diverging interests, means, strategies and representations they employ in designating this project as either valid or illegitimate. In sum, we insofar argue that different, vertical and horizontal intertwining of political, economic and cultural spaces, reflects differentiated aims and goals of various socio-political actors and groups engaged in processes of spatial (trans)formation, thus revealing an overall complexity, as this project exactly subsumes profound class differences and the spatial grounding of social relations.

EVERYDAY MOBILITY & TRANSPORT EXCLUSION

Vaclav Jaros, Charles University, KSGRR, Czech Republic
Miroslav Marada, KSGRR, Charles University, Czech Republic

This contribution presents a summary of recent studies focused on a transport-related social exclusion. It aims to explain the relationship between every day mobility and transport behaviour of people in localities with different level and type of transport exclusion. The research deals with data obtained from author's own mobility survey based on personal mobility diaries of people from different localities in Czechia. As a result of this contribution is proved that travel behaviour and spatial patterns in everyday mobility varies on the basis of the transport environment of the locality where people every day appears. People in different localities use various strategies to deal with transport inequalities in order to prevent transport exclusion.

ABOUT THE VALUE OF INNOVATION IN REGIONAL STUDIES

Hugues Jeannerat, University of Neuchâtel, Switzerland
David Doloreux, HEC Montreal, Department of International Business, Canada

The question of value and value creation is at the core of theories in economics, economic geography and regional studies. In economics, important controversies have been raised within and between different schools of thoughts on the primary factors of production, consumption and exchange that determine the economic value of an object or an activity, such as labour, capital, utility and price. In economic geography and regional studies, debates have been centered on the understanding of the spatial dynamics of value creation, circulation and capture that shape the development of different territorial production systems.

In the past decades, innovation has been analysed and conceptualised as a main trigger of value creation and territorial differentiation based on spatial division of labor, localized accumulation of capital, and organized global production networks. In lines with seminal economic theories, in particular evolutionary economics, economic geographers have primarily focused on the geography of production to investigate how economic value is generated and captured through innovation. In this approach, the notion of 'competitiveness' often resumes the value of a productive activity revealed by exogenous market mechanisms of selection and information.

In this presentation, we argue that the question of value and value creation remains an unachieved agenda in economic geography and regional studies. While most theories conceptualise how territorial dynamics shape economic change and spatial disparities, they usually fail or avoid explaining how the value of this change is actually and territorially constructed. Based on different socio-economic theories of markets, a relational, institutional and transactional approach to value is

proposed. The concept of 'valuation' is introduced to interpret contemporary territorial dynamics of innovation. These dynamics are not only related to the capacity of local innovation systems to produce differently from competitors. They also imply the capacity of this system to embed in multi-local networks of co-production and consumption.

DEVELOPMENT OF SMART REGIONS: CHALLENGES & SOLUTIONS

Elita Jermolajeva, Latvian Academy of Agricultural and Forestry Sciences, Latvia

During the last years there is the actual discussion about smart regions in Latvia and it is based on new approach to regional development theories. There are different challenges in this process: theoretical background which includes the new terminology and comprehension about the terms between scientists; information of state and municipal institutions; new competences (knowledge, skills) of entrepreneurs and public society as a whole.

One of the solutions to develop the smart regions in Latvia from 2014 is the implementation of National Research Programme 5.2. 'Economic Transformation, smart growth, governance and legal framework for the state and society for sustainable development - a new approach to the creation of a sustainable learning community (EKOSOC-LV)' including 10 interdisciplinary projects. The aim of one project No.5.2.3. 'Processes of Latvian rural and regional development and possibilities within the framework of economy' is to create the models of smart regional development in Latvia.

The research characterizes development trends in municipalities of Latvia, using methodology from several previous ESPON programme projects.

Smart development index elaborated within the project shows the existing development trends in a new light. Correlation between smart development index and its elements indicates the differences of development processes in five regions of Latvia, for example, in Latgale region smart development index mostly is linked with population and resources, but the coefficient for governance is lower. But the other regions have about 3 times higher coefficients' values for economics and significantly lower values for resources.

There are also experts' opinions on importance of each element of smart development index and the results of questionnaire discovered that these opinions were highly differentiated which can indicate on possible potential of each element.

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KNOWLEDGE, MULTINATIONALS AND REGIONAL ECONOMIC DEVELOPMENT

Jennifer Johns, University of Liverpool, United Kingdom

Matthew Allen, Alliance Manchester Business School, United Kingdom

Firms' knowledge-generating sites abroad are becoming increasingly important. Existing studies tend to 1) focus on explicit forms of knowledge to classify foreign subsidiaries and 2) downplay how multinational companies affect regional economic development. We synthesize work on knowledge generation, the resource-based view of the firm, and types of regional innovation systems to propose a theoretical framework to explain the contrasting entry modes and autonomy of MNCs' overseas

subsidiaries that seek to generate knowledge that can be used to create new products or services and/or that can improve production processes. We emphasize 1) the importance of implicit and explicit knowledge and 2) how variation in regional innovation systems influences knowledge development. The more tacit the knowledge and the more its generation relies on 'territorially embedded innovation systems', the more likely MNCs are to acquire existing businesses and to grant them a relatively high degree of autonomy. If subsidiaries create codified forms of knowledge within 'regionalized national innovation systems', they are more likely to be greenfield sites with little autonomy. Consequently, the benefits for the local economy are likely to vary: the host economy is likely to gain more from autonomous subsidiaries with many connections to local organizations than it is from those subsidiaries that are largely controlled by the MNC's headquarters and that have few links to host-country organizations. The challenges for regions are to attract more of the former than the latter type of subsidiary and to move the latter to the former.

THE ERUPTION OF MULTI-ETHNIC & TRANSNATIONAL CITIZENSHIP IN CALIFORNIA

Paul Johnston, University of California at Santa Cruz, United States

In an historic reversal, California has been transformed over two decades from the birthplace of modern anti-immigrant movements to the "sanctuary state". This has created the conditions for the development of a complex new citizenship regime that is both multi-ethnic and transnational. This paper reviews forces generating this new regime, new challenges to its development, and implications for the project of post-ethnic national identity, and also argues that new patterns of political polarization under the Trump presidency are accelerating these trends. The author is currently exploring parallel dynamics at work in EU regions, including the Scottish relationship to the UK in the era of Brexit.

CITY-REGIONALISM AS THE INTERNATIONALIZATION OF STATE SPACE: THE ROLE OF POLITICAL ACTORS IN TRANSFORMING HELSINKI FROM CITY TO CITY-REGION

Andy Jonas, University of Hull, United Kingdom

Sami Moisio, University of Helsinki and RELATE Centre of Excellence, Finland

Drawing upon a case study of Helsinki, Finland, this paper argues that city-regionalism is one of the key geopolitical processes through which state territory at all scales has become internationalized. In Finland, urban policy has been gradually transformed from a national strategy to promote balanced regional development (a.k.a., the Nordic welfare state model) into a transnational process designed to connect particular city-regions – notably Greater Helsinki – into the global circuits of capital and all sorts of "global networks". For example, the 2009 Strategic Plan for Helsinki set out a vision to transform the city into a city-region and, in the process, make the country as a whole more competitive internationally. Drawing upon an analysis of public documents and interviews with key political actors, this paper examines the territorial knowledges, imaginaries, ideas and practices informing the processes through which city regionalism in Finland has been politically orchestrated at the national and international scales, respectively.

REVISITING SERVICES IN THE REGIONAL ECONOMY

Andrew Jones, City University London, United Kingdom

In what some have termed the 'post-globalization' era with an era of resurgent nationalism in many advanced industrial economies, the place of service industries in regional economic development has become the subject of renewed debate. The globalization debate of the 1990s and 2000s often framed service industries as key agents, facilitators and enablers of greater global economic integration and of engines of innovation within regional economies and global city regions. Whether as global pipelines of knowledge and innovation, or local engines of value creation, service industries' role in regional economic growth was widely linked and associated with ongoing economic globalization. Yet in a period of apparent retreat from unfettered free trade and the free movement of goods, services, labour and firms, an ambiguity has arisen in how service sector industries are likely to develop into the mid twenty-first century within regional economies. Whilst many elements of economic globalization are likely to continue, and the key importance of service sector development remains evident, existing theory and policy appears to be becoming rapidly out-of-date and the nature of service sector development within regions in both advanced industrial and emerging economies requires reconsidering. This paper argues there is a need to fill a gap in regional science and social scientific thinking by bringing together diverse work on service sector industries in a regional context. It argues that service industries face new and complex challenges in the current era of national retrenchment, and this presents significant challenges to current theories of service industry internationalization and development.

REGIONS & POLITICAL EXPERTS: EXPLORING A DIVIDE BETWEEN GOVERNMENTS & REGIONS IN PEOPLE'S INTENTION TO VOTE IN THE EU REFERENDUM

Susan Jones, Coventry University, United Kingdom

This paper discusses the role of regionalism in British identities and people's voting intention for the European referendum, based on interviews with 19 non-voting but eligible British citizens three months after the 2015 UK General Election and nine months before the EU Referendum. The aim of the research was to investigate non-voting as agential or a deliberate choice as opposed to political apathy. Drawing from the interview data this paper discusses people's reasoning for non-voting. What the data shows is people's perception of an altered relationship between the state and its citizens in terms of: the location of decision making processes; who is included within these processes; and the foci or targets of citizens political action (Marsh et al 2007: 4) and reinforces Agnew (2000: 101) argument that, 'regional economic and political differences seem, if anything, to be strengthening', implying that regions must be viewed as 'central rather than merely derivative of non-spatial processes' (2000: 101). In essence people expressed dissociation with Westminster government and policies, and a lack of understanding or interest in national politics, but were local experts, tied to local identities. Where this changed was when people talked about Britain and the European Union where people held strong; usually negative views on Britain's place in Europe and became experts on 'Britishness'. Considering British identity to be under threat by both Westminster and European governments people draw on strong regional identity to reinforce perceptions of governmental neglect and erosion of British identity.

SUBSIDIARY UPGRADING AS A DETERMINANT OF INTEGRATION IN GLOBAL VALUE CHAINS: WITH A CASE STUDY

Jolta Kacani, Polytechnic University of Catalonia, Spain

Foreign direct investment, through the presence of subsidiaries in host territories, can facilitate integration of developing countries in different segments of global value chains. Developing countries can participate in global value chains if subsidiary upgrading occurs in host territories accompanied with improved industrial capacity and higher production flexibility. This paper aims to analyse the three levels of subsidiary upgrading occurring in two clothing manufacturing enterprises operating in Albania. The first case study is Shqipëria Trikot Sh.p.k an Italian subsidiary of Cotonella S.p.A and the second case study is Naber Konfeksion Sh.p.k a German subsidiary of Naber Moden. In this paper, subsidiary upgrading is determined by looking into: (i) process upgrading, (ii) product upgrading, and (iii) functional upgrading. In parallel, the paper considers the level of investments in operating facilities, manufacturing technology, and training of employees occurring in each subsidiary as necessary instruments to obtain the three levels of upgrading. The findings indicate that integration beyond the production segment of the global value chains occurs if subsidiaries operating in host territory obtain functional upgrading related to complex activities like research and development, design, and brand marketing that have traditionally characterized the head office activity.

IS THERE A SYSTEMATIC RELATIONSHIP BETWEEN COMPOSITION OF LABOUR FORCE ACCORDING TO KNOWLEDGE BASES AND ECONOMIC DEVELOPMENT OF EUROPEAN REGIONS?

Vojtěch Kadlec, Charles University in Prague, Faculty of Science, Czech Republic

Innovations are introduced to the market by companies (Ulwick 2005; Sawhney et al. 2006) and the capability of regions to attract or support a formation and rise of companies which can introduce innovation is key for their further development (Vernon 1972, Coe et al. 2004, Dicken 2011). Innovations can be brought to the market in different ways according to the type of knowledge base. Current literature distinguishes three knowledge bases: analytical, synthetic and symbolic (Asheim and Getler 2005; Moodysson et al. 2008; Martin and Moodysson 2013). Bearers of these knowledge bases are people who can use knowledge, skills and competences in specific firm environment and introduce the innovation to the world (Davenport, Prusak 2000). Based on this idea was conducted a research which used the occupational data by ISCO classification at the 3 digit level, which were associated with specific knowledge bases, with the purpose to shed the light on issue: If there exist a systematic differentiation of knowledge bases according to level of innovativeness and socio-economic development.

The analysis showed systematic differentiation among particular types of regions. Most innovative regions (according to the Regional Innovation Scoreboard) proved to have more developed all knowledge bases. Moreover, the most innovative regions have higher share of analytical knowledge base than the other type of regions. Similar pattern is observed also in differentiation of Western, Central and Eastern and Southern European regions and, also in the case of old and new EU member states. Moreover, from a evolutionary perspective, the results show quite clear trend towards strengthening of analytical knowledge base across all types of regions.

MEANDERS & SUCCESSES OF ESTABLISHING KEY PERFORMANCE INDICATORS (KPIs) FOR SMART SUSTAINABLE CITIES & COMMUNITIES

Dorota Kamrowska-Zaluska, Gdansk University of Technology, Poland
Hanna Obracht-Prondzynska, Gdansk University of Technology, Poland

Smart sustainable development is already theoretically examined concept but its implementation is still one of the main societal challenges of today, aiming to improve economic, social and environmental standards addressing public issues via ICT-based solutions on the basis of a multi-stakeholder, municipally based partnerships .

This paper explore the issues, challenges and development of key performance indicators (KPIs) for smart sustainable cities and communities. The aim of the paper is to present research on Smart Sustainable Cities KPI conducted in frame of the Horizon 2020 Project ESPRESSO (systEmic Standardisation apPRoach to Empower Smart citieS and cOmmunities), which focuses on the development of a conceptual Smart City Information Framework based on open standards.

The aim of the research is to map and assess the effectiveness of existing standards and indicators present in many documents and projects. The paper will try to evaluate the level of maturity of existing standards as well as to identify potential gaps.

The paper will also introduce framework for the Smart City indicator platform – an online tool, which could enable cities and other stakeholders not only to measure performance in different sectorial systems of Smart Sustainable Cities, but could also help them to think about smart development in a comprehensive way, stressing the role of community led processes as well as supporting development of integrated strategies and policies.

AN INSTITUTIONAL ANALYSIS OF URBAN-RURAL RELATIONS FOR CONSTRUCTING AN EFFECTIVE GOVERNANCE FRAMEWORK IN MUMBAI METROPOLITAN REGION, INDIA

Richa Kandpal, Kyoto University, Japan
Izuru Saizen, Kyoto University, Japan

A comprehensive urban-rural development framework is necessary in a rapidly developing country like India, with a large rural population. Taking the case of Mumbai Metropolitan Region (MMR) it is observed that the proportion of population of Greater Mumbai within MMR is declining, whereas other areas in the suburbs are showing an increasing trend. Kalyan and Bhiwandi are two such important nodes within the region. The villages around these two areas are fast urbanising, but many of them are still governed by rural Gram Panchayats. This lower order governance framework is not adequate to provide for the necessary services and growing infrastructural needs. Some of the villages have been incorporated within the Municipal Corporation areas, and some have been designated as Notified Areas under Special Planning Authorities. This study analyses the polycentric governance structure of MMR in relation to the policy provisions at National, State and Local levels. It follows an inductive approach, and is based on documents' review and interviews with government officials and experts from various related organisations. An Institutional Mapping reveals the hierarchy and inter-relations between the multitudes of organisations working in the urban and rural areas of the region. Differences in their accountabilities, and their objectives, which could be overlapping, complementing or conflicting, are the critical weaknesses in the system. The author attempts to identify opportunities for overcoming the institutional deficiencies in the system by a reciprocal relationship between the urban and rural governing bodies in order to make the governance framework more effective.

THE RISE OF THE RURAL?: EXPLORING POWER & POLITICS IN NEWS MEDIA COVERAGE OF THE 2016 IRISH GOVERNMENT FORMATION NEGOTIATIONS

Karen Keaveney, University College Dublin, Ireland

This paper investigates the representation of rural spatial inequality in politics and media, and subsequent regional policy impacts. The Irish government formation negotiations took place over 70 days in 2016. This period of time provides the lens through which discourses of rurality and power will be explored to understand how regional and local politics are, firstly, represented in national media, and secondly, how those representations heighten regional disparities in policy making. Although 'rural issues' became an integral part of the negotiations to form a government, this paper argues that the nature of how rural decline and struggle (and the very focus on these themes) were represented and influenced politics, serving to deepen the rural-urban divide and intra-rural inequalities. How the rural was represented during these 70 days, understanding how discourses contribute to social constructions of rurality, and the socio-spatial impact of the power of particular rural voices will form the focus of the paper.

THE ROLE OF RELATIONAL PROXIMITY IN INTER-ORGANISATIONAL RELATIONS AND COMMUNICATION

Petra Kecskés, Széchenyi István University, Hungary

The notion of proximity and its interpretation has changed, several proximity dimensions exist to express on one hand the physical closeness (geographical proximity), on the other hand the similarities between organisations (relational proximity). Relational proximity as an umbrella term includes soft factors (for example organisational culture and its elements, trust and social ties) which influence the organisational relations and ties. These factors and their impact were mostly analyzed regarding knowledge-sharing and innovation flows between companies, institutions and individuals.

The aim of this paper is to summarize the theoretical background of proximity and to synthesize the different proximity dimensions and their elements. Furthermore, the study will introduce and discuss the findings of a questionnaire survey which set out to examine how companies interact; to explore the formal and informal ties between them; to identify the used and preferred communicational genres and to measure the impact of different proximity dimensions in the companies' relations.

THE ROLE OF PROXIMITIES IN THE REGIONAL PRODUCTION OF UNITED STATES RENEWABLE ENERGY KNOWLEDGE

Peter Kedron, Oklahoma State University, United States

Persistent geographic disparities in the regional production of knowledge have generated a variety of conceptual and methodological approaches to understanding the role of place and space in the innovation process. Building on several of these developments, this paper examines the impacts economic place, physical distance, and non-geographic proximities have on the production of renewable energy knowledge within the United States metropolitan system. In contrast with prior economy-wide studies, this paper focuses on sub-set of emerging industries expected to alter the structure of the broader economy by reducing dependence on conventional energy source. This analysis of the determinants of regional renewable energy patenting in the period from 1980-2010 will be of interest to innovation researchers and policy makers alike.

THE WIDER IMPACTS OF TECH: EVIDENCE FROM THE UNITED STATES

Thomas Kemeny, University of Southampton, United Kingdom
Taner Osman, University of California, Los Angeles, United States

Innovative, high-technology activities are widely seen as drivers of regional development. In addition to the rewards that accrue directly by workers in such sectors, they are of interest because of the beneficial knock-on effects that are felt throughout the local economies that surround them. And yet our understanding of the actual wider impacts of 'tech' on non-tech workers remain partial. Using high-quality longitudinal data from the BLS' Quarterly Census of Employment and Wages, this paper fills a number of gaps in our understanding of the relationship between tech employment and broader local economic welfare. First, it builds upon prior work by considering the links between tech employment and real wages. Much of the discussion of Silicon Valley centers around shifts in local costs of living, driven chiefly by rising real estate values. Assuming a relatively inelastic housing supply, concentrations of tech employment in other regional economies ought to exert similar upwards pressure on housing costs, eroding benefits that one might expect due to Balassa-Samuels-style wage spillovers. Second, our paper neatly distinguishes between tradable tech, tradable non-tech, and nontradable activities, permitting careful study of the links between the former and the latter. Third, it considers impacts at the scale of regional economies: Combined Statistical Areas.

THE "DISPOSITIF" OF URBAN VISION MAKING, NEW SITES FOR DISCURSIVE STRUGGLES: CASE OF MUMBAI CITY

Purushottam Kesar, Faculty of Architecture, Manipal University, India

Vision making exercises have become quintessential element of any planning activity and are increasingly used as tools to carve out possible futures. The elaborate process of it, in fact, resembles a "dispositif" i.e. the process being set before the actual process takes place and prolong after the vision process has been completed. Also, visioning closely resembles an arena where elements of "political, procedural, power, personal relations, strategic behaviour and strategic use of information" are exercised by actor(s).

Three research questions addressed in this paper include. Firstly, How the urban vision making process is structured and set up? Secondly, how do actors and stakeholders negotiate in an institutional setting to exercise a "policy choice" during vision making process? And lastly, how does institutional practices (in socio-historical context) structure spatial discourse and influence production of spatial metaphors (utterances, key words)?

The most significant academic contribution in recent years on "problematization" has been done by Foucault while that on "spatialization" by Lefebvre. Nonetheless, the "problematization" of space or spatial elements during vision making exercises requires insights into actor's ideational capacities, methods of cognition which are shaped (but not only) by institutional practices and employed for specific positioning and argumentations by them. Recent strides on this particular aspect i.e. "Discursive Agency" has been employed in public policy work and is methodologically be improved to answer the research questions of the proposed research by following along three strands , Visioning as a discourse, Institutional Practice and Systemization Process

A case study i.e. analyzing vision making for Mumbai Draft Development Plan – 2034 is set up.

INNOVATION DISTRICTS IN SPATIAL PLANNING AND REGIONAL DEVELOPMENT: IS THERE SUBSTANCE BEYOND THE SHARED DISCOURSE?

Patrick Kilfoil, McGill University, Canada

Innovation districts have emerged as a common strategy to accelerate inner city revitalization and improve regional development outcomes. However, the effectiveness of this instrument in achieving either objective remains unsubstantiated. Innovation districts do not necessarily improve economic performance at the regional scale, nor do they unequivocally constitute the most effective strategy for urban revitalization, whether in terms of return on public investment, economic vitality or social inclusiveness. Why, then, is the innovation district model increasingly adopted and adapted in a growing number of cities? Using evidence from Montreal's Quartier de l'innovation and Toronto's MaRS Discovery District, we argue that the integration of territorial planning and economic development concerns into shared policy goals facilitates policy transfer as it reinforces a discourse of inevitable complementarity between planning and growth. We make two main contributions. First, we compare the articulation of spatial planning and regional development imperatives in the grey literature that promotes the innovation district model with the discourses used in planning documents for innovation districts in Montreal and Toronto. Second, we evaluate the anticipated contribution of Montreal's and Toronto's innovation districts to meeting broader land use and economic development goals. Our findings enhance the understanding of the contribution of planning to regional and local development, as well as shed light on the discursive tools used to facilitate the circulation of policy ideas.

FUNCTIONS OF PUBLIC VENTURE CAPITAL PROGRAMS

Tetsuya Kirihata, Ritsumeikan University, Japan

In this research, a comprehensive review of academic researches about public venture capital (PUVC) was conducted by highlighting two main controversial hypotheses: the positive spillover hypothesis and the market failure hypothesis. With regard to the micro level researches related to the positive spillover hypothesis, more researchers have supported that investment performances of PUVCs are less successful and PUVCs' value-added activities are less proactive and effective than those of private venture capitals (PRVCs). PUVCs tend to invest in seed or early stage firms, in high tech firms such as bio technology and other local firms in their pre-investment activities. They appear to have two unique characteristics: their less sensitivity to IPOs and their more value-added provision of public based network assistances in their post-investment activities. With regards to the macro level researches related to the market failure hypothesis, the crowding-in effects have had more support from researchers than the crowding-out effects on PUVCs' entry in the VC market.

According to the literature review, PUVCs appear to have had their own distinctive characteristics in term of their investment selections and value-added supports and brought about the crowding-in effects in the VC market to some extent, even if their investment performances are fairly inferior to those of successful PRVCs. Moreover, PUVCs' co-financing with PRVCs seems to be effective not only for providing the positive spillover but also for alleviating the market failure.

ECONOMIC DEVELOPMENT 'PANACEAS' – CLUSTERS IN HUNGARIAN ECONOMY

Eva Kiss, Geographical Institute Hungarian Academy of Sciences, Hungary

In the post-socialist countries clusters have appeared only around the millennium, which can be explained by several factors. In Hungary, the first cluster was set up in 2000, and then their number started to increase at a rapid pace. According to estimations the number of clusters nowadays exceeds 200, but their majority is cluster initiatives. Clusters were primarily established in manufacturing industry and in some sub-sectors of services. They are located mainly in the western and north-western parts of the country. Their long term operation considerably depends on sufficient financial sources. The impacts of clusters on regional and local economy are disputable. The main purpose of the presentation is to demonstrate the characteristics of the Hungarian clusters and to reveal their role in the economic development and regional differences with particular regard to the Hungarian industry. Based on empirical researches it has become obvious that clusters have not realized the expectations connected to them. It seems that the former economic development 'panaceas' are already less attractive today.

REVISITING THE ROLE OF SERVICES IN GLOBAL PRODUCTION NETWORKS AND REGIONAL ECONOMIC DEVELOPMENT

Jana Kleibert, Goethe-University Frankfurt, Germany

Services account for a very large share of employment and economic growth across the globe. In recent years, a global shift in service delivery has occurred through the relocation, or offshoring, of ICT-enabled service employment to countries in the global South. Despite the pervasiveness of services in the global economy, empirical research employing the global production network (GPN) framework has not fully engaged with services and continues to be characterised by a 'productionist bias' (Coe and Yeung 2015, p. 24). This talk addresses the neglected function of services in GPNs and global value chain research and interrogates the implications of the globalisation of service delivery for regional economic development. Services in GPNs are conceptualised using three lenses: a services-within-manufacturing networks lens (seeing services as intermediaries), a dedicated services networks lens (seeing services as independent service production networks), and a local support services networks lens (focusing on the rise of local service networks in regions). This conceptualisation is explored empirically by drawing on research on the information technology and business process outsourcing sector in India and the Philippines. Employing a local support services networks lens makes visible otherwise hidden territorial processes and reveals a rising local service-sector nexus at the regional level. Thus, it will be asked to what extent a stronger focus on the territorial scale can be introduced to GPN research in order to fully grasp opportunities for economic development in the global knowledge economy.

THEORY AND PRACTICE OF REGIONAL STRATEGIZING IN RUSSIA

Vladimir Klimanov, Institute for Public Finance Reform, Russia

In Russia, regional strategy of economic and social development is the main document of strategic planning system at sub-national level. It determines priorities, goals and objectives of territory development. The research reflects the current situation and trends in regional strategizing. Regional strategies and forecasts as normative legal acts were reviewed. Several basic elements of regional strategies have been chosen: objectives, analysis of economic and social development, choice of

strategic alternatives, its economic relations with neighboring regions, analysis of regional economy sectors, financial resources for strategy realization, and the presence of scenarios of future development.

There is a positive progressive development of strategizing in the contemporary Russia. Over the past decade, the number of regional strategies has increased significantly. Their contents have been improved. In all documents, there is an analysis of economic and social situation including strengths and weaknesses of development, geographical and historical features. The majority of documents contains analysis of region's economic relations with other regions.

There is a gap in terms of substantial instructions for regional strategies' contents. Therefore, it is necessary to adopt a common methodology of strategizing at the federal level. The concept should not contain formalized requirements for documents, it is necessary to fix the basic requirements for the strategies' contents and to improve a quality of strategizing and evaluation of achievement degree of planned development objectives.

SPACES OF COOPERATION – TERRITORIAL UNDERSTANDINGS OF EU EXTERNAL CROSS-BORDER COOPERATION

Katharina Koch, University Of Oulu, Finland

Transnational cross-border cooperation (CBC) operates in a space in which territories overlap, responsibilities are share and frictions arise out of the interests of the different actors involved in the implementation of the programmes. The European Union (EU) has established the European Neighbourhood Instrument (ENI) to implement CBC programmes in the external border regions. Previous scholarship (i.e. Lavenex, 2008) acknowledges the influential power the EU attempts to exercise with the European Neighbourhood Programme (ENP).

This paper builds on the arguments that “spaces of cooperation” contain both relational and territorial aspects that can be detected by studying the relations between the cooperating actors. These relations are influenced by elements such as personal trust but also the geopolitical environment in which the cooperation is enacted. Even though the EU is the responsible entity for the framing and funding of these CBC programmes, the multiplicity of the actors and governmental structures create a distinct simultaneous territorial and relational space in which the understanding of both state borders and state territory is open for investigation; particularly because the state level maintains its role as dominating the cooperation frameworks.

I approach this phenomenon by looking at the actor relations and change of discourses within Finnish-Russian CBC. The Finnish-Russian borders serves as an example of a “peripheral” border region which is laden with geopolitical discourses and security interests. The presentation questions how spaces of cooperation can be re-conceptualised, through recognising the multiplicity of actors and agents as they relate with one another.

SPACES BEHIND SPACE: REVEALING THE VERTICAL AND HORIZONTAL TOPOLOGIES OF POWER BEHIND BELGRADE WATERFRONT

Jorn Koelemaij, Ghent University, Belgium
Stefan Jankovic, University of Belgrade, Serbia

The currently emerging urban megaproject Belgrade Waterfront (BW) offers a unique opportunity to unravel complex and actual dynamics of spatial production. These encompass the intersection of various scales and power-hierarchies, but also include various controversies and struggles. This paper provides unique insights into the very course of the project implementation, based on the analysis of policy documents (General Urban Plan(s) and Laws) as well as in-depth interviews conducted in 2015/6 with the key actors and groups that are involved: politicians and state- and city officials, urban planning experts, representatives of BW enterprise and NGO activists. Prior to our empirical analysis, we argue against contemporary prevalent theoretical approaches in urban theory, advocating a pluralistic topological approach that is capable of acknowledging both vertical and horizontal dimensions of (social) space. By relying on Bourdieu's matrix of vertical asymmetries of social power composing differentiated social spaces (fields), we first categorize the main actors and groups accordingly. Furthermore, we explore the horizontal dimension of the production of social space by relying upon Lefebvre's concept of the spatial triad, revealing the diverging interests, means, strategies and representations they employ in designating this project as either valid or illegitimate. In sum, we insofar argue that different, vertical and horizontal intertwining of political, economic and cultural spaces, reflects differentiated aims and goals of various socio-political actors and groups engaged in processes of spatial (trans)formation, thus revealing an overall complexity, as this project exactly subsumes profound class differences and the spatial grounding of social relations.

THE IMPORTANCE OF INTEGRATION MODELS IN REGIONAL DEVELOPMENT POLICIES FOR A BETTER PROVISION OF SERVICES OF GENERAL INTEREST

Spela Kolaric, University of Ljubljana, Slovenia
Naja Marot, University of Ljubljana, Slovenia
Barbara Črnič Mali, University of Ljubljana, Slovenia

Authorities at different governance levels are responsible to guaranty the provision of services of general interest (SGI). Their approach to governing the SGI delivery is prevalingly sectoral, leading to incomprehensive solutions, not meeting the actual territory-specific needs for the services, and contradicting the EU territorial cohesion efforts. Affected by the economy, demography, and geomorphology, the SGI provision in mountain and border territories is challenging. To ensure the SGI accessibility (time, distance, money) in these areas, sectoral integration is crucial.

Built on the results of a transnational project INTESI (Integrated Territorial Strategies for Services of General Interest), this paper investigates the SGI provision approaches, and the related models of integration (actors, policies, funds, etc.) in five Alpine countries (Italy, Switzerland, Austria, France, Slovenia). Through the analysis of spatial planning and sectoral policies (regional development, transport, telecommunication, basic goods, health, social care, education), the aim is to find out if the integration models are included in the SGI strategies, to what extent, which are the most common, and where they are applied. The research comprising all documents relevant for the SGI delivery in Alpine Space, reveals the services' provision gaps, and highlights the integration needs. The results show, the integration models are mostly included in regional development polices, which are crucial for sectoral integration and SGI delivery. However, stakeholders do not recognise their importance.

Although some integrated SGI delivery solutions exist (e.g. mobile grocery), there are needs to link all sectors with transport and telecommunication, and strengthen health and social services integration.

THE POST-SOVIET EVOLUTION OF THE RUSSIAN URBAN SYSTEM

Evgeniya Kolomak, Institute of Economics And Industrial Engineering, Russia

The Russian urban system in the post-Soviet period faces a unique set of challenges created by the interplay of two factors: the legacy of the centrally planned system; and the transition to a market economy. The evolution of the Russian urban system over the past 20 years can be regarded as a natural experiment in the transition from a “non-market” structure towards market-based spatial equilibrium. The transitional dynamics of the Russian urban system provide an opportunity to test for the multiplicity of equilibria and to test the predictions of urban economic theories explaining the shape and evolution of city size distributions.

An analysis of annual city size data for more than 1000 cities in the period of transition from a planned to a market economy in 1991-2013 shows that: 1) predictions of the rapid growth of the urban system and of primary cities due to the introduction of market forces are not confirmed; 2) the city size distribution is almost unchanged; and 3) regression estimates reveal the significance of agglomeration economies. The results are consistent with the theories of random growth, increasing returns and locational fundamentals, but provide no convincing evidence for multiple spatial equilibria.

The influence of the transitional shock on the Russian urban system was not drastic or even serious. However, market forces also influenced the evolution of Russian cities. Concentration, diversification, market size, transport and social infrastructure shaped urban structure.

SMART GROWTH AND SMART SPECIALISATION STRATEGIES OVER PLATFORMS: ADVANTAGES CREATED BY INTERNET ENVIRONMENTS

Nicos Komninos, URENIO Research, Aristotle University, Greece
Elena Sefertzi, Intelspace Innovation Technologies, Greece

During the last few years a group of new concepts attempts to capture the development dynamics and policies in Europe and elsewhere: smart growth, as core component of the EU 2020 strategy; smart specialisation, as new regional innovation and development policy; smart communities, as European Innovation Partnership that brings together cities, industry and citizens; and smart cities, a term used widely in numerous places around the world to indicate new trends in urban development and planning.

This ‘smart’ paradigm is fuelled and gains momentum by the most important technology stack of our era, the combined technologies of Internet and World Wide Web. These collaborative technologies pave the way to a wider array of technologies, such as cloud computing, big data processing and analytics, cyber-physical systems, artificial intelligence, augmented reality, and the Internet of Things, which altogether push human collaboration to higher levels of competence and size. Growth processes and policies are profoundly affected from this widening of human collaboration, intensification of networking, knowledge flows and digital disruption.

The paper examines smart growth and smart specialisation strategies with respect to Internet platforms. We argue that such digital environments have a double role: on the one hand are

components of strategy implementation and core elements of action plans, and on the other hand are enablers of strategy design and elaboration. We present and discuss case studies of growth strategies that create advantages through Internet platforms, as well as a comprehensive web platform for smart specialisation strategy design, and highlight the advantages these digital environments offer to innovation and growth.

IMMIGRATION AND THE CHANGING SOCIAL LANDSCAPE – PERSPECTIVE OF YOUNG PEOPLE AND SOCIAL SUPPORT

Riikka Korkiamäki, University of Tampere, Finland

Along with other European regions, the immigration population has increased rapidly in the city of Pori, Finland, during the last two years. This has notably changed the visible demography of the town, as well as the experienced and lived social landscape of the residents. Alongside, municipal social services are facing the growing need for support and integration practices that are broader in scope and more advanced in competence than what has been the requirement in past. In this context, it is important to think through the formal and official support systems, and be aware of the informal networks created and maintained by the immigrants themselves.

The paper is based on an ongoing qualitative study that investigates the social relationships and support networks of young asylum seekers and refugees, 13-18 years of age, including both unaccompanied minors and young people who have arrived to Pori with their families. The paper focuses on their experienced social support in both formal services and informal networks. It investigates the sources of support appointed by the young people and considers these from the viewpoint of material, emotional, informational and appraisal support. It highlights that the insecurity and uncertainty that the young people face centrally dictate the kind of support that they need and appreciate. As a practical implication the paper suggests that in developing the municipal immigration practices, emphasis needs to be put on how the young people experience being treated as asylum seekers and immigrants, citizens and residents and, above all, as children and young people.

INFORMAL URBANIZATION IN THE NATIONAL CAPITAL REION OF INDIA: THE RISE OF CENSUS TOWNS

Artem Korzhenevych, Leibniz Institute of Ecological Urban and Regional Development, Germany
Manisha Jain, IOER, Germany

Urbanization process in the Global South is characterized by the blurring of the boundaries between urban and rural areas. Managing this process has become increasingly complex due to speed of transformation, and the lack of local institutional capacity. A phenomenon that exemplifies current trends is the emergence and rapid growth of census towns in India. Census towns are settlements that, despite having urban characteristics and fulfilling the census criteria for being urban, are not notified with municipal status. This paper investigates informal urbanization in the form of census towns, taking the National Capital Region around Delhi as a case study.

From the empirical investigation based on census data, the following conclusions can be drawn. (i) There is accelerated growth in the number and population size of census towns (unplanned growth) in close proximity to existing agglomerations. (ii) Population growth rates in the census settlements are substantially higher than in the statutory settlements, which remains true after controlling for settlement location. (iii) Census towns around Delhi and in close proximity to other agglomerations

are often better endowed with technical amenities than are statutory towns; however, the provision of public amenities is better in statutory towns.

In addition to the empirical investigation, this paper discusses the related governance aspects. There is a need for regional planning that integrates urban and rural development. Furthermore, census settlements must be faster notified with a municipal status. In addition to the advantages of urban planning, official status makes settlements eligible for international funding for infrastructure projects.

STIMULATING ECONOMIC RECOVERY THROUGH EA GROWTH POLES

Jana Kotlebova, University of Economics in Bratislava, Slovakia

Maria Siranova, University of Economics in Bratislava, Slovakia

In light of recent development in the ECB monetary policy the Japan-like stagnation scenario might seem to be a near-future economic modus operandi. Per definition, the growth pole economies help to drive the growth process in other economies, thus the money spent to boost domestic credit provisioning are likely to spill over to other adjoined economies and help them to recover even in the presence of depressed domestic demand and/or overleveraged domestic banking sector. This paper investigates this issue by computing growth pole scores for EA19 countries. We modify the procedure developed in World Bank (2011) for growth pole computation in order to account for strength of linkages connecting member states through net of cross-border trade and financial flows. Our results show that countries small in economic size (Baltic states, Slovakia and Slovenia) would benefit from a more differentiated approach as they strongly outperform their benchmark set by the ECB's official distribution key. On the other hand, big EA economies do not achieve levels used in official distribution key taking into account their growth pole potential for other EA economies.

EVALUATION OF NON-AGRICULTURAL TRAINING ACTIVITIES WITHIN THE RURAL DEVELOPMENT PROGRAM OF THE CZECH REPUBLIC 2007-2013

Jana Kourilova, University Of Economics Prague, Czech Republic

The present is characterized by significant technological changes. Participation in trainings is necessary and contributes to employability. The achieved level of knowledge and skills is not sufficient for all work life. Lifelong learning is becoming an essential part of our life both in cities and rural areas. This paper focuses on the evaluation of the measure supporting non-agricultural trainings in the Rural Development Program 2007-2013. Trainings were implemented in management, administration and marketing, information and communication technologies, landscape preservation, environmental protection and others.

Evaluation of the measure was carried out using indicators of outputs (number of supported subjects, number of training days) and results (number of successful participants). All indicators were exceeded. The measure impacts were evaluated using an empirical survey; its respondents were beneficiaries of the support (LAGs, training agencies, development agencies). The survey showed that the measure supported knowledge and skills enabling to start / extend participants' business in non-agricultural activities. Trainings contributed to an increased interest in local issues and also to participants' communication and involvement in networks.

However, some problems can be derived from the evaluation. Trainings were spread unevenly within the territory. The problem also is that respondents were only beneficiaries, who had no obligation to conduct training assessments by participants. The survey also showed that trainings in rural areas cannot be implemented without public funding.

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FINANCIAL EXCLUSION: EVIDENCES FROM HUNGARY

Sandor Zsolt Kovacs, Hungarian Academy of Sciences, University of Pécs, Hungary

The financial institutions are very important actors at all levels of economies (national, regional, local). In the Central and Eastern European countries, the banking sector dominated by great international commercial bank groups. These institutions have very centralised management structure, so the information asymmetry is very high in these economies. The postkeynesian literature emphasizes territorial inequalities induced by financial systems based on over-centralized spatial dimensional structure, which are characterized by high capital concentration in the centres of the core areas of economy, on the top levels of urban hierarchy. It entails the underfunding of small and medium enterprises, and financial centres in remote regions located far from the financial centres. The activities of locally embedded and decentralized stakeholder-based (as opposed to shareholder interest-based) credit institutions can be regarded as factors working against the concentration of financial and capital markets. International and national literature verifies the benefits of locally embedded relationship based banking in local economic development, which during economic crises has even greater value. This study focuses the Hungarian case and practices in this field. I collected the data of bank branches such as geographic location, accessibility and analysed these information with some indicators e.g. bank density indicator (inhabitants per branch). I saw, that bank branches are not in very much settlement, so used the accessibility indicator with geolocation techniques. This shows, that how far is the nearest bank from a settlement. Helps of these indicators, we can see a realisation of centre-periphery dual in Hungary.

SPORT MEGA-EVENTS: LEGACY OF EURO 2012 IN POLAND

Marek Kozak, Centre for European Regional and Local Studies (EUROREG), University of Warsaw, Poland

Nowadays, after talks with trade mark owner, mega events are seen by many authorities as a solution to all development problems. Methodology: research supported by National Science Centre, analysis of statistical data and literature. Sources of information adequate to research methods. The conclusions presented in the paper: no promised increase of number of hotels and (foreign) tourists thanks to the event. Neither investment increase, nor wages increase observed. No positive social change. There was no promotional (image) change – the foreigners come with the stereotype; broadcast time is too expensive to offer free promotion. Fans fight is the main exception. Infrastructural dimension has two goals: to ensure fans easily come to the hosting city and to stadiums and fan zones. The progress was made only in terms of easy access to stadiums (often not in use nowadays). Till end of 2016 not all the borders were connected by motorways nor by modern railways. The cost of construction and bankruptcy of small businesses was covered by central budget.

None stadium constructed for Euro 2012 after the event made an operational profit. No urban regeneration was observed around the stadium or fan zone. While ecology was not discussed at China and Sochi Olympic games, it was after Euro 2012 that protests started in Brazil against sport mega events, later in other countries (incl. Poland in 2014). Finally, the UEFA reported 1,4 bn euro profit at EURO 2012. Authorities are silent on costs of EURO.

GO EAST? FIRM STRUCTURE AND THE LOCATION DECISION OF GERMAN MANUFACTURING FIRMS

Astrid Krenz, University of Goettingen, Germany

This paper uses the regional dimension of a comprehensive, official firm-level dataset from the Federal Statistical Office for German manufacturing firms to investigate the location decision of new firm activity in the German regional economy, differentiated by firm structure. Results reveal that agglomeration economies play a significant role for the location decision of small firms, but not for medium-sized and large firms. Whereas the market potential exerts a significant positive impact for all firms, labor costs do not exert a significant impact on large firms' location decisions. Differential effects are found in an East-West comparison. The infrastructure plays an important role for the location decision of firms into Eastern German regions. As a policy recommendation it appears necessary to improve in particular the local infrastructure such as the road network to foster the setting up of firm activity in Eastern German regions.

DECISION MAKING PROCESSES IN RURAL REGENERATION PARTNERSHIPS: PARTICIPATION AND INFLUENCES OF NEW AND WEAK ACTORS

Stefan Kundolf, Thünen Institute of Rural Studies, Germany

Patrick Küpper, Thünen Institute of Rural Studies, Germany

Rural regeneration partnerships have been spread all over Europe as a bottom-up approach. The LEADER initiative is a well-known example (Pollermann, Raue, Schnaudt 2014). Such partnerships have been introduced with the aim to integrate different sectors, include ideas and commitment of citizens and actors from the third sector, use additional resources from private economy as well as provoke innovations by combining capabilities from different societal spheres and impulses of new actors involved. However, empirical evidence show that for instance LEADER is elitist, involves actors already engaged, is dominated by public actors, and thus reproduces existing policies (Etzioni-Halevy 2003; Falkowski 2013; Thuesen 2010). Theoretical explanations for this outcome built on micro-politics and resource theory (McAreevey 2009). Time, knowledge, networks, institutional power, and finances are needed to participate. In addition, communicative and power structures are used to exclude or marginalize new and weak actors in decision making processes.

Geographical distance has however not got much attention yet as a causal factor. The relevance of this issue has increased particularly in Germany because many rural districts were merged and rural partnerships often work on district level. As a hypothesis, we suggest that the smaller the spatial scale of the partnership, the more likely new actors from private economy as well as weak actors from third sector and citizens are involved. We argue on the one hand that resources needed to attend to board meetings decreases the smaller the size of the respective region, and therefore the distance to cover is lower, and weak actors tend to have at least local network resources too. On the other hand, the commitment for the region increases if the citizens are immediately affected which is more likely if issues dealt with are closer to ones-own home. As a consequence, the more new and weak actors are

involved and have a real influence on decision-making, the more likely innovative policies and solutions are developed.

Against this background, our research questions are:

- How different types of actors do participate in rural development boards and what influence do they have?
- How resource base, micro-politics and geographical space do affect the participation and influence of these actors?
- How different participation and power constellation do affect policy outputs in terms of innovation, regional adaptation, resource efficiency, and achievements of regional objectives?

To answer our research questions, we rely on empirical evidence from 13 rural regeneration partnerships in Germany. The 13 partnerships take part in a pilot program the German Federal Ministry for Food and Agriculture has initiated in 2014. This program "Rural upturn"(Land(auf)Schwung) aims at fostering innovative strategies for rural areas affected by demographic and economic shrinkage. The ministry therefore prompted the partnerships to involve new actors from civil society and private entrepreneurs. We researched these partnerships using documentary analysis of bidding documents and further regional strategy documents, open non-participatory observations in board meetings, and group interviews with key actors. Furthermore, a survey with a standardized questionnaire is planned to analyze the resource base and professional background of board members. Finally, we will interview selected members of the decision-making boards in the largest and smallest regions in order to investigate the motives for participation, their perception of their influence on decisions and constraints to their participation and influence.

Preliminary results indicate that many partnerships in the pilot program use existing decision-making bodies for rural development such as Local Action Groups from LEADER. Therefore, most members are not newly activated but had already been engaged with rural development before. Moreover, the majority of board members attend the meeting in their working time, because they are professionals. New actors were not appointed for the committees because they are often regarded as less trustworthy and experienced. As a result, the partnerships' strategies are mostly less innovative. By now, we cannot confirm the hypothesis that the spatial size of the respective region matters. Nevertheless our first findings suggest that rurality affects civic engagement. Volunteers in rural areas often serve in multiple functions, so that additional tasks like being a board member may overcharge volunteers and restrain them from participating. This is particularly the case for parents with small children or employees with long commuting distances or flexible working times.

DEMOCRATIC DELIBERATION IN PROMOTING LOCAL WELLBEING

Ronja Kuokkanen, University of Tampere, Finland

For the time being, municipalities are responsible for arranging social and healthcare services in Finland. Statutory services are commonly delivered in cooperation with private and third sector actors. In addition, number of non-mandatory services promoting wellbeing have been organized by these networks. The ongoing Health and Social Services Reform transfers the organising responsibility and decision making from municipalities to much larger regional units leaving the municipalities smaller scale health and wellbeing promotion duties. This substantial administrative reform challenges the agile working relationships between local actors and citizen participation in local health and wellbeing promotion. This presentation contemplates the potential of democratic deliberation in promoting citizen participation and cooperation between actors in the context of local health and wellbeing

promotion in rural communities. The study was carried out in a participatory development and research project titled 'Cultural Planning, Cooperative Development and Deliberative Participation'. My results supports previous studies that promoting democratic deliberation and active citizenship are regarded important in producing perceived wellbeing in local communities. Deliberative methods proved to be efficient to empower rural community (ies), therefore these could be used more widely in rural studies.

DOES IT COST MORE THAN IT TASTES? AN EVALUATION OF BUSINESS INCUBATORS AND INDUSTRIAL GARDENS IN NORWAY

Olav Andreas Kvitastein, Bergen University College, Norway

Jarle Aarstad, Western Norway University of Applied Sciences, Norway

Natalia Mæhle, Western Norway University of Applied Sciences, Norway

We evaluate business incubators and industrial gardens in Norway that are operated by Siva, a governmental body. A business incubator aims to foster growth for innovative entrepreneurial firms targeting an international market, while an industry garden hosts both entrepreneurial and mature firms with different prerequisites as regards to innovativeness and international ambitions. Using different theoretical perspectives and methodologies, we identify potential incubator- and industrial garden characteristics that are likely to foster firms that are located in them. In addition, we have aimed to compare the effects of being in a business incubator or industry garden vs. being located outside such an environment. We find that incubators or industrial gardens' regional integration with R&D-, education-, and investor milieus, in addition to local bodies of innovation, strengthen the firms that are located in them. Incubators or industrial gardens' integration with the established industry and the county municipality have an overall negative effect. Be believe the latter finding can be attributed to a path extension role played by these players. We also find that incubators and industrial gardens located in densely populated regions provide better services than incubators and industrial gardens located in sparsely populated regions. Using propensity matching score estimations, we furthermore find some positive effects of being located in an incubator or industrial garden vs. being located outside such an environment, but the results are non-significant. In lack of robust empirical results as regards to the latter finding, we question the socioeconomic value of publically funding incubators and industrial gardens.

DIFFERENTIATED REGIONAL ENTREPRENEURIAL PROCESSES. PRECONDITIONS AND OUTCOMES OF ENTREPRENEURIAL DISCOVERIES IN DIFFERENT REGIONAL CONTEXTS

Nina Kyllingstad, University of Agder, Norway

Arne Isaksen, University of Agder, Norway

Ann Camilla Schulze-Krogh, University of Agder, Norway

Jan Ole Rypestøl, University of Agder, Norway

The interest in entrepreneurial discoveries has increased by the introduction of smart specialisation strategies as the new principle for industrial development policy in EU regions, and by the overall need for job growth. Industrial growth starts, in the terminology of smart specialisation, by an entrepreneurial discovery. It includes an innovation, basic research, and not least the demonstration by an entrepreneur or a firm that, for example, a new production process is possible. The paper aims to contribute to better the understanding of entrepreneurial discoveries and regional industrial growth in two ways; first, by examining how different regional contexts affect entrepreneurial discoveries, and, second, how entrepreneurial discoveries tend to support specific types of path

development in different regions. We use the regional innovation system (RIS) approach to distinguish between three main types of regional institutional contexts; thick and diversified RISs, thick and specialised RISs, and thin RISs. We discuss possible outcomes of entrepreneurial discovery processes by differentiating between path extension, path renewal and path creation. The paper has design empirical studies to examine the relation between regional context, entrepreneurial discoveries and regional path development. These include examining the formation and growth of three 'official' regional clusters supported by Innovation Norway's Arena programme for immature clusters, found in three types of RISs. The clusters are Oslo Edtech cluster (leaning technology) in a thick and diversified region, iKuben (industrial internet) in the rather specialized Møre and Romsdal county, and Heidner (technology and knowledge for sustainable food production) in the rather thin Hedmark county.

FROM HYPE TO CONFUSION – WIDENING, DEEPENING AND DILUTED FINNISH INNOVATION POLICY

Valtteri Laasonen, University of Tampere / Faculty of Management / Regional Studies, Finland

Jari Kolehmainen, University of Tampere, Faculty of Management, Urban and Regional Studies Group SENTE, Finland

Markku Sotarauta, University of Tampere, Faculty of Management, Urban and Regional Studies Group SENTE, Finland

During the recent two decades, a growing body of literature in economics, economic geography and innovation studies has enhanced our understanding of sources of economic growth and innovation. This literature has also fostered the debate on the role and importance of innovation policy. The introduction of systems of innovation (SI) approach and surge of interest towards innovation policy, its dissemination into other policy areas, growing complexity of policy-making, the role of innovation for the solution of grand societal challenges and emerging new terminology raise important analytical questions about the reasoning and actual landscape of the innovation policy.

Finnish innovation policy is a case of point what comes to the innovation policy hype. Finland has been a showpiece for construction of knowledge economy and in the frontline in its effort to adopt the latest policy concepts. But, recently the Finnish innovation policy has been changing drastically, and innovation policy seems to be in a state of confusion.

In light of theoretical and empirical advancement, this article analyses and structures the developments and changes in the Finnish innovation policy during the 2000's and discusses the evolution from hype to confusion. We propose a framework that help to understand and characterize changes and different aspects of innovation policy. Drawing upon the Finnish case, we point out practical implications how the landscape of innovation policy has changed in the 2000's and also discuss potential development paths and emerging ideas framing the 'new innovation policy'.

TERRITORY AND INNOVATION. INDUSTRIAL POLICIES FOR PERIPHERAL AND BACKWARD REGIONS IN A GLOBALISED AND DIGITALISED WORLD

Sandrine Labory, University of Ferrara, Italy

Patrizio Bianchi, University of Ferrara, Italy

This paper examines industrial policy at regional level, with particular reference to peripheral and backward regions. It is argued that the important structural changes induced by globalisation and digitalisation implying a fourth industrial revolution, offer new opportunities for such regions. The

structural changes regard both the supply side, namely products and production processes, and the demand side, with new markets and new modes of interacting in markets. The former side has been much discussed in the literature, outlining the importance of the adoption of new technologies such as ICTs, robotics and big data analytics to establish smart manufacturing processes and new products. The latter side has been less discussed, but there are examples of specific projects in regions and cities even in peripheral and backward areas where the new market interactions offered by the Industry 4.0 technologies are used to increase both the extent of the market reached by the firm and its competitiveness. The paper examines the changes induced by the fourth industrial revolution, their implications on both the supply and the demand side, as well as industrial policy. It is shown that the discontinuity in development trajectories implied by the industrial revolution might indeed represent an opportunity for peripheral and backward regions, if appropriate regional industrial policies, in coherent multi-level governance frameworks, are implemented.

PLACING INNOVATIVE RELATIONS IN THE GLOBAL ECONOMY

Arnoud Legendijk, Radboud University Nijmegen, The Netherlands
Paivi Oinas, Turku School of Economics, Finland

This paper addresses two enduring debates regarding local and regional circumstances and relations in innovation processes. Those have been carried out in terms of “diversity” vs. “specialisation”, and “proximity” vs. “distance”. It is proposed that additional dimensions are needed to bring clarity into those debates. The dimensions discussed in this paper are degree of innovativeness, novelty vs. maturity, global connectedness and power. These additional dimensions enable creating a typology where the types epitomise the different roles localities play in various business-specific sub-systems of the world economy. These roles are reflected in the nature and closeness of their strategically most significant local and external relations, the consequent power-dependency positions in the economic systems that agents in those localities take part. It is proposed as a basis for understanding the relations in the geography of innovation and for placing earlier research results in their appropriate broader context.

UKRAINE AND THE EASTERN NEIGHBOURHOOD: GEOPOLITICAL HOSTAGE BETWEEN THE EU AND RUSSIA

Jussi Laine, University of Eastern Finland, Finland
Tomasz Stępniewski, The John Paul II Catholic University of Lublin, Poland

The paper seeks to examine the international influences on the Eastern Neighbourhood, Ukraine in particular, in the post-Cold-War Europe. It depicts Ukraine as the “stake” in strategic games between Russia and the European Union that have become increasingly laden with political and cultural contestations. The geopolitical confrontation has pressed the European Union to adopt a reactive approach mixing idealist notions with traditional realism, whereby its ambitious attempts to construct new models of regional cooperation have become partly reduced into technical, sectoral agreements. Despite its welcoming rhetoric, the EU can be seen to act with respect to its neighbours as a border-confirming and border consolidating agent, inscribing ‘otherness’ between itself and its neighbourhood, which highlight the tension between attempts to consolidate the union and to enhance the EU presence beyond its borders. The concurrent EU attempts will then be projected against Russia’s actions affecting the region that now more concretely than ever finds itself in the sphere of influence of competing global actors and in the midst of great power geopolitics. The paper argues that spaces along the EU’s external border are contradictory sites in which various aspirations

become entangled and in which border eroding and confirming forces continuously challenge one another. Despite the multiple forces that challenge the state centrality, the Ukraine crisis showcase how the territorial sovereignty of nation-states continues to form one of the leading principles upon which international (border confirming) relations are based.

INTER-REGIONAL COLLABORATION FROM A DISTANCE: THE EDIGIREGION STORY

Mandy Lalrindiki, Waterford Institute of Technology, Ireland

Bill O'Gorman, Waterford Institute of Technology, Ireland

Valerie Brett, Waterford Institute of Technology, Ireland

The local character and the perception of region as a locus of innovation has been emphasised in the innovation processes perceiving spatial proximity as a competitive advantage which raises the question of the possibility of collaborating at a distance. In order to address this question, this paper studies collaboration among regions that do not share contiguous borders and explores the change in the perception of representatives from fifteen collaborating institutions from four different European regions.

The collaborative process evolved over an eighteen month period with the aim to increase regional competitiveness by concentrating on their smart specialisation domains. Wilder Collaboration Factors Inventory Survey was administered which is used to guide the researchers' understanding of the collaborative (or non-collaborative) process by concentrating on the institutions rather than individual actors. The survey will be administered at three different phases of the collaboration process which allows testing for change at different points of time and also determine whether the inter-regional collaboration is possible (or not).

The preliminary findings indicate that inter-regional communication is still a barrier even after six months of ongoing inter-collaboration. Since the collaborative group consists of different types of institutions, the characteristics of each actor vary and as such, the understanding and trust between them differs. Conversely, the findings also portray the clear vision and the realisation of the uniqueness of the coalition. However, the findings highlight the need for further research to examine change throughout subsequent phases to determine if inter-regional collaboration is possible or not.

MODELLING THE RELATIONSHIP BETWEEN URBAN FORM AND SOCIAL SUSTAINABILITY AT NEIGHBOURHOOD LEVEL

Taimaz Larimian, Department of Geography, University of Otago, New Zealand

Debates about sustainable development no longer consider it solely as an environmental concern, but also incorporate social and economic dimensions. While a social dimension of sustainability is extensively accepted, how design elements of an urban area meet the social needs of those residing in it is still unclear. This study argues that selected elements of urban form, density, land-use mix, street layout and building type have differing effects on dimensions of social sustainability and considers how the latter concept may be promoted or weakened by different elements of urban form. A multi-dimensional model is developed and statistically tested to explore the relationship between elements of urban form and social sustainability at neighbourhood scale. The empirical evidence is set out based on household questionnaires linked to physical elements and socio-demographic data of five neighbourhood of Dunedin city, New Zealand. The validity and reliability of the model is tested

using factor analysis and examining the application of the model in case study neighbourhoods is through the use of multiple regression analysis.

The results of this paper demonstrate a strong relationship between selected urban form elements and dimensions of social sustainability in both positive and negative ways. For example, outcomes relating to security, neighbourhood satisfaction and sense of place are all proven to be lower in higher density areas; whereas access to facilities and services is shown to favour denser urban forms. The main contribution of this study is to develop a comprehensive model that can be employed to measure the level of social sustainability in various urban contexts. The results of this study could help urban planners and policy makers in their future design of smarter and more sustainable cities.

SECURING SUSTAINABLE GROWTH BY TURNING OECD'S GROWTH DRIVER OF INNOVATION INTO A WHITE BOX

Peter Wilgaard Larsen, Denmark

Through a more resource efficient, greener and more competitive economy, EU wants to secure sustainable growth in 2020 (Europe 2020, p. 3). Standing on the shoulder of the Lisbon Strategy, Europe 2020 - though framed by the ambiguous concept of sustainability - emphasises that the development of new processes and technologies reinforcing the competitive advantages of the businesses will lead to a more prosperous EU (Europe 2020, p. 9 & 12; Lisbon Strategy).

This idea of new processes and technologies as the main driver of growth is a reminiscence of OECD's framework of Growth (OECD, 2003). Based on statistical data, the OECD-report deduced four growth drivers as key factors in delivering multi-factor productivity. However, the four growth drivers of ICT, innovation, human capital, and entrepreneurship cannot stand alone, since their performances deeply rely on a fundament of macroeconomic stability, openness and competition, as well as properly working economic and social institutions (OECD, 2001: 24-25). With these disclaimers in mind, OECD's four growth drivers have for more than 15 years been the beacon in the night when practising regional development.

This paper demonstrates how the growth driver of innovation turns three regional development projects covering respectively the growth drivers of entrepreneurship, human capital and ICT into black boxes of implementation. To go from "opaque" to "transparent", a theoretical framework is presented to invigorate the growth driver of innovation as a white box, whose internal processing and logic is known.

THE QUITO PAPERS AND THE URBAN IMAGINATION: A SYMPATHETIC CRITIQUE

Philip Lawton, Maynooth University, Ireland

As a means of engaging actively in the discussion of the transfer and dissemination of different forms of urban knowledge, this paper undertakes a form of sympathetic critique of the recently launched 'Quito Papers'. Although as of yet to be fully fleshed out, the recent launch of the 'Quito Papers' (Clos, Sennett, Burdett, and Sassen, 2017) in response to UN Habitat III, gives pause for thought on how we imagine the urban future to be. For the authors, at stake is the very means by which we imagine our urban world - ranging from the continued role of the 1933 Charter of Athens, to the dominance of private interests - and the responses to such, including the promotion of an 'open city'. This paper seeks to situate this ongoing discussion within recent debates in urban studies, including that around

planetary urbanization, the right to the city as well as the more institutionalized approaches of UN Habitat itself. In so doing, it will attempt to examine the potentials and challenges of the alternative form of urban knowledge transfer as is proposed within the Quito Papers and ask questions about the ways in which various forms of urban knowledge are produced and transmitted.

OXFORD AND GRENOBLE: KNOWLEDGE ORGANISATIONS IN LOCAL DEVELOPMENT REVISITED

Helen Lawton Smith, Birkbeck University of London, United Kingdom
Dimitris Assimakopoulos, EMLYON Business School, France
Nabhassorn Baines, Birkbeck, University of London, United Kingdom
Saverio Romeo, Birkbeck, University of London, United Kingdom
Maria Tsouri, University of Trento, Italy

This paper explores how two high-tech city-regions, twin towns, have developed over a decade. In the early 2000s the performance and pathways to development of the high tech Grenoble (France) and Oxfordshire were compared (Lawton Smith 2003). The focus was on national laboratories as territorial actors. The rationale for the comparison is that they are both 'big-science' areas with concentrations of publicly funded science for example in nuclear energy and space research. In Oxfordshire national policy created this pattern after World War II while in Grenoble decentralisation from Paris occurred decades before.

In this new paper, the theme shifts to the different forms that government intervention takes place through investments in knowledge organisations in high tech economies. Since the early 2000s, there have been a number of shifts in national policy alongside new pathways to regional economic development enabled by the smart specialization policies of the EC. We show divergences in patterns of development, considering the different models of economic development in what appear to be similar types of locations.

We show that France is characterised by top down big spending, public sector-led development, taking advantage of the leading position that government labs "anchor institutions" enjoy in publicly funded research. The French government defines the cluster and firms have to demonstrate that they are members of the cluster in order to bid for government funding. In contrast, Oxfordshire is driven much more by public-private partnerships and privatisation of national assets.

PERSONALITY TRAITS, HUMAN CAPITAL AND WAGES: EVIDENCE FROM LINKED INDIVIDUAL AND LOCAL DATA

Neil Lee, London School of Economics, United Kingdom
Andrés Rodríguez-Pose, LSE, United Kingdom

Human capital has long been seen as a crucial factor in local economic performance. More recent work has highlighted the potential importance of individual personality traits. This paper links these two literatures, by considering the inter-relationships between wages, human capital and both individual and local psychology. It does this by combining individual data on wages, human capital and psychology with travel to work area indicators for local psychology. The paper has three findings. First, it shows that there are small positive wages effects for individuals in local areas with high levels of some personality traits, particularly extraversion and conscientiousness, even when controlling for other local level and individual characteristics. Second, it investigates the interaction between individual psychology and levels of qualifications, showing that the economic returns to some

personality traits interact with individual human capital. Third, it considers the interactions between local level psychology and individual level characteristics.

MACROECONOMIC FRAMEWORK CONDITIONS, STRUCTURAL REFORMS AND REGIONAL DEVELOPMENT

Alexander Lembcke, OECD, France

Sabine D'Costa, University of Westminster, United Kingdom

Nation wide policies affect regions very differently. Stringent regulation, such as for example in product markets, meant to protect weaker regions can de facto limit their capacity to “catch up” to economically better performing regions. The same reasoning applies to macroeconomic framework conditions, the exchange rate is universal across all regions, but the impact of changes is far from uniform. This study is part of a wider project that focuses on regions that are the most “lagging” behind within the European Union. The EU classifies “less developed regions” with less than 90% of EU average per capita GDP into two groups: low growth regions with less than EU average per capita GDP growth and low income regions with less than 50% of EU average per capita GDP.

The paper suggested for the sessions analyses (i) the economic imbalances most relevant to low growth and low-income regions, (ii) their impact on economic activity in these regions and (iii) the expected regional impact of undertaking and/or implementing labour market reforms and measures to improve the business environment. The objective is to better understand the economic situation of these regions, their pattern of growth or lack thereof, their ability to resume economic convergence in the coming years and the 'right' incentives, including investments, to provide the highest impact in terms of growth and jobs given their specific economic features. The study covers the period 2000-14, but also considers how the 2007-08 crisis affected the importance of macroeconomic trends and regulatory framework conditions.

HOUSING AND EMPLOYMENT GROWTH IN MELBOURNE, AUSTRALIA: A SPATIAL GENERAL EQUILIBRIUM ANALYSIS

James Lennox, Centre of Policy Studies, Victoria University, Australia

Philip Adams, Centre of Policy Studies, Victoria University, Australia

Housing and employment growth in Melbourne, Australia: a spatial general equilibrium analysis. We present a spatial computable general equilibrium (SCGE) model of Melbourne, Australia featuring commuting between over three hundred residential and employment zones. This model, entitled ‘VU-Cities (Melbourne)’, is being developed to simulate the impacts of policies, planning and public investments in the urban and transport sectors. These can be represented as changes in taxes, transport costs, productivity or amenity. The model accounts for positive local externalities of density in both productivity and amenity—phenomena that appear increasingly important in the new economy. Our calibration of the prototype VU-Cities Melbourne model draws on local area census data, spatial land use data and travel times.

To illustrate the application of the model, we consider population growth under three policy scenarios: suburban sprawl, urban infill and (as a reference case) current land uses. Our most striking result is that urban infill allows more people to move closer to where more of the jobs are. Outer suburban growth is, by contrast, relatively job poor. These results are therefore qualitatively consistent with the recent historical experience of Melbourne. The implication that we draw is that policy-makers have

only limited opportunities either to shift existing jobs outwards or to create new jobs in the outer suburbs. Greater efforts should therefore be made to reduce barriers to the supply of medium density housing in Melbourne's inner and middle suburbs.

FAMILY FIRMS IN SUCCESSION: A GEOGRAPHICAL PERSPECTIVE ON THE CHALLENGES TO CONTINUITY

Regina Lenz, Heidelberg University, Germany

Johannes Glückler, Heidelberg University, Germany

Family firms build the backbone of most regional economies because they employ the lion share of the regional labor force, provide training and qualification, and account for substantial production and export of goods and services. Additionally, family firm entrepreneurs often take social responsibility within their home region, engaging in financial philanthropy, supporting regional initiatives and serving on advisory boards across business, government and the civil society. Despite their contributions to their regional context, family firms have been overly neglected in economic geography. Since the continuity of family businesses is essential for long-term stability, this paper focuses on succession as an increasingly vulnerable situation in the life of family firms. While traditionally the incumbent generation hands over the unity of ownership and control to their descendants, this family-internal succession is being increasingly challenged by demographic, technological and institutional changes. This challenge is part of the 'succession conspiracy', the fact that only a small percentage of family firms in a given generation survives until the next. Reviewing the body of family firm research, we compare the Spanish Basque Country and Baden-Württemberg, and explore how family firms cope with the challenge of succession. Empirically, we assess the specific institutional contexts made up of regulation, policies, established patterns of behaviour, and the relevant actors within the organizational field of succession. Our comparative and qualitative approach supports the conclusion that family firm continuity increasingly depends on contextual new succession strategies and emergent support structures around them.

SECOND HOME MOBILITY AND SEASONAL SUBURBANIZATION IN THE REGIONS OF RUSSIA

Mikhail Levchenko, Russia

In some countries, second homes are located in recreational zones or deep rural areas. However, in Russia most second homes are located in suburbs and form quite dense settlement structures. The paper focuses on second home related seasonal suburbanisation, second home mobility and their regional differentiation. Approximately one third of the national population has their own dacha (a typical seasonal second home). However, there are differences in quantity and quality of such seasonal settlement in more developed regions and in more depressive or with unfavorable climate conditions. Furthermore, there is a functional differentiation which is represented by predominance of leisure and residential functions or agricultural function in different regions. Second homes suburbs also vary in area which show correlation with size of central city or town, so the biggest "dacha area" around Moscow overflow borders of the capital region and in some directions stretches in hundreds of kilometers. Suburbs structures and features and their dynamics are another issues. There are signs of transformation into classic suburbs with permanent residence around the largest cities or partial converting seasonal suburbs into slums-type settlements in some eastern regions. Diversity of socio-economic, cultural and climate conditions in regions of Russia produce a variety of forms of suburbanization which, however, have a common seasonal feature.

NEW ARTS OF RENT: CREATING RENTS AS REGIONAL DEVELOPMENT PLATFORMS

Nick Lewis, University of Auckland, New Zealand

In free trade worlds returns to capital flow out of regions. The challenge faced by mainstream development agencies is not just to stimulate growth by creating conditions for the generation and appropriation of economic rents but to ensure that they stick in place. In this paper I use examples from the NZ context to argue for an explicit focus on rent as a political strategy for reawakening regions as regions rather than surface for accumulation. Geographic rents, the value that can be added and extracted because activity is carried out here 'here' rather than 'there', are at the heart of regional development. They are products of a complex social architecture of capability, endowments, rule making, qualification, connectivity, and provenance. These rents are a collective asset but privately appropriated. Rather than dismissing rent as unearned income and negative, I ask whether rent offers a more redistributive and inclusive development narrative for a post-free trade world by interpreting it as a return on (and to) place, embracing it as positive, and highlighting its collective ownership? Does it offer a conceptual platform for reawakening regions and re-engaging development agents of all forms in more meaningful conversations?

FUNCTIONAL POLYCENTRICITY AND URBAN NETWORKS OF KNOWLEDGE COLLABORATION WITHIN AND BEYOND THE YANGTZE RIVER DELTA REGION IN CHINA

Yingcheng Li, University College London, United Kingdom
Nicholas Phelps, University College London, United Kingdom

While sharing an interest in the economic functionality of intercity linkages, recent studies on urban polycentricity and megalopolitan urban forms have paid relatively little attention to the defining features of megalopolitan forms – their being the 'hub' that links national to international urban systems and the 'incubator' within national urban systems. In light of this, this paper measures and explores how the functional polycentricity of China's Yangtze River Delta (YRD) megalopolis at different geographical scales has evolved from an intercity knowledge collaboration perspective. Here scientific knowledge collaboration and technological knowledge collaboration are distinguished with data drawn from the Web of Science and the World Intellectual Property Organization databases respectively. In general, knowledge collaboration of the YRD megalopolis can be seen as functionally polycentric at the megalopolitan scale but this functional polycentricity decreases with increases in the geographical scale at which interurban linkages are considered. Furthermore, the results of a multi-scalar analysis show that the structure of scientific knowledge collaboration as reflected by co-publications has been 'nationally connected but locally and globally disconnected' while the structure of technological knowledge collaboration as measured by co-patents has been 'globally connected but locally and nationally disconnected'. Notwithstanding this difference, the structures of both scientific and technological knowledge collaboration suggest that the gateway role of the YRD megalopolis in knowledge collaboration will take time before it is fully realized.

THE CONTINUED NEED FOR INNOVATIVE, CREATIVE AND ENTREPRENEURIAL LEADERSHIP OF PLACE: THEORISING URBAN AND REGIONAL LEADERSHIP IN THE FUTURE

Joyce Liddle, IMPGT, Institute of Public Management and Territorial Government, France

Brexit is but one external force creating a demand for greater levels of innovative, creative and entrepreneurial leadership of places; some others include austerity (in the UK, at least), globalization

and systemic shocks; poor productivity and need for enhanced performance, growing citizen expectations and an iPod generation demanding immediacy; technological and demographic shifts; lack of trust in politicians; no 'one size fits all' solutions; relational governance with plural partners; need for sustained learning; and continuous vigilance of the media. Undoubtedly Brexit will highlight even more the need for innovative solutions and strategies to solve urban and regional problems, despite the uncertainty on how leadership in different places might be affected. Entrepreneurial & Innovative Place Leadership will be a significant factor in how states seek to reduce overall public deficits and find ways of solving some 'wicked issues', as Brexit follows many years of de-industrialisation of urban and regional localities, and an ongoing context of financial constraints/austerity. Place leaders are often pioneers who venture into unexplored territories and unfamiliar destinations (Sotaurata, 2016) and the social and economic turmoil created by Brexit will continue to heighten intra and inter place competition for scarce resources and create uncertainty and instability.

In this session I will update colleagues on prior and future development of the RSA Urban and Regional Research Network, which most recently met in Aix-Marseille (October 2016) and will meet either in MMU, Manchester or Open University Regional Office Belfast in late 2017/early 2018. The network has been successfully organized at various venues since 2010, and convenors anticipate extending its lifetime even further applications for funding and increased research outputs.

A MULTIPLIER EVALUATION OF PRIMARY FACTORS SUPPLY-SHOCKS

M. Carmen Lima, Universidad Pablo de Olavide, Spain

M. Alejandro Cardenete, Universidad Loyola Andalucía, Spain

Ferran Sancho, Universitat Autònoma Barcelona, Sri Lanka

Demand-side multipliers have ruled within multisectoral models as the main indicators for policy effectiveness and key-sector determination. The causal link between new exogenous final demand and responded endogenous total output is well understood and has been the basis for such a prevalent demand-side analysis both in linear interindustry analysis and in non-linear applied general equilibrium models. In this paper we shift the perspective to supply-side injections and we do so by studying the repercussion effects of marshalling additional primary factors, labor and capital services, which are injected into the economy and give rise to a general resource reallocation. As a result, we obtain estimates of supply multipliers that provide complementary information to standard demand multipliers. We illustrate the methodology using an empirical general equilibrium model built with the most recent data for the region of Andalusia, Spain.

ECONOMIC WELL-BEING, INEQUALITY AND SUBJECTIVE WELL-BEING: EVIDENCE FROM RUSSIAN MACRO-REGIONS

Leonid Limonov, ICSEER Leontief Centre, Russia

Marina Nesena, ICSEER Leontief Centre, Russia

The relationships between income level, inequality and subjective well-being have been studied for a number of years by many researchers, including very famous ones: J.E. Stiglitz, A. Sen, R.Easterlin, A.Alesina etc. Still there are very few attempts to study these relationships within Russia. Thanks to the opportunity provided by the European Social Survey (ESS) we have the dataset with more than 10 000 answers to the survey question about "happiness". We use 4 rounds of ESS split by Russian macro-regions. We analyze the statistical relationships between individual subjective well-being of

respondents and their socio-demographic data combined with macro data on economic well-being and inequality level by macro-regions of Russia. We consider the happiness as a latent variable and use ordered probit regressions for estimation of these relationships. We have not confirmed the “Easterlin paradox” which suggests that society’s average level of happiness is not linked to its economic development. Instead we have found that in Russia there is positive relationship between economic well-being and subjective evaluation of happiness. Similar result was revealed for the relationship between inequality level and subjective well-being. We explain these results by the fact that in Russia richer regions have higher level of inequality. Obtained findings were compared with other studies in cross-country sample, Europe and the US.

THE NEW SEASON OF STRATEGIC PLANNING IN ITALY: CHALLENGES AND OPPORTUNITIES IN A CHANGING INSTITUTIONAL AND PLANNING CONTEXT

Valeria Lingua, University of Florence, Italy

Important changes are occurring to the Italian planning system and practices following Law 56/2014 and the recent negative result of a national referendum, concerning a constitutional reform aimed to reorder the traditional institutional levels by abolishing provinces and merging small municipalities. At the moment, these attempts of "reorganization" of the institutional architecture concern the transformation of all provinces in second level institution, with non-elected assemblies and a reduction of their competencies; the replacement of provinces who insist on 14 major regional capital cities with "Metropolitan cities", joint city-governments charged to provide for a strategic plan, concerning the metropolitan region; the amalgamation of municipalities with a population of up to 5,000 inhabitants.

Of course, the need of co-operation on strategic issues is not new in Italy: institutions have an old history of working together to address planning issues across local boundaries. Nevertheless, the questioning on the role of provinces and the emergence of cooperation as a duty certainly pose some questions concerning the redefinition of planning spaces and responsibilities, the role of previous planning activities, the access to the cooperative arena, the need for regional design practices.

By providing a better understanding of the way spatial planning is changing in Italy, the contribution aims to contribute to develop a deep reflection on the adaptation of planning tools and processes, as well as on the role of regional studies and design in defining the urban region, its spatial development and its articulations in different ways at various spatial scales and with varying effects.

LANDSCAPE POLICY INTEGRATION. CONCEPTUALIZING A KEY MEASURE OF THE EUROPEAN LANDSCAPE CONVENTION

Gerd Lintz, Leibniz Institute of Ecological Urban & Regional Development, Germany

Landscapes are important for urban and regional development; equally important is landscape governance. The European Landscape Convention (ELC; CoE 2000) can be seen as a milestone in landscape governance. Not only does it firmly establish the term ‘landscape policy’ (Art 1), it also explicitly demands the integration of landscape into a range of relevant policies (Art. 5).

However, as is the case with other innovative aspects of the ELC (Conrad, Christie and Fazey 2011), there are many unanswered questions regarding Landscape Policy Integration (LPI). How does it work? What are the factors influencing success? How can integration be defined?

Here we can make use of research on the established and more general field of Environmental Policy Integration (EPI; e.g. Runhaar, Driessen and Uittenbroek 2014, Jordan and Lenschow 2010). The literature on EPI deals precisely with these kinds of questions thrown up by various environmental policies (e.g. climate policy integration), many environmentally-relevant economic policies (e.g. integrating environmental aims into transport policy) as well as decision-making at various politico-administrative levels.

Drawing critically on the EPI literature, the paper aims to elaborate elements of a concept of LPI at the urban and regional level based on the identification of specific characteristics of landscape policy. This is not a trivial task given that landscape is a 'complicated idea' (Thompson, Howard and Waterton 2013). In the end, landscape policy needs to be defined as a part of a system of environmental, economic and spatial policies relevant for LPI.

ECONOMIC CONSEQUENCES OF BREXIT AT A NATIONAL, REGIONAL AND SECTORAL LEVEL

Katerina Lisenkova, University of Strathclyde, United Kingdom
Graeme Roy, University of Strathclyde, United Kingdom
Peter McGregor, University of Strathclyde, United Kingdom
Gioele Figus, University of Strathclyde, United Kingdom
Kim Swales, University of Strathclyde, United Kingdom

Over the long term most economists predict that the decision to leave the EU will have a negative impact on trade, labour mobility and investment. To date studies have concentrated on the UK as a whole. At the same time, they have tended to focus on the aggregate economic impact, with little assessment of the different impacts by sector. This paper closes this gap by providing an inter-regional and multi-sectoral analysis of Brexit on Scotland and the rest of the UK.

To undertake this analysis we examine the geographical pattern of Scottish international exports and identify the sectors most exposed to any changing trading relationship with the EU. We then make use of an inter-regional macroeconomic model of Scotland and the rest of the UK to examine the long-term impact on the Scottish economy.

Our conclusion is that under all modelled scenarios, Brexit is predicted to have a negative impact on Scotland's economy. After 10 years, a reduced level of trade is expected to result in Scottish GDP being between 2% and 5% lower than would otherwise be the case. The range of impacts is driven by the nature of any post-Brexit relationship between the UK and the EU – the stronger the economic integration with the EU, the smaller the negative impact.

Our modelling suggests that ultimately, the size of the relative impact by sector depends on a complex interplay between the EU-export intensity of sectoral sales and how responsive particular sectors are to changes in competitiveness.

THREATS AND OPPORTUNITIES: A ROLE FOR TOURISM IN THE RECONSTRUCTION OF REGIONAL IDENTITY IN BREXIT BRITAIN

Stephen Little, Asia Pacific Technology Network, United Kingdom

In the UK both government and opposition are developing industry policies directed at the lagging regions of the country. Under the rubric of 'new localism' and of 'Northern Powerhouse' and 'Midland

Engine' smart specialisation is being promoted to re-energise the regions at the heart of the first and second industrial revolutions.

This rhetoric was developed by central government as an answer to an increasing 'north-south divide'. Following the EU referendum, awareness of the disaffection of these former industrial heartlands has given added impetus to this project, The proposed devolution of policy- making powers to the directly elected mayors of new city regions has been re-emphasised. Two of these regions exemplify the tensions created by a divisive national vote.

Liverpool and Manchester are electing mayors in May 2017. Both the regions contain a core city which voted for continued membership of the EU, surrounded by metropolitan boroughs which voted predominantly to leave. The nativist and isolationist aspects of the successful but divisive leave campaign compromised these internal city brands and contaminated their external brands.

This new layer of governance is faced with several challenges. From 1979 onwards neoliberal central policies have eroded the traditional civic identities and capacities established throughout these conurbations during the nineteenth and early twentieth centuries. In addition the 2010 coalition government emphasised localism and oversaw the dismantling of regional development agencies leading to the danger of sub-optimisation from local competition over limited resources.

Tourism based on contemporary and heritage aspects of these cities has a role both in repairing the damage to regional brands and in developing a robust understanding of the history and future of these conurbations grounded in both 'internal tourism' and an acknowledgement of place for inhabitants and incomers.

MULTI-LEVEL COHERENCE IN REGIONAL INNOVATION POLICIES FROM A UNIVERSITY PERSPECTIVE

Siep Littooi, Saxion University of Applied Sciences, The Netherlands

This paper aims to assess three regional innovation policies against the potential for Saxion UAS to participate and to benefit.

Saxion University of Applied Sciences is located in Eastern Netherlands where at city, region (NUTS3) and greater region (NUTS2), stakeholders have set directions for inspired innovation policy. Leading stakeholders were inspired by possibilities of European and national policy instruments. Multi-year and multi-actor processes have played out from 2015 through 2017. Each of three governance levels has now set up a collaborative agreement followed by the formulation of projects in order to attract funding. The regional innovation strategies now evolve towards collaborative multi-stakeholder policies but have limited multi-level coherence.

A process of engagement with stakeholders including Saxion UAS has led to establishment of joint policies that together equate to Regional Development Platforms (RDP), as elaborated by Harmaakorpi et al (2011). RDP policies organize along dimensions of proximity and distance to generate innovations. The paper studies current regional policies through the lens of the RDP framework. Comparing the scope and resources of each level, whether NUTS2, NUTS3 or city level, will provide insights into the policy opportunities for regional actors. Three specific policy agreements will be studied to observe the policy features and to compare the three different levels. The Saxion institutional strategy is then compared to the RDP policies. Conclusions on the potential for Saxion UAS will present different opportunities included in the policies, as well as showcase inputs that Saxion UAS may give to the regional development objectives set forth.

THOUGHTS AND COUNTERMEASURE OF TARGETED POVERTY ALLEVIATION BASED ON THE SYNERGETIC DEVELOPMENT OF ECOLOGY AND CULTURE IN THE CONCENTRATED POVERTY-STRICKEN AREA IN YANGTZE RIVER ECONOMIC BELT: A CASE STUDY OF XIANGXI IN HUNAN PROVINCE, CHINA

Chunla Liu, Hunan Normal University, College of Resource and Environment Science, China

Min Li, Institute of Socialist Core Values, Hunan Normal University, China

Bingeng Xie, Department of Resources and Environment Science, Hunan Normal University, China

Chuxiong Deng, Department of Resources and Environment Science, Hunan Normal University, China

Xiangxi autonomous prefecture is a significant node on ecology and culture in Yangtze River economic belt, also is the locus of state-level poverty-stricken regions, state-level eco-compensation demonstration regions, and state-level cultural and ecological protection experimental regions. In this study, we firstly analyzed the background and feasibility of boosting targeted poverty alleviation based on the synergetic development of ecology and culture in Xiangxi, then analyzed the state of boosting targeted poverty alleviation based on the synergetic development of ecology and culture in Xiangxi, at last proposed some thoughts and countermeasures, such as study and construct balance sheet of ecology and culture in Xiangxi, innovate the mechanism of targeted poverty alleviation based on the synergetic development of ecology and culture, explore targeted poverty alleviation mode of “ecology plus culture and big data” in Xiangxi, construct the industrial system based on synergetic development of ecology and culture in Xiangxi, and produced some model villages and towns. We wish this study can make some references for the targeted poverty alleviation works in Xiangxi and Yangtze River economic belt’s concentrated poverty-stricken areas.

RELATEDNESS AND THE INNOVATION: THE ROLE LOCAL AND EXTERNAL KNOWLEDGE

Alessia Lo Turco, Università Politecnica delle Marche, Italy

Daniela Maggioni, Università di Venezia, Italy

We explore the role of local intra- and extra-regional product-specific capabilities in fostering the introduction of new products by firms active in the Turkish manufacturing sector. We model firms’ product additions to their product basket as dependent on extra- and intra-regional knowledge. Firms’ product space evolution is characterised by strong cognitive path and place dependence. Technologically related intra-regional knowledge spillovers and firm internal capabilities appear as the only important drivers of new products additions vis-à-vis extra-regional knowledge spilling from imported inputs and foreign firms. However, when focusing on new products never produced before in the region, that is regional “discoveries”, external related knowledge spurring from foreign firms active in the same location as the innovating firm significantly matters. We interpret this finding as dependent on the higher level of product complexity which characterises regional “discoveries” with respect to goods already produced in the region. Finally, when we account for the level of complexity of new products, we find that technologically related capabilities accruing from foreign firms active in the local market are fundamental in fostering the introduction of new products with a high complexity level whereas low complexity goods are spurred by proximity to domestic and firms’ internal knowledge. Production capabilities transferred by foreign firms have, then, contributed to further stimulate production upgrading in some core regions, but at the same time they have also represented a key element for a possible structural break in less developed regions, even if Eastern regions are mainly excluded from this process.

DE/RE-CENTRALIZATION AND REGIONAL POLICY IN CENTRAL AND EASTERN EUROPE: AN INSTITUTIONALIST APPROACH TO REGIONAL INEQUALITIES

Bradley Loewen, Czech Republic

The issue of decentralization in the post-socialist countries of Central and Eastern Europe (CEE) has faded from the research agenda since the reforms of the democratic transition and EU accession periods. Conventionally presented as a global policy goal for supporting local democracy, improved governance and reduced regional inequalities, decentralization has been met with uncertain results in less developed regions. Furthermore, EU Regional Policy, initially supporting decentralization in CEE through the transfer of Western models, has been met with institutional challenges in lagging regions facing various institutional legacies and capacity limitations. Perceived failures of decentralization as well as multiple recent crises point to a trend of re-centralization of regional policy in CEE, on the part of both national and EU levels, potentially exacerbating regional inequalities. Considering a relative lack of knowledge about the relationship between decentralization and regional inequalities in post-socialist countries since EU accession, the cases of Estonia and Hungary examined in this paper illustrate divergent political-institutional paths of development with respect to decentralization processes and their relationships to Regional Policy. At the current crossroads of Regional Policy, where trends of increasing regional inequalities meet programme implementation challenges and growing Euroscepticism, a reconsideration of the decentralization (and regionalization) initiatives that were once elemental to the Europeanization process in CEE may offer a valuable contribution to the Regional Policy reform debate for future programming periods.

NOWCASTING THE SPATIAL DISTRIBUTION OF HOUSEHOLD INCOME INEQUALITY IN IRELAND

Jason Loughrey, TEAGASC, Ireland

Cathal O'Donoghue, College of Arts, Social Sciences & Celtic Studies, NUI Galway, Ireland

Paul Kilgarriff, University College Cork, Ireland

David Meredith, Teagasc Rural Economy and Development Programme, Teagasc, Ireland

The spatial distribution of income is the subject of increasing concern to Irish society in the aftermath of the severe economic recession from 2007 to 2012. While much information is publically available regarding the labour market and household income at the regional level, there remains scope to further illustrate the current spatial distribution at the local level and its evolution over recent times. Local level analysis is motivated by the presence of significant income inequalities within and between individual cities, counties and regions. In this paper, we describe methodologies that can be used to nowcast the spatial distribution of household income inequality at the local level in Ireland. Nowcasting involves the extrapolation of recent data to estimate the current situation. We apply our nowcasting model to the intercensal period from 2006 to 2011. Data from a number of alternative sources are utilised including the Irish component of the Survey of Income and Living Conditions (SILC), the Small Area Population Statistics (SAPS) from the 2006 and 2011 Censuses of Population and quarterly earnings and employment data from the Central Statistics Office. We apply a model of the tax-benefit system in Ireland to produce estimates of household disposable income. Our results show that overall inequality in disposable income declined during the period, reflecting falling earnings at the top of the distribution and a more redistributive tax-benefit system. We decompose the income inequality into inter and intra-district components and find that the inter-district component increased in importance during this time.

HOW COLLABORATIVE INCENTIVES IN CLUSTER POLICIES INFLUENCE THE STRUCTURAL ROLE OF SMES IN REGIONAL INNOVATION SYSTEMS: A NETWORK-BASED ANALYSIS OF AEROSPACE VALLEY IN TOULOUSE - FRANCE (2005-2015)

Delio Lucena, IEP/LEREPS - University of Toulouse Capitole, France

Jérôme Vincente, LEREPS, University of Toulouse – Sciences-Po Toulouse, France

One of the main reasons of the development of cluster policies relies on the growing awareness that network failures have to be merged with traditional market ones in the design of public incentives to foster innovation. Cluster policies aim at strengthening knowledge networks through R&D collaborative incentives in order to stimulate the expected benefits of knowledge spillovers. They rely on two related network failures. (i) The potentialities of knowledge spillovers from science to industry can be inefficiently exploited due to the cultural divide between the two communities. (ii) Entrepreneurship matters in clusters. Their performance can be assessed by SMEs and spinoff birth and entry. The aim of this research is to go more in depth into these policy guidelines, by offering an original view of dealing with the links between the implementation of these public collaborative incentives and the resulting structuring of clusters. We will focus on the Aerospace Valley cluster in Toulouse – France, over a 10 years-period (2005-2015). Our basic starting assumption is related to the fact that in spite of their control on the selection of R&D collaborations at the micro-level, cluster policy practitioners cannot have a perfect control of the structure as a whole. In network theories, these micro-macro scales problems is typical: the “macro-behavior” of the network and its structural properties, both resulting from the aggregation of ties built by agents, largely escape their own intention. Since clusters are networks, such a research can be useful to highlight the strengths and weaknesses of cluster policies.

THE TECHNOLOGY SHIFT THESIS: UNDERSTANDING GROWTH AND TRANSFORMATION IN A REGIONAL SYSTEM

Karl-Johan Lundquist, Lund University, Sweden

Lars-Olof Olander, Lund University, Sweden

Mikhail Martynovich, Lund University, Sweden

In this paper we examines the long run economic growth and productivity performance of regions and how this relates to different phases of structural change and economic adaptability in different part of a national regional system.

Firstly, we suggest a theoretical ‘systemic’ approach for analyzing long term regional economic growth and transformation. Special emphasis is given to radical technology shifts and their effect in time and space, such as lead-lag relations between industries and regions leading to divergence and convergence in regional growth as consequences of technological change, market integration and economic growth. We hypothesis that technology shifts in combination with industry structure and the existing hierarchy of regions will put strong restriction on what can be achieved in terms of transformation and growth for single regions in specific time periods but also on how interdependency in a regional system evolves over time.

Secondly, in the empirical work, based on detailed analysis of the Swedish regional system 1985-2008, we show that the technology shift have targeted various part of the regional system at different points of time setting the overall average agenda for structural change, productivity development and growth for different levels of the regional system. Further on we have found that regions belonging to different level of the hierarchy tend to follow different “growth corridors” giving the basic

precondition for regions to take advantage or not of the impact from the technology shift. Finally we have identified outliers and unexpected idiosyncratic regional growth trajectories calling for further in-depth research.

REGIONAL ATTRIBUTES ASSOCIATED WITH YOUTH SCHOOL ENROLMENT IN BRAZIL

Luciana Luz, CEDEPLAR - Universidade Federal de Minas Gerais, Brazil
Pedro Amaral, Cedeplar-UFMG, Brazil

In this paper we evaluate the regional attributes associated with school enrolment for youth between 15 and 17 years old in Brazil using a spatiotemporal approach. School enrolment for this specific age group is far from ideal in Brazil. Although access to school is almost universal for children aged 6 to 14, enrolment rates for youth were 82.6% in 2014 (Inep, 2015). In spite of the recent gains in enrolment rates for this age group, their school participation is marked by high age grade mismatch.

The effect of socioeconomic and individual characteristics on enrolment rates are well documented in the literature. In addition to these well know determinants, we look at the influence of regional characteristics and the effect of neighbouring and urban hierarchy over enrolment rates at a municipal level for years 1991, 2000 and 2010. We assess the stability of the coefficients over time, thus analysing the evolution of the degree of influence of each one of the factors.

PLAYGROUND OR PICTURE: VALUING COASTAL AMENITIES

Ronan Lyons, Department of Economics, Trinity College Dublin, Ireland
Tom Gillespie, NUI Galway, Ireland
Stephen Hynes, NUI Galway, Ireland

Coastlines provide numerous valuable ecosystems and recreational goods and services. When placing a value on coastal amenities more consideration is given to the provisioning services such as fisheries and aquaculture rather than cultural ecosystem services that they provide, for example, aesthetic values. The aim of this paper is to determine the effect of the coastline on house prices, thereby estimating values for various coastal attributes based on their proximity to the house and also if the house has a view of the coastal feature. This methodology for environmental valuation is known as hedonic price modelling. The paper investigates if people value having a picture of the coast via a window in their house more than having direct access to the coast for recreational purposes. The analysis uses a rich dataset from daft.ie which has over 2.5 million observations for sales and lettings in Ireland since 2006. The paper also uses GIS modelling to determine distances to coastal features as well as 3D spatial modelling techniques to determine a houses' view of the sea.

EMERGING FRONTLINES OF UNEVEN DEVELOPMENT UNDER POSTSOCIALISM: GOVERNING REPRODUCTION OF BRATISLAVA'S URBAN WATERFRONT

Branislav Machala, Charles University Prague, Czech Republic

This paper addresses the transforming geography of the urban waterfront in Bratislava. The theoretical framework of the analysis is positioned within the debates on uneven geographical development; the role of megaprojects in urban waterfront transformations; and urban restructuring under postsocialism. Tracing the glocal political-economic conditions and the key impulses of the

decision-making process, the paper uncovers the nature of waterfront transformations that reshape this frontline of capital fixities. The temporarily fixed circuits of capital are materialized on the waterfront through localization of a transnational circulation of 'star-architecture' and large-scale urban development projects. The paper focus on the role of key institutions and the decision making process in transforming pathways of the industrial port area and surrounding large urban development projects that are expected to deliver a new panacea for local urban futures. However, by focusing on the nature of decision making process the paper points at lacking ties between the key strategic and land-use documents which contributes to the dominant role of the private capital accumulation over wider public interests and weakens horizontal spatial linkages within the urban region. This path therefore increases limitations of the positive spillovers from the waterfront redevelopment for the benefits of the whole urban region.

IN WHAT SENSE A REGIONAL STRATEGY? UNPACKING THE NORTHERN POWERHOUSE

Danny MacKinnon, CURDS, Newcastle University, United Kingdom

Since its Manchester launch in June 2014, the Conservative's Northern Powerhouse initiative has proved politically influential in framing the policy debate on regional development in England, triggering copycat initiatives from other regions. Couched in the entrepreneurial language of cities and regions as growth machines, the proliferation of these labels reflects regional actors' efforts to gain central state recognition and finance in a climate of fiscal austerity. In particular, the Northern Powerhouse seeks to pool the strengths of Northern city-region to articulate and mobilise a pan-regional brand identity in order to compete in international markets. It can be seen as a form of 'soft space' of governance and economic development at the pan-regional scale, focusing attention on how it articulates with formal spaces of sub-national governance. The paper assesses the broader significance of the Northern Powerhouse in the context of the overarching discourse of spatial rebalancing and the failure of previous rebalancing initiatives. In essence, it argues that the Northern Powerhouse is a political and state project concerned with the political framing and management of uneven development rather than a conventional economic initiative designed to address regional inequalities. This is part of a wider hegemonic project of actively reproducing political authority and consent in northern England in the context of entrenched regional disparities, austerity and the concentration of large-scale infrastructure investment in London and south east England.

LOCAL EXPERIENCES OF SPATIAL PLANNING; A SPATIAL JUSTICE INTERPRETATION

Marie Mahon, National University of Ireland, Galway, Ireland

Maura Farrell, National University of Ireland Galway, Ireland

John McDonagh, National University of Ireland Galway, Ireland

Patrick Collins, National University of Ireland Galway, Ireland

Preparations are underway for a new Irish National Planning Framework (NPF, 2017-2040) to replace the failed National Spatial Strategy (NSS) 2002-2020. Emphasis is being placed now on interconnecting spatial planning and sectoral policies, on processes of decision-making that are hierarchical but attuned to the place-specific nature of regional- and local-level development prospects and capacities required to achieve same, and on mobilising communities as the nucleus of place. In the most recent (February 2017) NPF draft document, no explicit reference is made to spatial justice as a desired dimension of spatial planning. There is, however, considerable discussion on the significance of links between spatial planning and outcomes for health, wellbeing and place-making. In light of this new NPF emphasis on achieving potential as opposed to simply growth, this paper uses an example of a

settlement in the hinterland of Galway City and draws on contemporary thinking on spatial justice to reflect on how the local population has experienced the outcomes of spatial planning decisions over the last two decades in terms of everyday lived experiences in that place, particularly following the 2008 economic crisis. It also reflects on the scope to engage in future spatial planning at this local level in ways that are politically and socially enabling; based on enhancing local capabilities rather than on distributive and compensatory forms of governance and development intervention.

STRANGERS IN A STRANGE LAND: EXAMINING THE CONTRIBUTION OF PEOPLE WITH MENA ROOTS ON THE US INNOVATION SYSTEM

Sami Mahroum, Insead, United Arab Emirates

Georg Zahradnik, AIT, Austria

Bernhard Dachs, AIT, Austria

With 322.5 billion USD expenditures on business R&D, the US leads the world in innovation, science and technology. The US a world leader in both inward and outward investment in business R&D. While firms from other countries take their R&D activities overseas in search of diversity and excellence, US firms find these at home. In fact, some 85% US R&D investments are made at home. What US firms have and others lack is the substantial presence of immigrant workers in science and technology (S&T). Various studies by William Kerr and others have estimated that about 25% of US S&T workers are immigrants, accounting since 1995 for much of the net increase in the U.S. STEM workforce. Immigrant S&T workers make up around 25% of total US R&D workforce and enable US firms to benefit from a deeper and broader talent pool without the necessity of going overseas. This gives US firms a unique comparative advantage over competitors in other locations. In fact, one of the main reasons for foreign firms from Europe, Japan, and the emerging economies to invest in US R&D is the quality of its R&D personnel. For example, the US had eight times more patents filed (194,600) by an immigrant between 2000-2010 than Germany (25,300), which comes second after the US globally in this respect. Depending on discipline, anywhere between 24 and 80% of PhD scientists and engineers employed in the US are foreign-born. In 2009, 60% of these came from Asia. While the contribution immigrants of Chinese, Indian and Latin American background to US innovation have been already investigated in a number of studies by Kerr et al., no studies has been undertaken to examine the contribution of people from the Middle East and North Africa to the US innovation system. Matching 2500 Middle Eastern and North African (MENA) specific first names with patent documents from the World International Property Organization (WIPO), we were able to gain a good perspective on MENA inventors in the US innovation system. We use patent documents filed under the Patent Cooperation Treaty (PCT) by the World International Property Organization. The PCT allows firms and individuals to protect their inventions simultaneously for a large number of countries by filing a single PCT patent application instead of applying at various national patent offices. PCT currently includes 145 contracting states. We present unique findings on the extent and distribution of MENA inventors in terms of technology sector, firm and geography.

ENTREPRENEURIAL ECOSYSTEMS AND THE EVOLUTION OF DYNAMIC REGIONS

Edward Malecki, The Ohio State University, United States

Entrepreneurship is understood to take place in localities or regions, drawing on local resources, institutions, and networks. Regional variations within nations persist, even in the current flush of interest in entrepreneurial ecosystems. I argue that an entrepreneurial ecosystem is a dynamic regional environment, comprised of many relationships, flows, and interactions within and outside

the region. The paper reviews and builds upon both early and recent studies that do not use the term ecosystem but highlight the mechanisms, institutions, networks, and cultures within what have been called environments for entrepreneurship or innovative milieux. Entrepreneurship remains primarily a local/regional event, drawing on distant resources and global links when necessary. The principal objective of the paper is to build a framework for understanding entrepreneurship within the context of local and regional development. Accordingly, the principal question is: how do entrepreneurial ecosystems fit within broader processes of regional development? This prompts a methodological question: how can we learn how and why entrepreneurship emerges and evolves in particular places?

THE ROLE OF ORGANISATIONAL DIVERSITY AND PROXIMITY FOR INNOVATION IN PERIPHERAL REGIONS OF SPAIN AND PORTUGAL

Pedro Marques, INGENIO, Spain

Research on innovation has helped to shed light on how firms and other organisations establish networks that allow them to share knowledge and generate new ideas. However relatively less attention has been paid to the internal dynamics within firms, particularly the interaction between different specialisations and knowledge bases. This is particularly true in the context of post-Fordist theoretical approaches, which tend to assume that specialisation, rather than diversification, is the key to innovation. This research project will use the emerging concept of combinatorial knowledge bases as a way to analyse how diversity contributes to the initiation, development and deployment of innovation in organisations. This concept distinguishes between analytical (science-based), synthetic (engineering-based) and symbolic (aesthetic-based) knowledge bases and argues that in any given context all three make important contributions to the development of new products and processes. This project will also link with research on organisational studies, to add the importance of management strategies and the creation of opportunities for ‘unstructured technical dialogue’ between knowledge bases.

Though the aim is to emphasise the relevance of internal firm dynamics, it is still necessary to understand how these dynamics interact and benefit from external links. These links are of special importance for smaller, more specialised firms, who need external collaborations in order to access new knowledge. Because this research project is concerned with firms in peripheral regions, where they are less likely to benefit from an innovative, dynamic environment, it will question how firms can develop proximity with partners located elsewhere and what the impact is of these connections.

STRUCTURAL CHANGE AND PRODUCTIVITY GROWTH IN CITIES

Ron Martin, University of Cambridge, United Kingdom

Peter Sunley, Southampton University, United Kingdom

Ben Gardiner, University of Cambridge & Cambridge Econometrics, United Kingdom

Emil Evenhuis, University of Cambridge, United Kingdom

It is now widely acknowledged that structural change is integral to the process of economic growth and the evolution of capitalist development. Given the veritable explosion of interest in recent years in cities as ‘engines’ of wealth creation, trade, innovation and creativity, the issue of structural change would seem highly relevant to understanding the evolving economic performance of cities, particularly given the ongoing debates over structural specialisation versus diversity. This paper examines the differing productivity growth paths of some 85 British cities since the beginning of the 1970s, and explores how far these paths reflect differences across cities in the pace and nature of

structural change. We first find evidence that while productivity tended to converge across cities between 1971-1991, thereafter convergence ceased and was replaced by weak divergence. The paper then analyses the extent and nature of structural transformation in the various cities, using particular measures applied to 82 sectors of activity, between 1971 and 2014. We find evidence of considerable structural convergence across cities and a general tendency for the degree of specialisation to fall. This then leads to a decomposition analysis which identifies the relative contribution of within-sector and between-sector (sectoral re-orientation and relocation) effects to city productivity growth. The analysis reveals that within-sector productivity developments outweigh structural change in accounting for differences in productivity growth across most cities. As such, the paper raises questions over the importance often assigned to specialisation as a motor of city growth, and points to the role of city-specific factors that influence the growth performance across most of a city's sectors.

REGIONAL POLICY FROM NATIONAL STRATEGY TO EU BARGAINING FRAMEWORK. WHAT HAS BEEN LOST IN TRANSLATION

Flavia Martinelli, Università Mediterranea di Reggio Calabria, Italy

Regional development policies were born at the national institutional level, when intra-national spatial inequalities became acknowledged. In Europe, structured regional policies – and agencies – came into being after WW2. Among the first countries that explicitly addressed intra-national territorial divides and established regional development agencies and programmes were Italy with the Cassa per il Mezzogiorno (1950), France with the DATAR (1963) and the UK with its Regional Development Agencies (1970s), albeit debates had started even earlier. Regional policies were thus a national concern and were centrally engineered, in the context of the broader national development strategies of the Keynesian state. Significant national resources were allocated and the main actors were national (the central government, national corporations, state holdings, national unions, etc.).

With the Single European Act of 1986 and the launch of both the Single European market (with its corollaries of competition, liberalisation and deregulation) and Cohesion Policy, regional policy ceased to be a national prerogative – as it was deemed 'unfair' competition – and was up-scaled into an EU-wide funding scheme – based on the reformed Structural Funds – meant to aid the weakest firms, institutions and territories within the Union. Regional development policy was thus re-articulated between the EU level, which provided regulation, funding and strategic priorities, the national level, which was to ensure co-funding and strategic contextualisation, and – most importantly – the regional or local level which was the key scale of action.

By then, analyses of regional dynamics had lost the multi-scalar approach of critical political economy, which saw regions – and regional disparities – as interconnected components – and results – of the overall capitalist development model. The EU discourses about subsidiarity and a 'Europe of regions', together with the emerging myth of industrial districts, innovative regions and endogenous development, had shifted the attention onto the 'local' level. Regions – now local areas* – were no longer inserted in national and international dynamics, but had to compete with each-others – as monads in a global world – on the basis of their endogenous resources and comparative advantages.

In the context of the above-sketches evolution of regional analysis and policy in the last 70 years (with special reference to Italy and the UK), this paper focuses on scale, the relations among different levels of governance, and what has been 'lost in translation' in the shift from the Keynesian state and its national regional policies to the EU neo-liberal regulatory framework and its Cohesion policy architecture. I will argue that: i) albeit a multi-scalar approach is in principle retained, as member

states are formally in charge of drafting national plans consistent with the EU guidelines, which should act as reference frames for local actors, it is eminently the latter that are entrusted with formulating strategies and bid for resources; ii) such a funding and policy architecture, in line with the 'competitive' approach of the EU, not only pits localities against each other, but tends to reproduce the existing asymmetric power relations and social and territorial disparities, as actors and places are differently endowed with social, entrepreneurial and political power.

The blind trust in the local – as the best level to ensure efficient, democratic and self-determined agency – has not brought about the postulated effects, as in many places, negative cumulative causation mechanisms have not been reversed and the sum of many local strategies has not materialised in a coherent overall strategy. Without being nostalgic about the nation-state, the current absolute faith in the local appears ill-placed. Recovering a multi-scalar perspective to assess regional development processes is in order, together with a dispassionate reflection on the appropriate level for regional policy governance.

REGIONAL INEQUALITIES AND UNBALANCED DEVELOPMENT IN BRAZIL: DIFFERENT APPROACHES AND RECENT TENDENCIES

Humberto Martins, Universidade Federal de Uberlândia, Brazil

The paper analyses the regional inequalities in Brazil, an important topic in economic literature and public policy, as they have marked Brazilian economy since its formation.

We search to identify the main approaches in the literature and trends of economic activity at subnational level, using both literature review and secondary data.

First we discuss the differences between the concepts of 'regional concentration' and 'regional inequalities', identifying both as key concepts, which correspond to two different approaches. These two approaches have been largely used in the economic literature, constituting the two main traditions in Brazilian regional studies. We argue that, although there are important differences between these two perspectives, in some aspects they are complementary and the joining of both in regional studies is not only possible, but also useful.

Then the analysis goes to the evolution of economic indicators, such as GDP and employment, at Brazilian regions and states, focusing on the period 1970-2010. The data is analysed in a qualitative perspective, searching to relate the trajectory of the indicators to the national economic growth and to the phases of Brazilian economy. We also try to explore some links of regional economic inequalities with economic growth and development at national level, as well as with social inequalities.

Finally, we discuss the tendencies of regional inequalities in a context of crisis in which the policy responses consist in a key question.

ARE GRADUATE START-UPS HIDDEN DRIVERS FOR REGIONAL GROWTH?

Chiara Marzocchi, MIOIR - University of Manchester, United Kingdom

Fumi Kitagawa, University of Edinburgh Business School, United Kingdom

Local competitive strength drives differences in university spin offs (USOs) generation within diverse spatial configurations. It has been noted that less competitive regions engage more in USOs activities (Zhang et al., 2016). As well as reflecting the local availability of economic resources, the chances to

become an academic entrepreneur also relate to the convenience of employment options (Horta et al., 2016). Thus, the territorial differences in terms of opportunities which are in turn driven by the institutional context exert an influence on the entrepreneurial choices stemming from universities' entrepreneurial activities. The aim of this paper is to broaden such analyses and consider the relationship between graduate start-ups and regional institutional configurations. More specifically, we investigate how the latter affect the direction of entrepreneurial capital generated by universities. By combining data from the Higher Education Business Community Interaction survey with local data drawn by the UK Office for National Statistics for the years between 2007 and 2015, this work will look at the UK regional contexts by focusing on the differences between England and the devolved regions of Scotland, Wales and Northern Ireland. We examine the relationship between graduate entrepreneurial outcomes across universities in relation to the regional frameworks they are embedded in. In particular, the paper aims to understand how the availability of resources at the regional level (such as business structure, access to finance, and employment opportunities, e.g.: Smith et al., 2014) influence business creation and employment at the graduate level. In doing so, the paper will reflect on the recent policy initiatives on entrepreneurial activities by university students and recent graduates, and their impact on regional competitiveness according to different institutional and spatial contexts.

POLICY MIXES FOSTERING REGIONAL CAPACITY IN LOW CARBON ECONOMY. INSIGHTS FROM THE IMPLEMENTATION OF THE RIS MODEL IN PERIPHERAL EUROPEAN REGIONS

Cristian Matti, Copernicus Institute of Sustainable Development - Utrecht University & Climate KIC, The Netherlands

Julia Panny, Climate KIC, Belgium

This study provides evidence on the application of a regional policy model through a portfolio of actions to support entrepreneurship and development of professional competences. For doing so, we analyse the capacity building process delivered through the EIT RIS Climate-KIC programme in the context of peripheral European regions. In the context of the EIT RIS those are defined as the ones showing innovation performance below the EU average according to the European Innovation Scoreboard .

Emphasis is put on the alignment of multiple stakeholders with existing regional innovation plans such as Smart Specialisation Strategies (S3) by which policy mixes emerge with the purpose of reinforcing synergies and complementarities between EU, national, regional innovation initiatives while developing and activating large-scale "green" projects. The study addresses then the performance of the peripheral regions to improve the knowledge triangle integration. We argue that a variety of mechanisms for public-private collaboration is required to effectively support technological as well as practice-base innovation.

The case of European peripheral regions is a concrete example of the application of policy mixes by considering a variety of regional settings in terms of industrial history and governance configurations. The empirical study is based on the comparative analysis of the results of a portfolio of activities as well complementary interviews to regional policy officers. Results show that the successful alignment between regional priorities and low-carbon economy projects can be explained by how clear is the understanding of horizontal relations between stakeholders to define the long term direction of regional innovation.

PLACE-BASED POLICY AND INSTITUTIONAL CONFIGURATION

Philip McCann, University of Sheffield, United Kingdom

Raquel Ortega Argiles, University of Birmingham City-REDI Institute, United Kingdom

This paper examines the issues associated with implementing place-based regional policy, industrial policy or urban policy within an appropriate institutional set-up. The goals and objectives of different policy regimes may have different spatial implications and the appropriate governance set-up for successfully delivering these policies may therefore differ according to these goals or objectives. These geographical or administrative reconfigurations may be aimed at the exploitation of their endogenous potential or the access to external opportunities such as public funding. In addition, the potential 'levers' available to policy-makers may be conditioned by these institutional settings, such that both the efficacy of the policy objectives and the policy delivery mechanisms are entwined with the governance and institutional arrangements. This has encouraged governmental levels in different OECD countries to seek alternative means and processes of policy design and delivery, in which institutional reconfiguration with or without an established administrative setting is an important component. An improved alignment between policy goals, mechanisms and the needed institutional features to facilitate these goals and mechanisms is now a major theme in many parts of the world: Australia, Europe, South Korea, Japan or Central and South America. This paper examines some of the initiatives and issues arising in different countries which are aiming to improve these different types of policy-institutional reconfigurations and provides insights as to the challenges and possibilities such realignments are permitting.

DISCIPLINING THE STATE: RE-ASSERTING MARGINALISED NARRATIVES IN RESOURCE GOVERNANCE PROCESSES

Jack McCarthy, University College Dublin, Ireland

This research analyses the development of a national agri-environment scheme under the Common Agricultural Policy (CAP) on collectively owned land, or "commonage", in Ireland. The research explores the role of alliance building in reasserting marginalised narratives in the policy implementation process. To this end, analysis is carried out on government policy documents and reports; interdepartmental exchanges; parliamentary testimonies; and media reports of political mobilisation relating to the policy development process. This allows, firstly, for the tracing of the historical emergence of collectively owned land as a differentiated agricultural space. Secondly, it explores how a specific governing device – collective agreements – emerges in national debates as means of organising these spaces. Finally, it allows insight on how alliances emerge between commonage farmers, farm extension professionals, and politicians to lay challenge to the collective agreement element.

This illustrates how marginalised, but capable actors may exploit elements of multi-levelled governance structures to influence state institutions and policy outcomes. The research thus asserts that these alliances are key to effective social and political mobilisation that seeks to discipline policy implementation. However, this process remains bound by predetermined policy frameworks, thus limiting the scope for such alliances to influence the formation of policy. This builds upon territorialisation literatures that conceive of resource governance as a means of organising space through its alignment with transnational goals and regulations, and responds to recent scholarship that seeks to emphasise the productive role of alliances in policy processes.

COASTAL COMMUNITIES ON THE ISLAND OF IRELAND: TOWARDS A STRATEGY FOR ENHANCING RESILIENCE

Linda McElduff, Ulster University, United Kingdom

Our coasts support a range of socio-economic needs and desires including tourism and recreation, fisheries, industry and power generation. Such activities are located within an area continuously subject to change, including shifting environmental parameters (e.g. accelerated erosion), social change (e.g. transient populations), economic instability (e.g. reliance on tourism/fishing), and evolving governance structures and priorities (e.g. introduction of marine planning). This state of flux poses uncertainty in terms of the planning and regeneration of coastal communities long-term, and there are calls for more bespoke interventions which acknowledge the inter-linkages between social (e.g. coastal communities) and ecological (e.g. land-sea divide) systems. In this context, the concept of resilience has increasingly infiltrated contemporary socio-economic priorities and policies. However, there is an evident gap in relation to reconciling resilience thinking with place-specific processes and challenges.

This presentation highlights the need to enhance understandings of coastal resilience and advance a more strategic approach to coastal planning and regeneration. It draws upon empirical research (policy analysis, in-depth semi-structured interviews) carried out across the island of Ireland where a call for more coastal specific interventions can be identified at both the local and regional level. The findings highlight the prevalence of contrasting values, perceptions and interactions and a need for greater understandings of the unique qualities and characteristics of coastal places. Particular emphasis is placed on the shifting roles and responsibilities of the various actors involved. Key recommendations for developing a more holistic vision in securing resilient outcomes for coastal communities are put forward.

IS IT TIME FOR AREA BASED REGENERATION INITIATIVES TO COME IN FROM THE COLD?

Dave McGuinness, Northumbria University, United Kingdom
Paul Greenhalgh, Northumbria University, United Kingdom

The UK has a long post-war history of area based regeneration initiatives (ABIs) which aimed to improve economic, social and environmental conditions in the most deprived communities; and to close the gap with more resilient communities. In the post-war period, there has been an ideological struggle between socio-pathological and structural explanations of deprivation. In 2012, The Work Foundation published a report, which stated that for the first time in 40 years England was without any national framework for regeneration or any dedicated funding stream targeted at England's most deprived communities. This non-intervention approach seems to herald the triumph of socio-pathological explanations of poverty, like the 2008 Policy Exchange report, which suggest ABIs were simply tipping money into a black hole. This paper will consider the impact of academic evaluations of contemporary area based regeneration initiatives and some initial thoughts on the post-regeneration era. Before, reflecting on the impact upon some of the most deprived communities in the country of the policy decision to cease funding for area based regeneration initiatives in England. The paper concludes by considering the emerging inclusive growth agenda and considering whether there this new agenda could offer an opportunity to revitalise area-based regeneration initiatives in England. Ultimately, if area based regeneration initiatives are not to return to the policy toolbox are politicians consigning some communities to a fate of managed decline?

GEOGRAPHICAL VARIATION IN SOCIAL INCLUSION AT THE LOCAL GOVERNMENT AREA LEVEL IN VICTORIA, AUSTRALIA

Kate McIntosh, La Trobe University, Australia
Amanda Kenny, La Trobe University, Australia
Mohd Masood, La Trobe University, Australia
Virginia Dickson-Swift, La Trobe University, Australia

Rural communities across the globe are a population group vulnerable to poorer health outcomes and exhibit various forms of health disadvantage relative to their urban counterparts. Differences between urban and rural groups in broad measures of health and wellbeing such as life expectancy and mortality rates have been reported in Australia, Canada and the United States. Studies have shown that much of the variation in health status can be explained by socioeconomic factors; yet evidence that rurality contributes to health indicators in other ways is inconsistent. Social inclusion is a popular concept in public health in Victoria, Australia and there are few studies examining spatial differences in the characteristics of social inclusion. Here we explore social inclusion across place by comparing publically available population data across four geographical classifications of Victorian local government areas (LGAs) using an established measurement framework for social inclusion. Classified as metropolitan, peri-urban, regional or rural, there was significant difference between the groups across a range of indicators of social inclusion. Rural and regional LGAs ranking higher on measures of social connection, social trust and civic engagement. Metropolitan areas were stronger in economic and educational indicators. Peri-urban areas ranked poorly on social engagement, financial and housing stress, and self-rated health, even though economic and health indicators were comparable with metropolitan areas. This paper contributes to the debate on the application of policy as “one size fits all” and highlights that adequate action on social inclusion requires contextual consideration of place.

HUMAN CAPITAL, TEMPORARY MOBILITY AND REGIONAL DEVELOPMENT – AN AUSTRALIAN PERSPECTIVE

Fiona McKenzie, Department of Environment, Land, Water and Planning, Australia

Human capital has been shown to be a key driver of economic development and large cities are generators and attractors of such capital. In the Australian State of Victoria, the capital city of Melbourne has strengthened its dominance in the past decade , and currently receives 80% of Victoria’s population growth.

Non-metropolitan school leavers wishing to undertake higher education often need to relocate. Their choice of destination is fed not only by the economic imperative of human capital accumulation but also the narratives of mobility – moving to Melbourne is seen as a mark of success and upward mobility. As a result, non-metropolitan regions are likely to experience a net loss of human capital over time. These areas often experience human capital shortages. Smaller, more dispersed populations make it difficult for firms to attract the skilled workers they need, while locally-based skilled workers may face limited employment opportunities. Temporary mobility may offer a solution to some of these regional issues of human capital attraction and development. However, the question of who moves and who controls movement is relevant to the success of such strategies.

This paper shows how some non-metropolitan locations in Australia suffer from a lack of movement which hinders human capital, and hence economic, development. This immobility may be due to strong bonds of social capital creating insularity, or to barriers to the temporary mobilities which some regional communities are actively seeking.

IMMIGRANTS, CITIZENS AND THE “COLLATERAL” IMPACT OF RECESSIONS

Regina McManigell Grijalva, Oklahoma City University, United States

The Great Depression in the United States occurred in the 1930s and had a devastating impact on Hispanic communities, especially those from Mexico (or those thought to be). The history of what happened to two million people, with somewhere between thirty and sixty percent of them being citizens of the United States, is often forgotten and is rarely taught as part of elementary education history curricula. However, history teaches important lessons to us, and this piece of history is especially important since it was the nation’s response to shortages of resources at such a depressed time locally and globally. In fact, with the recessions many nations have faced in recent years, it is no surprise that there have been similar responses in the United States to shortages of resources. Certainly, the lack of resources is not as great as it was in the 1930s, neither is the total number of people deported nor the percentage which were actual United States citizens. However, the practice of mistakenly deporting its own citizens is a practice acceptable to the United States’ government. Government agencies involved with immigration problems call the practice, “collateral apprehension.” This paper will look at how this term is used and how the practices it refers to affect people who fall victim to it, especially people who have already been marginalized by the system that fails them yet again.

THE ROLE OF EU COHESION POLICY AND PROCUREMENT POLICY IN LABOUR MARKET EQUALITY PRE AND POST-BREXIT

Leaza McSorley, Glasgow Caledonian University, United Kingdom

Katharina Sarter, University of South Wales, United Kingdom

This paper examines EU Cohesion policy and EU Procurement policy and asks whether these non-labour regulatory frameworks can be used to deliver gender equality in the labour market. As the prospect of leaving the EU approaches for the UK this paper this paper investigates EU Cohesion policy and EU Procurement policy and asks, firstly, what has been the added-value of these policies to UK labour market equality and secondly, what challenges and opportunities lie ahead if these EU regulatory frameworks no longer apply to UK regional cohesion policies and procurement policies. Cohesion regulations set out clear guidelines on gender mainstreaming, yet at an implementation level the literature questions whether gender equality is sufficiently visible, particularly in non-ESF funded projects (McSorley & Campbell 2016). As the focus of Cohesion policy shifts towards delivering Europe 2020 targets for jobs and growth. This paper asks if lessons can be learned from a policy which provides a strong regulatory framework for mainstreaming gender equality.

Public procurement accounts for over 14% of EU GDP. European law does not demand that gender equality is taken into account when tendering but acknowledges the admissibility of gender equality related considerations under specific conditions (Sarter 2016).

The challenge for policy makers is in using EU Cohesion and Procurement policy not just to counteract the negative impacts of the EU’s drive for increased competition, growth and competition-based tendering but consciously designing non-labour regulatory frameworks to lever labour market equality. Finally, the challenges and opportunities that lie ahead for gender mainstreaming and labour market equality if these EU regulatory frameworks no longer apply to UK regional policies and procurement policies are discussed.

THE EVOLUTION OF REGIONAL ECONOMIC COMPLEXITY AND STRUCTURAL CHANGE IN THE US: 1850-2010

Penny Mealy, Oxford University, United Kingdom
Doyle Farmer, Oxford University, United Kingdom
Ricardo Hausmann, Harvard University, United States

We apply networks-based economic complexity analysis to US census data to investigate the evolution of regional productive capabilities over 150 years of US development history. We contrast the complexity of industries to the complexity of occupations and examine their relative importance in predicting long-run growth and structural change. By drawing on on historical patent data, we also analyse the associated relationship with innovation. We then map the regional 'industry space' and examine differentiated regional development paths through this network. We also explore how the network structure evolves over time and highlight key implications for the urban-rural divide.

FROM SMART GROWTH TO EUROPEAN SPATIAL PLANNING: A NEW PARADIGM FOR EU COHESION POLICY POST-2020

Eduardo Medeiros, University of Lisbon, Portugal

Formally initiated in 1989, EU Cohesion Policy as since passed throughout a series of metamorphoses, along its five programming periods, while becoming the most financing EU policy. As its name indicates, its initial goals were earmarked for promoting economic cohesion and social cohesion, following the intentions expressed in the Single European Act. Since then, from a policy strategy intervention point of view, EU Cohesion Policy has shifted into a financial tool to promoting investment for jobs and growth. In the meantime, European Spatial Planning which had its debating pinnacle with the release of the ESPD, by 1999, has declined in interest and narrowed into a novel notion of Territorial Cohesion. This French notion was finally included into the EU treaty by 2010. Looking back at the implementation process of EU Cohesion Policy and its main impacts, available literature identify a myriad of positive and less-positive aspects. Moreover, these impacts varied within all EU Member States, creating a dual faction: pro and against EU Cohesion Policy. Faced with mounting dilemmas, following from the recent (2016) Brexit process, and increasing euro scepticism, EU Cohesion Policy post-2020 is striving for its survival. Drawing on this critical scenario, EU Cohesion Policy faces several potential paths, from a pure extension into a soft makeup process. In this challenging context, this article analyses the implementation and main impacts of EU Cohesion Policy and propose a new strategic paradigm, built around a novel 'European Spatial Planning' vision, built around the main pillars and dimensions of territorial development.

HIGH TECH FIRMS IN SMALL AND MEDIUM SIZED TOWNS

Rahel Meili, University of Bern, United Kingdom

Small and medium-sized towns (SMSTs) have different economic specialisations and fulfil important functions in polycentric urban systems. Empirical evidence shows that many SMSTs of EU15 countries are catching up with large cities not only in terms of population growth but also in terms of economic performance.

Although SMSTs have different economic characteristics, the industrial sector is dominant in most SMSTs. Industrial firms can thus have a long history in towns and are crucial for the entire region. In

SMSTs where only a few firms dominate the economy, the performance and decisions of such firms has tremendous influence on the town's well-being and wealth. However, firms in SMSTs have to deal with different economic, social and physical conditions than firms in either core regions or even peripheral regions. Yet, there is a research gap about how local conditions in SMSTs influence the development and strategies of firms. Research focusing on industrial firms has mainly been conducted in core regions or in the periphery.

This paper focuses on dominant traditional high tech industry firms in SMSTs in developed countries. We have conducted a multiple case study in the eastern part of Switzerland with six firms in four different SMSTs. It seeks to advance our understanding of how local conditions in SMSTs influence dominant and successful high-tech firms. Moreover, we are interested in how these firms have managed the balancing act between local embeddedness and global orientation. This can help us understand economic dynamics and development paths in locations that are neither core nor periphery.

A SPATIAL ANALYSIS OF THE IMPACTS OF THE GREAT RECESSION ON TRAVEL-TO-WORK AREAS

David Meredith, Agriculture And Food Development Authority, Ireland
Mike Coombes, CURDS, Newcastle University, United Kingdom
Colin Wymer, CURDS, Newcastle University, United Kingdom

This paper explores the impact of economic restructuring, in terms of not only the changing sectorial composition but also the location and gendered nature of employment on the spatial structure of travel-to-work areas (TTWAs). The research poses three interrelated questions: What effect did the onset of the economic recession have on the industrial structure of employment and, by extension on the size and composition of both the labour and work forces in the period 2006 - 2011; What effect did these developments have on commuting patterns; and What were the implications of these development for the spatial structure of TTWAs in Ireland? The answers to these questions point to a number of long-run trends that are underpinned by interrelated socio-economic processes of feminisation of the workforce, an increase in dual income households and, consequently, the increasing concentration of the population within TTWAs characterised by 'thick' labour markets, i.e. those associated with larger urban centres. The implications of these developments are considered with reference to the National Planning Framework which is currently in development.

TRIPLE WORLD? THE PROXIMITY-BASED APPROACH OF SMES RELATIONS IN THE POLISH AVIATION INDUSTRY

Grzegorz Micek, Jagiellonian University, Poland
Bartosz Piziak, Jagiellonian University in Krakow, Poland
Monika Panecka-Niepsuj, Jagiellonian University in Krakow, Poland

The small and medium companies (SMEs) perform a significant role in local and regional development in the Polish aviation industry. Following the description of the state-of-the art of the industry the paper adopts the proximity-based approach in order to analyse determinants of knowledge links between SMEs and other companies. The conclusions are derived from in-depth interviews conducted with managers of SMEs as well as from network analysis of managers' mobility. The research leads to distinguishing three types of SMEs. First group of dynamic firms is strongly linked with major foreign players and is geographically concentrated in the South and Eastern Poland. It is argued that institutional proximity (eg. in the form of quality certificates) matters the most in terms of relations'

determinants. Second group of small and medium companies (often family ones) is isolated in the network. These firms do not have enough bargaining power to enter global value chains and sometimes decide to start production for another industries. The third type consists of growing isolates which have exclusively foreign customers. In general, organisational proximity (even in the form of dynamic cluster players), does not matter for establishing the majority of SMEs' relations.

HIGHLY SKILLED AND WELL CONNECTED: MIGRANT INVENTORS IN CROSS-BORDER M&AS

Ernest Miguelez, CNRS - GREThA University of Bordeaux, France

Diego Useche, GREThA - Université de Bordeaux, France

Francesco Lissoni, GREThA - Université de Bordeaux, France

We investigate the role of migrant inventors as bridging ties in Cross-Border Merger & Acquisitions (CBM&As), based on firm level data. We perform logistic regressions on a large matched sample of CBM&A deals and control cases, and further control for several firm and country factors. We assess the migrant status of inventors by comparing information on their nationality and residence, as reported on patent applications by acquiring firms. We find that migrant inventors affect their employers' choice of targets, by favoring those located in their home country. Evidence is stronger when CBM&As occur in high-tech or knowledge-related sectors, concern innovative targets, and lead to full acquisitions, and after controlling for sources of transaction costs such as diversity in language, physical and cultural distance. This suggests that migrant inventors can mitigate acquiring firms' liability of foreignness, by tapping into relevant social networks in their home countries and reduce information asymmetries.

INTERGOVERNMENTAL FISCAL TRANSFERS AND CONVERGENCE PROCESSES IN RUSSIAN REGIONS

Anna Mikhaylova, Institute for Public Finance Reform, Russia

The main indicators of regional socio-economic development have been systematized to identify interrelationships between financial incentives from the federal government and growth rates of the regional economy in Russia.

The hypothesis of conditional and unconditional β -convergence for the Russia's regions has been tested.

Regression models have been evaluated to test the effect of intergovernmental transfers from the federal budget in the convergence process. We tested conditional convergence hypothesis, with the inclusion of additional control variables, which in fact is equivalent to testing the hypothesis of conditional β -convergence, where these measures economic policy accepted as convergence conditions. Thus, the following control variables were: the average ratio (for the period 2006-14) of gratuitous receipts in the budget of the region from other budgets of the budget system to the GRP, the average ratio of gratuitous receipts in regional budgets from the federal one to total revenues of regional budgets. The hypothesis of conditional convergence suggests that regression sign at the initial level of GRP per capita should be negative, and the sign at control variable should be positive. We confirmed the hypothesis about the importance of such government policies as intergovernmental transfers. The coefficients in front of the two control variables are positive and significant at the 5% level. There is a positive connection between the volume of intergovernmental transfers and the rate of growth of the regional GDP per capita.

IMPACT OF INTERREGIONAL MONEY FLOW ON THE LOCAL ECONOMY IN JAPAN'S "CAR ISLAND": A CASE STUDY OF FUKUOKA'S ACCUMULATION OF GLOBAL INDUSTRIES

Hitoshi Miwa, Kyushu International University, Japan
Yoshifumi Ikejima, Yokohama National University, Japan
Kenji Ogai, Hokkai Gakuen University, Japan

This study aims to present mutual inflows/outflows of money involved in corporate transactions or consumer behavior among regions, and illustrate the impact of global industries on inter-regional money flows. This study focuses on Fukuoka Prefecture called Japan's "Car Island". Fukuoka has an industrial agglomeration base of global automobile industries such as Nissan, Toyota, and affiliated companies.

Broadly, added value is a key concept for the framework of regional economies to indicate whether a domestic region can obtain sufficient money from its home industries. However, added value produced by major foreign-affiliated companies is more likely to flow back to their headquarters outside the region, in most instances Tokyo, and does not stay within the region. Consequently, gross regional product (GRP) of Fukuoka Prefecture has not shown a continuous increase, although the population is showing a tendency to increase.

This paper estimates interregional money flows using a new approach, inter-regional money flow model: (1) between municipalities in the Fukuoka prefecture; (2) between each municipality and outside the prefecture; and (3) between each municipality and overseas locations, focusing on business transactions with establishments, consumers, and so on. This paper also calculates the monetary leakage that would occur from regional economies, and presumes the impact on the local economy with the accumulation of global industries. Finally, money flow between municipalities in Fukuoka is visualized using GIS (geographical information system) technology to spatially highlight the local economic structure.

A COMPLEXITY PERSPECTIVE ON LOCAL/REGIONAL ECONOMIC DEVELOPMENT

Winston Mok, University of Sydney, Australia

In local/regional development and planning, Michael Porter's cluster paradigm has made significant impact worldwide. However, it received widespread criticisms – where public policy practices might run ahead of cogent theory. Among the manifold shortcomings of the cluster paradigm, it does not adequately address vertical and geographical/spatial interactions.

The limitations of clusters may be overcome by complex systems which consist of cross-cutting hierarchies with tangled and dispersed interactions among heterogeneous agents. In fact, regional development has already assimilated many ideas from complexity, such as positive feedback (circular cumulative causation), learning, path dependence and evolution. However, it has not gone far enough in embracing more fully core concepts in complexity. For example, unlike Porter's market-based view of strategy which frames his cluster concept, the resource-based view of strategy is rooted in habits and routines of complex systems. This paper will focus on the importance of vertical and geographical/spatial interactions – both central in complex systems – in shaping local/regional economic development.

The paper will illustrate how such vertical and horizontal forces shape the development of China's Pearl River Delta, one of the world's largest and most dynamic metropolitan regions (with population

approaching 70 million). Among many clusters in China, many remain stuck at the bottom of the pyramid in global value chains. The paper will explore how Pearl River Delta's rapid growth and its rise as one of the world's most competitive regions may only be explained from a complexity perspective.

MAINSTREAMING ENERGY EFFICIENCY POLICY: OPPORTUNITIES AND CHALLENGES FROM THE GRASSROOTS

Francesco Molinari, Italy

Antonio Zonta, Provincia di Treviso, Italy

Article 5 of Directive 2012/27/EU on energy efficiency requires Member States to ensure that 3% of the total floor area of central government buildings is renovated each year to meet the minimum energy performance requirements set out in Article 4 of the Energy Performance of Buildings Directive (2010/31/EU).

In fact, Member States have the choice between two approaches to meet these obligations: one of the two allows a flexible combination of 'deep' or 'shallow' renovations with measures to promote behavioral changes of building occupants and visitors.

Recently, many success stories have materialized from the local level, going in the same direction of the EU directives mentioned above, with particular regard to the impact of 'soft' aspects (such as demand side management) on energy efficiency of public buildings.

However, whether and to which extent the positive outcomes of individual pilot experiments are capitalized or scaled up to the national level hides a number of challenges which go beyond the 'mere' capacity building of a more environmentally aware political class.

Some of these challenges are now being analyzed in depth within the context of a large-scale experiment of good practice sharing and diffusion, now involving 8 partners from 7 Central European countries, with the financial support of the European Union.

Practical guidelines are being developed on how to setup favorable environments to mainstream pilot evidence into regional and national policies and programmes, organizing advocacy events and achieving political buy-in.

GOVERNANCE, TERRITORIALITY AND 'FIXING' CRISIS: THE ROLE OF NAMA IN INFLUENCING URBAN DEVELOPMENT BEYOND THE IRISH STATE

Niamh Moore-Cherry, University College Dublin, Ireland

As has been well documented, the year 2008 marked the demise of what had been broadly heralded as the 'Celtic Tiger' economic miracle as a triple crisis (financial, fiscal and banking) took hold in Ireland. While the Irish state attempted to address the banking crisis through a series of recapitalisations and nationalisation, the scale of bank exposure to the property crisis was such that while loans made to property developers remained on their books, domestic banks could not raise funding nor stem capital outflows. The establishment of the NAMA was announced in an emergency budget in April 2009 with the primary objective of redeeming all senior and junior debt, generating a surplus for the tax-payer after operational costs and obtaining "the best achievable return for the State on the assets it has acquired". This paper focuses on how the Irish state, through NAMA, instrumentalised spatial

unevenness and difference across national borders to achieve particular political-economic goals. Through a discussion of NAMA's activities in Britain, and particularly in London, I illustrate how the sale of development loans and secured properties in Britain have been a crucial component of NAMA's attempts to deal with the consequences of the 'triple crisis' in Ireland. This paper highlights the growing role of extra-territorial 'states' in influencing urban development in particular cities. It raises questions about the nature of the state in metropolitan development, highlights the increasingly disembodied nature of urban decision-making, the difficulties of regulation within an increasingly global urban-financial complex, and the importance of spatial difference in sustaining post-crisis capitalism.

INSTITUTIONAL INNOVATION IN WALES FOR DELIVERY OF REGIONAL ECONOMIC DEVELOPMENT INTERVENTIONS

Brian Morgan, Cardiff Metropolitan University, United Kingdom

Gerald Holtham, Cardiff Metropolitan University, United Kingdom

Selyf Morgan, Cardiff Metropolitan University, United Kingdom

Robert Huggins, Cardiff University, United Kingdom

With output per head at only 71% of the UK average, Wales remains amongst the poorest parts of the UK. Is this state of affairs inevitable? What, if anything, can be done over the next decade to start to catch up, or should policy makers in Wales change their frames of reference and concentrate on other goals such as outlined under the rubric of the Foundational Economy?

The sclerotic performance of the Welsh economy to date is partly a hangover from Wales's industrial past, and partly a result of factors such as poor connectivity and a low skills base, each of which inhibits productivity growth. Political devolution, so far, has not succeeded in addressing these weaknesses, even with relatively stable (one party) government in place. The kind of devolution experienced in Wales may account for some of this performance, but whilst the role of the Welsh Government in industrial development has been important, critics point to a lack of adequate capacity and knowledge within Government, and a lack of meaningful financial support to encourage the development of a strong base of export-oriented firms.

This paper will discuss these issues in the post-Brexit context where a change in the nature of regional development policy is inevitable, and the development of a Welsh industrial strategy, which may have to take into account what is promised to be a more active UK industrial policy.

THE POTENTIAL REGIONAL IMPACT OF BREXIT IN IRELAND NORTH AND SOUTH

Edgar Morgenroth, Economic And Social Research Institute, ESRI, Ireland

While there is still a lot of uncertainty about the future relationship between the UK and the EU, it seems more likely that the UK will be both outside the EU Single Market. In the absence of a trade deal between the UK and the EU the UK which is likely to take some time to negotiate, the UK could be treated as a 'third country', where World Trade Organisation (WTO) tariffs apply on merchandise trade. Recent analysis shows that if this treatment were reciprocated by the UK, the impact would differ significantly across countries. While detailed trade data for Irish regions (North or South) are not available, the existing data shows that Northern Ireland trades considerably more with EU member countries than other UK regions and that the Border region of the Irish Republic also exports more to the UK. This paper provides more detailed insights into the potential exposure to trade

impacts from Brexit at the county level, for both Northern Ireland and the Republic of Ireland. This is achieved by mapping the potential impacts of Brexit at the product level using concordance tables to 2 digit NACE sectors and using the spatial distribution of sectoral employment for these sectors to assess the exposure to a hard Brexit across Ireland.

MIGRATION AND INNOVATION IN THE AGES OF MASS MIGRATION

Andrea Morrison, Utrecht University, The Netherlands

Sergio Petralia, Utrecht University, The Netherlands

Between 1892 and 1924 more than 20 million people migrated to the US, which represents the highest peak in this country. As far as today about 40% of US population descends from immigrants (Bandiera et al. 2013).

Overall, the migration literature suggests that immigrants (both in quantity and composition) had a significant impact on the US economy (Rodrigues Pose et 2013, Bandiera et al. 2013). Recent evidence shows that some groups of immigrants had also a significant impact on US innovation (Moser, 2014; Borjas and Doran, 2012; Kerr, 2010). However, this latter works focused either on selected groups of migrants (e.g. Jews, Russian, Indians) or on fields and sectors (e.g. chemistry, math). Moreover, there is no agreement in the literature on the potential crowding out effect of skilled migration.

By drawing on a novel patent dataset (HISTPAT-US) containing unique information on immigrant inventors to the USA in the period 1836-1946, we investigate the impact of migration on innovation in the ages of mass migration (1870-1930). This study contributes to the current literature by providing systematic (by ethnicity, geography, field of innovation) evidence on the impact of mass migration to US patent innovation.

THE REGIONAL DIMENSIONS OF ENERGY SECURITY: THE ROLE OF PUBLIC-PRIVATE PARTNERSHIPS IN THE PROMOTION OF CLEAN ENERGY

Nikolai Mouraviev, University of Abertay Dundee, United Kingdom

This paper aims to investigate what role public-private partnerships (PPPs) can play in the promotion of renewable energy sources (RES), for example by building wind energy plants and municipal solid waste management (waste-to-energy) facilities. Specifically, the objective is to consider whether PPPs, as a policy instrument, could be effectively used in a transitional nation, such as Kazakhstan, for the sustainable production of power from RES. Preliminary conclusions show that in the field of renewable energy, PPPs should be viewed not merely as electricity production facilities, but also as a means to contribute to sustainability through job creation, income generation and reduction of the nation's dependency on fossil fuels. Furthermore, it is likely that PPP deployment in the RES sector will diversify the economy by expanding this emerging industry. This has a clear regional dimension as certain regions within one nation experience lack of power as well as lack of industrial infrastructure and, more generally, lack of incentives for the economic development. By engaging with the RES sector through PPPs, the government is able to create the set of incentives for regional development. In addition, in the long run PPP deployment would significantly reduce the governmental involvement in power generation, which means the reduction of the size and scope of the government sector and the corresponding expansion of the private sector.

FORMALISING THE INFORMAL: THE ROLE OF A STRONG CIVIL SOCIETY IN UKRAINE'S STRUCTURAL REFORMS SINCE 2014

Olga Mrinska, European Bank for Reconstruction and Development, United Kingdom

A dramatic crisis has gripped Ukrainian society. Conflict has damaged its security and territorial integrity, re-enforcing Ukraine's uninterrupted economic decline since 2009. Addressing these problems requires dramatic action on multiple fronts. There have been fundamental changes to Ukraine's territorial administrative arrangements, regional policy and local economic development policy since 2014. They have created a new framework for multi-level governance, enabling greater decentralisation of the powers, and laying the basis for reforms in many other areas.

Achieving these reforms will require strong, sustained efforts from Ukrainian politicians and state servants at all tiers. Yet there is not always sufficient commitment to proceed. Either because of negligence or due to pressure from interested parties that are set to lose out significantly from new system, decision-making and the enforcement has often stumbled. Sometimes the process is merely slowed down, while some decisions are actively being sabotaged and/or reversed.

Reforms are often portrayed by those who oppose them as a useless and harmful exercise. The civil society plays an essential role in saving reforms from being marginalised or reversed, creating and maintaining a positive "brand" for reforms, which can counteract this negativity.

This paper looks at the tools and mechanisms used by civil society organisations active in the area of local and regional governance and economic development to monitor the reform process, to validate results against stated objectives, to force government agencies and politicians to stick to agreed roadmaps, and to communicate the results of reforms effectively.

AFTER BREXIT: THE CHALLENGES AND OPPORTUNITIES OF URBAN REGENERATION FOR THE UK AND EUROPEAN CITIES

Janu Muhammad, University of Birmingham, United Kingdom

In the result of the UK's vote to leave the European Union, much of the prediction so far has focused on what are the challenges and opportunities of post-Brexit for the United Kingdom and European Cities. Regarding urban regeneration, an alteration in Britain's relationship with Europe will have significant effects. In one hand, it has raised the issues of inequality, the growing divide between cities and rural areas, and cultural identity. Somehow this will affect their economies and businesses in the future. In the other hand, post-Brexit means a time to redevelop and restructure of urban regeneration both for UK and European Cities to be more resilience. Indeed, one important trend has emerged over the years was: the earlier projects tended to focus on physical regeneration, usually housing, whereas current programmes have attempted to stimulate social and economic regeneration for the UK and European Cities. This session aims to discuss the issues of urban regeneration for Britain and European cities after Brexit using the case studies of city of Birmingham and Rotterdam. Cities are competing with other places and have developed coordinated long-term strategies for making both UK and European cities places where people choose to live, invest and do business. The strategies include practical actions and policies to give vulnerable groups of UK and European citizens access to new opportunities after Brexit.

THE UNIVERSITY CONSORTIUM: LOCAL NETWORKING CONTRIBUTING TO GLOBAL RESEARCH

Jari Multisilta, Tampere University of Technology, Finland

UCPori is a consortium of four universities, who have established a distance unit to the city of Pori, Finland. The main idea of the UCPori is to coordinate the cooperation with and between university units participating to the consortium, the universities main campuses, other higher education institutions and regional actors. The aims of the paper are to

- 1) Identify, define and share the success factors in effective education partnerships. It is claimed that there is a need for new procedures for leadership and management that support both the global research and local collaboration. In addition, it is important to identify the practices how on to collaborate in several levels.
- 2) Discuss effective strategies for improving the quality of teaching with a specific emphasis on students who are studying and working at the same time. There is a need to further develop distance learning so that the courses in UCPori could also be used in secondary education.
- 3) Discuss the strategies for improving transition to employment from education systems: there is a need to measure the impact of the university to the local region. Do the students and graduates from UCPori get employed at the region, does the companies and organizations in the region get educated workforce and do their skills correspond to the requirements of the jobs in the Satakunta region?

THE IMPLICATIONS OF BREXIT FOR ECONOMIC DEVELOPMENT AND DEVOLVED GOVERNANCE IN CUMBRIA, THE NORTH EAST OF ENGLAND AND THE SCOTTISH BORDERS

Gail Mulvey, University Of Cumbria, United Kingdom

Ignazio Cabras, Northumbria University, United Kingdom

Mike Danson, Heriot-Watt University, United Kingdom

Frank Peck, University of Cumbria, United Kingdom

Keith Shaw, Northumbria University, United Kingdom

This paper explores economic, social and governance issues for northern England and southern Scotland associated with the process of leaving the EU.

This is important for a number of reasons. While all areas in Scotland voted Remain, the NE had the third highest Leave vote of any English region and fifteen out of the 18 electoral wards in the NE and Cumbria registered a higher proportion of Leave voters than the average for England (53.3%). This is despite the two areas benefiting heavily from EU structural fund investments and experiencing comparatively low numbers of migrant workers. The Brexit vote has led to renewed debate concerning further levels of devolution or independence for Scotland, the future direction of devolution within England and the likely consequences for functional links and policy relations across the Anglo-Scottish Border.

Currently, considerable uncertainty surrounds these policy questions. However, a modified version of the Delphi approach is designed to document the views of local stakeholders regarding different scenarios based on (a) “desirability” (the best outcome), (b) feasibility” (technically possible) and (c) “probability” (most likely outcome). This is being applied at two focused events at the Universities of Cumbria (Carlisle) and Heriot-Watt (Edinburgh), supported by the Economic and Social Research Council (ESRC) within the ‘UK in a Changing Europe’ initiative. These events include local leaders

invited from industry, government and academia to discuss the implications of Brexit followed by a 'Discussion and Answer' panel. The paper presents preliminary findings from this process and considers the implication for further research.

AFRICAN CITIES AS ENGINES OF DEVELOPMENT? SOCIOTECHNICAL REGIMES, URBAN TRANSITIONS, AND SPATIAL TRANSFORMATIONS

James Murphy, Clark University, United States
Padraig Carmody, Trinity College Dublin, Ireland
Francis Owusu, Iowa State University, United States
Richard Grant, University of Miami, United States

Africa is experiencing an urban transition as the region globalizes. In this context, significant questions remain as to whether or not urbanization in the region is contributing to socioeconomic transformations that can structurally transform national economies and enable countries to achieve the UN's 2030 Sustainable Development Goals (SDGs). This paper argues that conceptual and methodological innovations are needed to answer such questions systematically and in a comparatively rigorous manner. We propose that cities be conceptualized as constituted by three overlapping sociotechnical regimes – production, consumption, and infrastructure – that are shaped by multi-scalar relationships and context-specific factors that determine the direction of urban development. To understand the contours of urbanization pathways in Africa today, we deploy this approach to examine trends and patterns in the continent today, arguing that cities are not yet achieving their full potential as generators of spatially and socioeconomic distributed forms of economic development. They are instead marked by a three-fold dynamic of extraversion, introversion, and splintering. Beyond assessing the prospects in Africa today, we further argue that this approach can contribute to and reshape debates regarding new epistemologies of the urban, emergent urban formations and their spatialities, and comparative urban research determine the direction of urban development. The project will contribute to and reshape debates regarding new epistemologies of the urban, emergent urban formations and their spatialities, and comparative urban research.

NEOLIBERALISM, PLANNING, AND THE COMMON GOOD

Enda Murphy, University College Dublin, Ireland
Linda Fox-Rogers, Queens University Belfast, United Kingdom

The depth and global scope of the 2008 global economic crisis has forced a renewed interest in critical questions surrounding the role and function of the state and its institutions. Given its role in oiling the development process, planning has not been immune to such questions. Using the lens theoretical lens of neoliberalisation, this paper investigates competing stakeholder perspectives of the common good in the planning process in an attempt to identify what is understood by the principle from the viewpoint of diverse interests. The methodology consisted of 20 interviews with each of four different stakeholder groups considered pivotal to the planning process: planners, local councillors (politicians), developers and community interest groups (used as a proxy for the general public). The results show that there are significant variations in understanding the common good in planning among the stakeholder groups. They suggest also that the views of the common good from community interest groups are starkly different to those of planners and developers. Rather interestingly, the views of planners and developers were more aligned than for any of the other groups suggesting the planners' views of the common good mirror, to a greater degree, those of developers.

THE ENTREPRENEURIAL ENVIRONMENT AND CREATIVE ENTREPRENEURSHIP IN PERIPHERAL PLACES

Aisling Murtagh, National University of Ireland Galway, Ireland

Patrick Collins, NUI Galway, Ireland

Interest is increasing in the role of creative entrepreneurship in a peripheral regional development. This paper will explore the role of soft (e.g. cultural amenities, tolerance) and hard (e.g. office space, accessibility) factors in peripheral creative entrepreneurship. Economic development theories focused on the creative sector have tended to place strong emphasis on soft factors without a great degree of evidence in support of this. This paper will begin to address this gap. We will also explore the wider entrepreneurial environment in peripheral European regions and look at how creative entrepreneurs navigate this. Traits associated with peripheral regions that pose challenges impacting entrepreneurship and start-ups include: out-migration of younger population; remoteness from core market areas; limited local markets and poor access to expert knowledge and advice. More positive interpretations of peripheral development processes also exist. Rather than peripherality fundamentally limiting opportunities, building strong local business networks, good digital infrastructure and local/global linkages can support entrepreneurship development. We take a comparative, qualitative approach focusing on the experience of entrepreneurs two peripheral regions of Northern Europe - Västernorrland in Mid-Sweden and Ireland's western region.

NO JOY WITH BANKS ROUND HERE: THE GEOGRAPHY OF DISCOURAGED BANK BORROWING AND LOAN REJECTION AMONG UK SMES

Samuel Mwaura, University of Strathclyde, United Kingdom

Sara Carter, University of Strathclyde, United Kingdom

For many years, credit rationing has been cited as one of the major challenges universally faced by SMEs. This is thought to have important economic implications given the contributions such SMEs could make to the wider economy if they secured investment financing. Credit rationing has in the past included firms whose credit applications are rejected by banks, and discouraged bank borrowers - firms that do not seek bank credit at all, in part because they believe they would be rejected. Research into rejection and discouraged bank borrowing is abounding and a variety of policy interventions have been implemented over the years, such as government loan guarantee schemes and, more recently, direct initiatives by the UK banking industry through the Business Finance Taskforce. Such efforts have however only realised modest success. A potential shortcoming could be that since such initiatives are often implemented at the national level, they may have assumed that discouraged bank borrowing and loan rejection are evenly spread across the UK. If that was not the case, however, the limited success of initiatives to counter credit rationing could simply be attributable to a failure to deploy resources in areas and localities facing relatively higher incidences of discouraged bank borrowing and loan rejection. The purpose of this study is to draw out the geography of credit rationing among UK SMEs. The study employs the UK SME Finance Monitor data to map out the relative incidence of discouraged bank borrowing and loan rejection between local postcode areas in the UK.

PEAK AND PINE: RE-SCALING, UNEVEN SPATIAL DEVELOPMENT, AND TERRITORIAL COHESION IN EUROPE, 1980-2015

Vlad Mykhnenko, University of Oxford, United Kingdom
Manuel Wolff, Department of Urban and Environmental Sociology, Helmholtz Centre for Environmental Research – UFZ, Germany

This paper engages with the key theoretical points of reference in the literature on state re-scaling by interrogating the soundness of their fundamental assumptions and questioning the validity of the propositions made. The paper traces back the notion of re-scaling to David Harvey, Henri Lefebvre, and Neil Smith's Marxist conceptualizations about the role of space, capital, and the state in the production of uneven, spatially-imbalanced urbanization. It further investigates the core assumptions of the neo-Marxist literature on state re-scaling, principally associated with Bob Jessop and Neil Brenner. It distills the central hypothesis of re-scaling theory to the claim that radical spatial governance reforms initiated by Conservative New Right governments in the UK and across the post-1980 Europe have led to regional imbalances, divergence, and ever-growing spatial polarization across the continent. The paper examines the cause and effect relationship posited by re-scaling theorists against two bodies of urban and regional statistical analysis. This study's major finding is that – in striking contrast to North America – the vast volume of evidence analyzed here cannot substantiate the core re-scaling hypothesis of rising spatial imbalances and economic divergence in the post-1980 Europe. The power of re-scaling theory to predict, convince or inspire appears significantly compromised as a result.

THE ROLE OF THE RELATION BETWEEN A REGIONAL AIRPORT AND LOCAL UNIVERSITIES IN THE LOCAL AND REGIONAL DEVELOPMENT: THE CASE OF NEWCASTLE-UPON-TYNE (UK)

Alena Myshko, Gran Sasso Science Institute (GSSI), Italy

Airports are key infrastructure projects for many cities and regions, which maintain inclusion in national and global process and networks. Despite the fact that they are traditionally located outside city's organization and territory, their operation is oriented towards the development of their hosting city - region. In the last decade, a number of regional airports, across Europe and in the UK, are implementing development plans for improvement and/or expansion, also in the form of new master plans. These plans consider the local and regional institutional framework, including universities. They are important social institutions in a life of a city and its development because they attract local and international students, who consume city's facilities and spaces, helping the city's image and brand. At the same time, students, with their social practices, in turn, can stimulate changes in the city. Moreover, a university is composed by a variety of social groups, who are understood in the research as academia-related workers (academic and non-academic staff) and students. Although they have different social practices, lifestyles, as well as socio-economic characteristics, they are perceived as academia-related people who have specific features in common. This social group can create an impact on the city, its development and image; also it can influence airport's plans for development and can be considered by an airport as a separate passenger group.

REGIONAL HETEROGENEITY, INTELLIGENT CARE AND URBAN LIVING

Anupam Nanda, University Of Reading, United Kingdom

Due to a multitude of factors and scientific progress over last 50 years, people are living longer, and

needs, tastes and preferences for old age life are also transforming. A particular need of human life is shelter, which tends to become specialised as we grow older or have significant activity constraints. Shelter also influences interactions with external social, physical and built environments such as urban form, amenities and suitable infrastructure. These innately affect wellbeing. As a result, the demand for bespoke housing and at-home care and monitoring is expected to reach a staggering level in foreseeable future, even if we believe in the most conservative estimates. At the local level, the statistics indicates several challenges for the authorities, such as creating accessible infrastructure and transport, managing healthcare and emergency care expenses, providing suitable housing and so on. These are inexorably linked and their impact increases significantly with time and varies across spatial territories. The challenges could be better addressed if individuals and social institutions were more prepared for the future. This means adapting individuals' and institutions' behaviour now, to accept and exploit the technology advantages. In this paper, we analyse a novel approach to address one of the biggest crises cities are facing – social care needs – by devising predictive analytic tools for remote at-home care and addressing loneliness and isolation. We make use of data from multiple sources to analyse behaviour change through active citizenship, requiring a data oriented feedback system for both individuals and institutions.

PARTICIPATORY TRANSPORT PLANNING: EXPERIENCES FROM EIGHT EUROPEAN METROPOLITAN REGIONS

Janez Nared, ZRC SAZU, Slovenia

The paper presents experiences with the participatory transport planning in the eight European metropolitan regions: Ljubljana Urban Region (Slovenia), Oslo and Akershus (Norway), Gothenburg Region (Sweden), Helsinki Region (Finland), Budapest (Hungary), Metropolitan City of Capital Rome (Italy), Porto Metropolitan Area (Portugal) and Barcelona Metropolitan Area (Spain). The included metropolitan regions that jointly cooperate in the Interreg Europe project SMART-MR have answered the questionnaire on legal framework for public participation, key stakeholders, involvement of NGOs, methods and tools used, as well as on their experiences with the participatory transport planning. The results were presented on a workshop in September 2016, where the representatives from the eight metropolitan regions continued the exchange of experiences in the two workshop sessions, one dealing with the key stakeholders in the participatory transport planning and the other dealing with the methods for their involvement. The results show the involvement of stakeholders differs between the local and regional level, where participants' engagement is higher at the local level where measures are more concrete and less abstractive. The participatory planning process is longer than classical planning processes, but can ease the implementation of the project/measure to the extent that justifies additional resources and time. It is of crucial importance to include all the relevant stakeholders, to provide experienced facilitator and above all to include the results in the respective plans and policies. Although there are differences in the participatory planning culture between the countries and regions involved, the use of participatory methods in the transport planning becomes more and more important.

THE MOTIVATIONS AND EXPERIENCES OF COMMUNITY GARDEN PARTICIPANTS IN SCOTLAND, AND THE ROLE FOOD GROWING PLAYS IN THE DEVELOPMENT OF THEIR COMMUNITIES

Robert Nash, Bond University, Australia

David McVey, Queen Margaret University, United Kingdom

Paul Stansbie, Grand Valley State University, United States

This paper reports on a research project undertaken with 38 participants from three Community Gardens in the East of Edinburgh, Scotland; to investigate the role that food growing plays in their own development, and also the development of their children, their neighbours, and their communities as a whole. Thirty-eight participants across three community gardens were interviewed using qualitative, semi-structured questions to explore their motivations and experiences. Participant observation was used as a way to experience the community gardens as the participants did; to better understand the importance of the gardens in their lives. The participants felt the gardens were places that fostered neighbourly engagement, increased leisure opportunities, social support, community health, connectedness, and in some cases, but not all, community diversity. They were also places that promoted knowledge exchange inside the garden; this often transcended in to the homes of the people and the community itself. Anxieties over land use and land reform, currently under review in Scotland, highlighted how community gardens symbolised empowerment and control that furthered their development but also showed resistance to the hegemonic structure of local council and government. This resistance illustrated how the community's own development of unused land was more suited to their needs; demonstrating how productive they could be when these areas were managed by the community, for the community. In effect, the research suggests that community gardens grow much more than just food, they grow community.

THE MOBILITY OF DISPLACED WORKERS: HOW THE LOCAL INDUSTRY MIX AFFECTS JOB SEARCH

Frank Neffke, Harvard Kennedy School, United States

Anne Otto, Institutes for Employment Research (IAB), Germany

César Hidalgo, Massachusetts Institute of Technology, The MIT Media Lab, United States

Does the local industry mix matter for how job-seekers trade off geographical against skill distance? To investigate this, we study how workers who lose their employment in establishment closures in Germany cope with their job loss. About a fifth of these displaced workers do not return to social-security covered employment within the next three years. Of the others, about two thirds leave their old industry, whereas one third move out of their region. Being in a location with a large concentration of one's old industry makes finding new jobs easier: in regions where the predisplacement industry is large, displaced workers suffer relatively small earnings losses and find new work faster. In contrast, a strong local presence of industries skill-related to the predisplacement industry increases earnings losses and the time it takes to find a new job. However, having skill-related industries in a region reduces the rate at which workers leave the region by 15%, and increases the rate at which they switch industries by 8%. When analyzing these spatial and industrial job-switching patterns through the lens of a job-search model, we find that workers take Marshallian externalities into consideration when they decide how to allocate search efforts between industries.

REGIONAL DIVERGENCE IN NEW ZEALAND: THE DEMOGRAPHIC, ECONOMIC AND SOCIAL IMPACT ON RESOURCE FRONTIER REGIONS AND TOWNS OF UNEVEN DEVELOPMENT

Etienne Nel, University of Otago, New Zealand

Since the 1980s fundamental changes have occurred in New Zealand's space economy associated with globalization, market shifts and the country's adoption of an extreme form of neo-liberalism. The weakening of the welfare state, loss of global market access, the marginalization of unions, reduced state employment, the removal of subsidies to industry and agriculture and withdrawal of support for regions and localities are hallmarks of this transformation. These processes have catalysed or exacerbated spatial unevenness within and between regions accentuating the spatial reality and implications of 'geographically uneven development'. While selected areas, and the larger centres in particular have benefitted, generally, the regional and local effects of these changes have been negative, particular in resource frontier regions, threatening former economic enclaves historically based on primary industries. The loss of state regional support and the scaling back of welfare support and institutional systems which has had severe implications on local employment and service provision, frequently leading to population out-migration, particularly in many peripheral areas and towns, which are also characterised by low levels of innovation. Simultaneously, in these now peripheral regions a narrow band of places more attuned to current market opportunities have reaped some rewards from these changes. This paper examines these trends with specific reference to their spatial, demographic, economic and social impacts on the regions of West Coast and Southland of New Zealand where changes in these resource dependent areas overlays place and sector specific 'boom and bust' cycles linked to global and national processes of restructuring.

INTERNAL GEOGRAPHY OF THE FIRM AT HOME AND ABROAD: A MIXED-METHODS STUDY OF LARGE GERMAN MNES

David Nguyen, London School of Economics, United Kingdom

This study is interested in the spatial patterns of German multinational enterprises (MNEs) at home and its relation to their expansion abroad. We aim at understanding the spatial expansion of German firms at home and examine differences across industry sectors and their level of technology intensity. A secondary research question looks into the timing of these expansions and enquires to what degree expansion abroad is an early feature of their business strategy. Hence the key themes of this study are 'firms, industries, technologies and space' and 'investment at home vs. investment abroad'. We rely on related studies from these fields for conceptual and empirical inspirations. Our empirical starting point is a spatial analysis of German manufacturing sectors to identify spatial clustering and dispersion of relevant 4-digit sectors. Here we use overall manufacturing as a benchmark, as manufacturing activity is evidently not randomly spatially distributed. To do so we geocoded all manufacturing firms from BvD Orbis located in Germany and conducted a point-pattern analysis based on K-, L-, and D-functions as well as kernel density measures. The aim of this exercise is to get an understanding for the baseline geography of certain sectors and use this as a backdrop for the analysis of individual firms. This second part of the analysis then relies on structured surveys and in-depth interview with large German MNEs. Here we focus on non-listed firms that are fully German owned and headquartered in Germany. Since in Germany many of these are traditionally family-owned, we mostly (but not exclusively) deal with this type, also accounting for related studies.

MAPPING DIGITAL CONTENTION NETWORKS: COUNTER-POWER AND SPACE IN TWENTY-FIRST CENTURY IRELAND

Gráinne Maedhbh Nic Lochlainn, Trinity College Dublin, Ireland

Digital contention is online activity which attempts to influence how sociocultural/political issues are addressed in twenty-first century societies. Historically, contention has been an important agent of change, shaped by and shaping societies at varying spatial scales. Modern contention is often digitally networked, creating online social spaces and strategies which go beyond co-ordinating offline activities and/or digital protest. Whilst detailed case studies of high-profile and occupation-based movements have been conducted, less attention is paid to the geographical dimensions of digital contention. How are digital contention networks spatially located? In what ways do relational connections within contention networks (e.g. affiliation, communication) correspond to and/or contradict with non-digital space? How does the nature of digital contention impact upon its form as a force of counter-power? This paper addresses these questions by investigating the community-based anti-water charges movement in Dublin. In analysing and mapping digital contention networks from spatial perspectives, the paper raises a number of important questions about sociocultural/political power in the twenty-first century, particularly with regards how power and counter-power are/will be expressed.

BENEFITS OF DENSE LABOUR MARKETS - EVIDENCE FROM TRANSITIONS TO EMPLOYMENT IN GERMANY

Annekatrien Niebuhr, Institute for Employment Research, Germany

Silke Hamann, Institute for Employment Research, Germany

Jan Cornelius Peters, Institute for Employment Research, Germany

Agglomeration economies may impact on productivity in different ways. Up to now, only a few papers try to provide evidence on the underlying mechanisms that might give rise to a positive correlation between agglomeration and wages. In this analysis we focus on the matching mechanism, i.e. the hypothesis that the size of the local labour market allows for better matching of job seekers and vacancies. Better matches in turn are supposed to give rise to higher productivity. We aim at providing new evidence on the importance of the matching mechanism and investigate the effects of the density of local labour markets on the wages of new employment relationships. The analysis is based on a large micro data set that offers detailed information on labour market biographies of workers in Germany. We apply the two-stage regression approach proposed by Combes et al. (2008) and distinguish between different types of transition, i.e. job-to-job transitions as well as transitions from short- and long-term unemployment. The results point to rather small positive effects on productivity: a doubling of the employment density increases the productivity of new employment relationships by 1.1% to 1.2%. Moreover, the findings indicate that the benefits of a better match might only accrue to persons with a job-to-job transition as well as short-term unemployed. We detect no important impact of agglomeration for transitions from long-term nonemployment.

HOW MANY LEVELS OF GOVERNMENT: REGION VIABILITY IN COLOMBIA

Jose Nino Amezquita, Regional Center for Productivity and Innovation of Boyaca, Colombia/ San Buenaventura University, Colombia

The origin of Region is regarded as a recovering mechanism, but also observed as another level of

State with specific functions, resources and great project management; promoting local power, development and, it adapts more effectively to democratic and administrative aspirations. Likewise, it includes a more efficient management of officers and, consequently, an adequate distribution of the functions corresponding to the State.

In Colombia, regions started to be studied after the European processes carried out during the second half of the XX Century, and it was adopted in our Nation by the 1991 Constitution. However, after 25 years, none of these regions has been constituted. At present, the Caribbean Region seems to be the most advanced process although it does not have any real project to show. Moreover, regions in Colombia appear as a reconstruction of the ancient departments of 1886 (Fals Borda, 1996). This fact puts in doubt the changes carried out over the XX century but it gives a possible solution to the lack of great projects that departments cannot develop due to weak resources (financial, staff, machinery, etc.).

Currently, it is not possible to confirm if Region establishment is a step ahead or, on the contrary, a brake in the process of public goods assignment generated by the State. Furthermore, the new Nation model doubts about the effectiveness of the four levels of government and the cooperation between the regions of the same country (Vandelli, 2002). However, nation structures change constantly, which makes it mandatory to analyse the promotion of Colombian regions as an answer to develop the national territory altogether.

A MULTI-LEVEL APPROACH TO REGIONAL BRANCHING AND NEW INDUSTRY FORMATION: CASES FROM WESTERN NORWAY

Rune Njøs, Western Norway University of Applied Sciences / University of Bergen, Norway

Evolutionary economic geography (EEG) has been criticized for failing to acknowledge the importance of the agency of firms, organisations and individuals in conceptualizations of regional industry development. However, recent accounts have considered this critique, and a new strand appears to emerge where it is pointed out that regional industry evolution is the result of influence from systemic structures and agency. However, in discussing the role of regional contexts as an enabler of renewal of industries, this article argues that this 'dualistic' approach may disregard an important dimension of evolutionary theorizing, namely internal system dynamics. For instance, from the literature on technological innovation systems, we know that different systems are characterized by different internal dynamics and functionalities, i.e. that how a system evolves is linked to diverging intra-systemic logics, paths and rationales. Moreover, as an evolutionary epistemology holds that dynamic interplays both within and between systems constitute the core of evolutionary reasoning, this implies that 'unilevel' investigations may be overly simplistic and run the risk of empirical fallacies. Linking this to EEG, it is here argued that analytical frameworks investigating regional industry renewal should consider interplays between the micro-level of firms and organisations, the meso-level of industry clusters and regional industries, and the macro-level of regional innovation systems (broadly defined). Through qualitative investigation of initiatives for new industry formation in Western Norway, this paper exemplifies how new industry activity growing out of existing industries can be considered a result of reciprocities and interplays between the micro, meso and macro levels. Hence, it is argued that EEG should not just develop frameworks incorporating the agency of firms and organisations into its current structure-oriented approach – there is also a need to develop multi-level understandings emphasizing the importance of diverse intra-systemic levels and divergent development paths.

INNER PERIPHERIES: WHEN AGGLOMERATION IS NOT THE ONLY DETERMINANT FOR SUSTAINABLE DEVELOPMENT. FROM OPERATIONALISATION TO DELINEATION OF A NEW TERRITORIAL CONCEPT

Joan Noguera, University of Valencia, Spain

Carsten Schürmann, TCP International, Germany

Andrew Copus, Nordregio, Sweden

Mar Ortega-Reig, University of Valencia, Spain

Thomas Dax, BABF - Federal Institute for Less-Favoured & Mountain Areas, Austria

Inner peripherality emerges in the European policy debate as a standing alone, complex and multidimensional territorial concept. Inner peripheries are regions that suffer forms of peripheralization that are related not only to distance from centres of economic activity but also to other less “geographical” factors influencing their capacity to take advantage of the benefits of networks of all types with surrounding areas and beyond. As a consequence, inner peripheries tend to lag behind their neighbouring regions in the long term. This contribution arises from the ongoing ESPON 2020 project “Processes, Features and Cycles of Inner Peripheries in Europe (PROFECY)”. The paper takes the three theoretical concepts of inner peripherality developed in the conceptual framework of the project and presents a procedure that allows for their transformation into four operational types that are then delineated using different mapping techniques, based upon innovative small-scale raster approaches, to respond to the challenge posed by each. Thereby, PROFECY for the first time tried to identify areas of inner peripheries for entire Europe based upon a harmonized methodology. The development of a sound methodology also involved a trial and error approach in order to refine and combine resulting maps. The representation of the spatial dimensions of inner peripherality (and its mixture with aspatial processes) is key to understanding the problems associated with inner peripheries and to designing useful strategies to leverage their strengths. At the same time, PROFECY aims at contributing to regional sciences by developing a methodology for the identification of inner peripheries.

HIGHLY SKILLED MIGRANTS AND THE INTERNATIONALIZATION OF KNOWLEDGE

Claudia Noumedem Temgoua, University of Bordeaux, France

This paper investigates the role of Chinese and Indian highly skilled migration in the internationalization of knowledge networks, for a sample of OECD destination countries. We mainly focus on three types of knowledge networks: co-inventorship, co-authorship and R&D cooperation. Based on the DIOC database, we run cross-section PPML regressions on a gravity model for each of our dependent variables. Our results confirm the existence of positive effects of the Chinese and Indian highly skill groups on each of our three proxies for knowledge networks except for the case of the Indian highly skilled impact on R&D cooperation where we do not find any significant result. We extend the analysis to a selected sample of ten ethnic highly skilled migrant groups – which belong to the top sending countries of highly skilled migrants within the group of OECD destination countries of our sample. For most of these additional ethnic groups we do not find any conclusive result in terms of their effect on each of our three dependent variables as compared with what we had for the Indian and Chinese groups.

REVIVING THE ROLE OF THE RURAL ECONOMY TO REALISE ENGLAND'S ECONOMIC GROWTH ASPIRATIONS

Alexander Nurse, University of Liverpool, United Kingdom
David Shaw, University of Liverpool, United Kingdom

Since 2010, much of England's sub-national policy architecture has centred on city regions and the devolution of power away from Whitehall (Nurse, 2015). This debate is, perhaps, encapsulated by the 'Northern Powerhouse' which aims to foster economic growth in Northern England as a counterbalance to London. As a contribution to the ongoing debate around this agenda, we argue that rural economic activity as a key contributor to overall economic growth within those sub-national economic areas has been and remains largely ignored (Pemberton and Shaw, 2012, Gallent et al., 2015). In particular, with ideas about skilled jobs and innovation, amongst others, being touted as a key economic focus as Britain prepares to leave the EU (HM Government, 2017), this paper questions whether these activities are the exclusive domain of the urban and, by extension, how rural economic activity contributes to this agenda.

Focusing on the North West of England, and drawing upon both national and European funding programmes, we examine the ways rural aspects of the growth agenda have been prioritised in city-regional growth strategies. We also analyse two interlinked ERDF-funded projects based in the region tasked with supporting innovation, and working with over 250 companies across a wide variety of industrial sectors. The paper develops an analysis of the urban/rural split of this support, and by extension where economic growth, jobs creation and particular industries (including those underpinning post-Brexit industrial strategy) are located.

In doing so, we make the case for a greater rural focus within this still-developing policy agenda.

RURAL VITALITY, WELLBEING AND PERCEPTION OF PLACE IN SOUTH WEST IRELAND

Brendan O Keeffe, Mary Immaculate College, Ireland

This paper presents the findings of a survey of almost 1,000 citizens in rural communities in the south-west of Ireland. It takes a largely quantitative approach to capturing and assessing citizens' perceptions of their communities on a range of economic, socio-cultural and environmental indicators. Methodologically, the paper draws on a number of rural indicator studies and tools for the measurement of quality of life. The application of the methodological framework applied in the Irish study allows for temporal and spatial comparative analysis and the setting of objectives and targets in local area planning. The data from this particular study reveal positive associations between rural vitality and endogenous development, the LEADER Rural Development Programme and strong and networked civil society organisations. However, the findings also show negative associations between vitality and distance from services, suggesting the persistence of peripherality in spite of technological advances. The findings highlight challenges for public bodies with regional development briefs in garnering citizens' trust, while they also suggest opportunities in respect of agencies partnering more formally with civil society organisations in planning and delivering development strategies.

I NEED MY OWN HOUSE'. THE Pervasiveness OF THE PRIVATE HOUSE IDEAL IN ALTERNATIVE HOUSING INITIATIVES

Cian O'Callaghan, Trinity College Dublin, Ireland
Cesare Di Feliciano, Maynooth University, Ireland

With the increase of vacant housing rates in post-crash cities (Kitchin, O'Callaghan and Gleeson, 2014), social movements are offered the possibility to challenge existing property relations and experiment alternative housing models and initiatives. These projects often involve those "expelled" (Sassen, 2014) from the regime of welfare and well-being they expected for themselves, especially migrants (Di Feliciano, 2016), pointing out the need to establish a new collective ideal of home based on commoning (Huron, 2015). This way, they challenge the main neoliberal principle of personal responsabilization built upon indebted private homeownership. Building on our research in Ireland, Italy and Spain, in this paper we aim to reflect upon the pervasiveness of the idea of private home as the main site for perceived self-realization even for those involved in alternative housing initiatives and social movements fighting for the right to housing. Our point is that not everybody is able to live in alternative housing projects putting their life in common with others. Some people are just too harmed and broken to engage with such emotionally taxing practices, while for others the ideal of private home (ownership) remains an aspiration despite the problems with the model identified by the crisis. Moreover, different national housing systems provide differential levels of security or precariousness between housing tenure options. We thus call for the need to take into account personal biographies and positionalities, along with structural conditions of housing systems in different contexts, to understand the possibilities to practice and establish alternative housing models.

THE NETWORK STRUCTURE OF KNOWLEDGE FLOWS

Neave O'Clery, University of Oxford, United Kingdom
Mariano Beguerisse, University of Oxford, United Kingdom

What drives economic growth? An emerging perspective of growth focuses on the role of 'know-how' and tacit knowledge in the emergence of sophisticated economic activities. From this viewpoint, cities and regions grow as they acquire 'capabilities', and learn to combine these capabilities in order to move into more sophisticated economic activities. This simple process gives rise to a notion of 'path dependence' that may be represented with a network where nodes represent industries and edges represent capability overlap. This network is a model of the opportunity landscape of city or region: the current location of industries in the network determines future diversification potential. I.e., a city whose industries are located in a well-connected part of the network has many options, but one with only few peripheral industries has limited opportunities.

We estimate the capability overlap network of industries by counting worker transitions among them: two industries are connected if more workers than would be expected moved from one to the other. We investigate the structure of these networks built from comparable data for Sweden and Ireland, both highly developed nations that rely on foreign investment. Our results show that although there is remarkable correspondence between the two countries' networks, with strong overlaps in structure particularly in more sophisticated manufacturing and services sectors. There are also important differences that can be explained by constraints or disincentives to labour mobility such as pension provisions in the public sector, and the presence of isolated sectors dominated by foreign multi-nationals.

NAVIGATING THE GLOBAL ECONOMY: CORPORATE STRATEGIES AND CLUSTER CONNECTIONS IN THE DEVELOPMENT OF THE FINNISH MARITIME INDUSTRY

Paivi Oinas, Turku School of Economics, Finland
Kari Mäkeläinen, University of Turku, Finland
Jouni Saarni, University of Turku, Finland

Maritime industries (supplying equipment and parts to shipbuilding and related industries) are of regional and national prominence, and form distinctive clusters in many European countries. Yet they have been of markedly limited academic interest, possibly because shipbuilding is not considered as the kind of innovative and dynamic industry that calls for attention. Our research seeks to fill this gap by making a longitudinal study of the development of the Finnish maritime industry. The country may not be widely known for its maritime industry but it is actually home to a set of internationally significant specialised players. We identify the key historical development phases of the industry nationally, and follow the development of selected regional clusters. Their diversity and changing specialisations make us focus not on the clusters as composite wholes but on the strategies of their leading firms. A firm focus is not typical in analyses of clusters, yet it seems pertinent in this case for understanding their evolution over time. Changes in product offerings, markets, supply chains, and innovation relations are strategic and firm-specific even if they reflect general developments in the national political economy, in the global markets, the overall corporate landscape, and to varying resource availabilities in local and national scale clusters at home and abroad. We trace changing corporate strategies, and developments in the national and local clusters, and suggest that the Finnish maritime industry has succeeded by following global corporate trends and by making innovative inter-industry and international connections within dynamic firm- and cluster-specific specialisations.

THE RISE OF SCIENTIFIC COLLABORATION POLICY – MORE EVIDENCE NEEDED

Agnieszka Olechnicka, Centre for European Regional and Local Studies (EUROREG), University of Warsaw, Poland
Adam Płoszaj, Centre for European Regional and Local Studies (EUROREG), University of Warsaw, Poland

Scientific endeavour is increasingly collaborative. This is seen not only on the individual level (of rising size of research teams), but also on aggregate level (collaboration between cities, regions, countries and continents). Collaborative turn in science is accompanied by the emergence of numerous scientific collaboration policies. Collaborative component of the science policy became more and more visible - many national and regional governments have implemented such instruments (e.g. Framework Programmes in the EU or Industry/University Cooperative Research Centers in the US). However, the assumption that inter-organizational, interregional, national scientific collaboration is productive and beneficial is not unanimously supported. A number of empirical studies bring ambiguous results, demonstrating that joint research may have mixed impact on scientific outcome or that the intended positive influence occurs only under specific circumstances. Factors such as discipline specificities or geography matter, as well as methods used to measure collaboration and scientific performance. The article attempts to systematise the multiplicity scientific collaboration policies tools, based on three examples: Europe, China and USA. The authors distinguish three types of instruments: focused (1) on increasing scientific collaboration, (2) on increasing scientific quality and productivity through collaboration, (3) on increasing scientific performance (addressing collaboration only implicitly). The policy mix is highly country specific. The analysis allows to conclude that the proposed policies are weakly evidence-based, however – to some – extent it depends on the type of instrument.

INTERNATIONALISATION OF INDIGENOUS START-UPS: ECONOMIC DEVELOPMENT IN A SMALL PERIPHERAL ECONOMY

Clare O'Mahony, Dublin Institute of Technology, Ireland

Ireland's economic development is intrinsically linked to its success at attracting Foreign Direct Investment (FDI). For decades, indigenous industry has lagged behind the foreign-owned sector, giving rise to concerns of a dualistic industrial structure. An over-reliance on FDI carries a number of risks associated with its footloose nature and weak linkages in the domestic economy. The development of a strong export-oriented indigenous sector is therefore seen as essential to ensure sustainable economic growth and employment security. Since the 1990s, Irish industrial policy has placed a greater emphasis on indigenous industry. At the same time technological change and the decentralisation of Multinational Enterprises (MNEs) have provided opportunities for small innovative firms.

This paper examines the internationalisation of indigenous start-ups that received support from Enterprise Ireland, the government agency tasked with the development and growth of indigenous industry. These firms are traced over time using the FAME database, supplemented by other sources including websites and news reports. Survivors are found to have high levels of internationalisation. There is also evidence of complementarities with FDI. Consistent with findings for other small economies, acquisitions are often by foreign-owned MNEs. A blurring of the indigenous/foreign-ownership dichotomy raises a number of questions including the degree of embeddedness of these firms in the domestic economy, their FDI linkages, the ability of policy-makers to ensure local ownership, and the relevance of indigenous ownership for a small peripheral economy in a highly globalised and networked world.

OPEN INNOVATION, CLOSED BUSINESS: GRASSROOTS INNOVATION PROCESSES AND PLACES IN CHINA

Luis Orozco, LEREPS/Université Toulouse Jean Jaurès, France
Clement Renaud, École Polytechnique Fédérale de Lausanne, Switzerland

The rise of an innovation-driven economy in China has emerged from the modernization of an aging manufacturing sector and the arrival of the global "maker's movement". Multiple spaces (fablabs, hackerspaces, makerspaces, etc.) have emerged in Chinese cities to support local communities of innovators. In addition, the Chinese government has announced a major plan called Made in China 2025 to upgrade of the local manufacturing sector towards new models of production by providing legal and funding support to communities of innovators. This paper examines the encounter between the economic ambitions of China's innovation policies and the actions of local communities, based on a series of visits and semi-structured interviews with managers, owners and users of several organizations and places dedicated to innovation in the city of Nanjing. These organizations can be considered as knowledge spaces and play an important role in providing educational resources to potential innovators

The various accounts of the actors interviewed suggest: 1) a need to develop processes and resources to support knowledge and know-how sharing between and beyond their member communities; 2) a will to position themselves strategically as key intermediaries of innovation, most of the time without a clear vision of the expected outcomes. However, with no capacity (or institutional legitimacy) to capture returns, they cannot take any direct profit from the businesses and innovations they host. In

our view, this model fails to create sufficient incentives to foster the development of new innovative products or services, leading them more towards a model based on real-estate investment.

THE IMPACT OF HOUSING BENEFIT CUTS ON YOUNG SINGLE PEOPLE FROM PROTECTED GROUPS IN BRITAIN

Iliana Ortega Alcazar, University of Southampton, United Kingdom
Eleanor Wilkinson, University of Southampton, United Kingdom

In line with neoliberal policies of welfare retrenchment, in the last years Britain has seen significant cuts to housing welfare. Single people have been particularly affected by these cuts. Single people (without resident children) aged between 18 and 34 are now only entitled to Housing Benefit at the rate of a room in a shared property, the Shared Accommodation Rate (SAR). Focusing on the SAR, this paper looks at the uneven impact of the current housing crisis and the neoliberal austerity measures that accompany it on protected groups as defined by the 2010 Equality Act (women, ethnic minorities, LGBT people, and people with disabilities). It looks at the detrimental effects of the SAR examining protected groups as separate entities, and also examining the experiences of those who are multiply marginalised. Based on in-depth interviews with young people that have been affected by this policy, this paper explores how young people's ability to access safe and secure accommodation is being diluted by austerity and the government's heteronormative 'family-first' policies. As a result of the SAR, we claim, vulnerable young people are increasingly having to choose between living in precarious shared accommodation with strangers, sofa surfing or living with their parents. This paper examines the ways in which young people's protected characteristics shape their everyday experiences of living in shared accommodation with strangers and how it differs to the shared living arrangements of students and young professionals.

FEMBIBLIO, THE COLLECTIVE CONSTRUCTION OF CULTURAL POLICIES IN THE LIBRARIES OF TWO CONTRASTING NEIGHBOURHOODS IN VALENCIA (SPAIN)

Mar Ortega-Reig, University of Valencia, Spain
Alba Herrero Garcés, Fundació Assut & Associació Valenciana d'Antropologia, Spain
Edgar Bellver Franco, University of Valencia, Spain
Rafael Granell Ruiz, University of Valencia, Spain

This work presents the results of a project of the local government of Valencia (Spain) for improving public libraries, the informal education service of proximity. First, a public opinion survey was conducted in order to assess service performance. Second, an innovative methodological approach through system innovation, public participation and librarians' engagement was developed. On the one hand, the 32 librarians of Valencia were involved in constructing a transition arena for the public library city system interacting with librarians of Barcelona (an innovative model). On the other hand, a participatory analysis was promoted in two pilot neighbourhoods: Russafa, in the city center, and Malilla, in the outskirts of Valencia, with different socio-economic realities. The process, aimed at increasing visibility and dynamizing libraries with the stakeholders of the neighbourhood, fostering social and institutional change. The methods aimed at constructing a common transition arena. The results of the survey show that public libraries are highly valued, but only known by 21% of the population. In addition, several key lines of action relevant for the local community were identified. In both cases, two antagonist models were demanded by citizens: (i) a "the temple of silence" to study and read quietly. And, (ii) a center to learn through cultural activities and IT. These contrasting models pose challenges for adapting libraries to the current social reality. The process resulted in a social learning

arena where bottom-up meet top-down perspectives for the collective construction of public policies and socially accepted and innovative solutions for service improvement.

SOCIO-ECONOMIC IMPACTS OF DEMOGRAPHIC DECLINE IN A CULTURALLY DISTINCT PERIPHERAL RURAL AREA: A CASE STUDY OF THE UIBH RÁTHACH GAELTACHT

Shane O'Sullivan, Limerick Institute of Technology, Ireland

The socio-economic restructuring of the Uibh Ráthach Gaeltacht, an Irish speaking area situated on the Iveragh Peninsula in Co. Kerry (Ireland) has had a profound impact on the demographic structure, with the population declining by 41% between 1956 (3,036) and 2011 (1,797). This contrasts to a 17.51% average population rate for other Gaeltacht areas within the same timeframe. Furthermore, the number of uninhabited townlands in the Uibh Ráthach Gaeltacht and immediate hinterland has increased by 385% between 2006 (13) and 2011 (63). In tandem with the significant decline in population, there was a reduction of 1,084 persons speaking Irish between 1961 and 2002. According to the 2011 Census of Population, 39% of Irish speakers use the language less frequently than once a week. Landscape, language and heritage are among Uibh Ráthach's key strategic assets and resources. However, devalued language or sterilised heritage do not engender development. Development is people driven and has to be people centred and landscapes need to be living and vibrant. This paper will examine the area's demographics with the view of examining the local economy – its relative performance and prospects – and quality of life factors – community development and social capital. This paper will utilise Census of Population data (1956 – 2016); agricultural census (1990 – 2010); local administrative (school enrolment figures and church records); and household questionnaire (n=130) data in order to provide evidence and clear signposts for relevant local, regional and national stakeholders with respect to identifying socio-economic priorities and direct investments over the coming years.

GRADUATE MIGRATION IN GERMANY – NEW EVIDENCE FROM AN EVENT HISTORY ANALYSIS

Anne Otto, Institute of Employment Research, Germany
Teichert Christian, Justus-Liebig-Universität Giessen, Germany
Niebuhr Annkatrin, Institute of Employment Research, Germany
Rossen Anja, Institute of Employment Research, Germany

Human capital is a key determinant of regional development. Universities play a crucial role for human capital accumulation in regions. However, graduates of local universities will only increase the human capital endowment if they stay in the university region and especially for smaller regions out-migration of graduates might be an issue. Therefore, understanding the migration decision of graduates is of particular importance for less developed regions with institutions of higher education. Regarding the voluminous literature on student and graduate migration, many studies investigate the factors that impact on migration decision making using individual level information. Migration decisions are observed mostly between specific points of time (e.g. five years after graduation). Hence, the question whether most graduates immediately leave the region of study after graduation or even two years later after first entering the labour market in the university region has remained, by and large, unanswered. In our paper, we focus on the time dimension of graduate migration in Germany. We regard moves that are linked to labour market entry of the graduates. By applying event history methods we are able to investigate the sequence of the migration process in more detail. Our panel database combines student records with the Integrated Employment Biographies (IEB) for five German universities. In this database, a graduate's employment biography includes all spells

available in German social security records and is reported on a daily basis. Only a few studies that investigate the mobility of young high-skilled workers use this approach up to now. In contrast to these papers our analyses provide more precise information on the timing of migration.

EMERGING ALTER-GLOBALIZATION AND DEVELOPMENT POLICY IN AFRICA

Francis Owusu, Iowa State University, United States

During the 1990s and 2000s many spoke of the “anti-globalization” social justice movement around the world. Some members of the movement rejected this term, arguing that they were in favour of an alter-globalization of people and ideas, rather than capital. As the contradictions of globalization became more apparent through the global financial crisis and its aftermath, there has been a reactionary backlash against it in some developed countries such as the US and UK. However rather than entering a post-globalization world, as some have argued, we argue we are entering a world of actually existing alter-globalization, where the Trump administration will attempt to promote American exports, in addition to import-substitution domestically. This paper explores the contours of the emerging alter-globalization world and highlights the emerging players. It examines whether the emerging reconfiguration of global relations can open up opportunities for previously marginalized regions, such as those in Africa, or will further stifle their development opportunities.

SPACE, TECHNOLOGY AND EVERYDAY WORK-LIFE: THE SPATIAL UNDERPINNINGS OF MOBILE AND FLEXIBLE LABOUR, THE CASE OF TORONTO-WATERLOO, ONTARIO

Filipa Pajevic, McGill University, Canada

Richard G. Shearmur, McGill University, Canada

The proliferation of smart devices with applications that digitize quite a significant portion of work, such as communications, filing and storage, editing and creating of information, is altering the way that work is being performed, in the sense that it enables greater worker mobility, allowing the worker to temporarily engage in multiple activities from a variety of locations. This ability of the worker to be more flexible and mobile characterizes the Gig Economy (also dubbed the Sharing Economy, the On-Demand Economy, and the 1099 Economy), i.e. an economy in which work is organised around projects, and in which each worker will tend to work for, or with, numerous different teams throughout their career.

From an urban planning perspective this means that we can no longer assume that all workers have a well-defined, fixed place of work. In fact an increasing number of non-places - such as cafés, train stations, airports, and shared spaces -, have begun to assume the role of the workplace in parallel to their other functions. The location dynamics of work within cities are shifting, which could signal a need to rethink the traditional planning practices concerning productivity and economic growth, and adopt a different approach to understanding, using and regulating space.

This project explores how the Gig Economy manifests spatially, using the Innovation Corridor of Toronto-Waterloo as a case study; it seeks to uncover the extent to which symbolic workers are constrained spatially, and to confirm whether symbolic workers indeed no longer require a fixed, well-defined place of work to perform their job.

GHANAIAN SMES LOOKING OUTWARD: THE IMPACT OF EMERGING NATIONAL SYSTEMS OF INNOVATION (NSI)

Marina Papanastassiou, Middlesex University Business School, United Kingdom
Jyoti Navare, Middlesex University Business School, United Kingdom
Ellis Osabutey, Middlesex University Business School, United Kingdom
Robert Pearce, Henley Business School, United Kingdom
Zhongqi Jin, Middlesex University Business School, United Kingdom

In this paper we argue that SMEs in developing countries, in our case in Ghana, in their pursuit of international competitiveness break away from paradigms that want them to rely technological on imported mature technologies mostly developed by multinational enterprises (MNEs). We maintain, that the existence of national and international systems of innovation (NSIs and ISIs) allow them to interact with a variety of innovation related actors enabling them not only to adapt existing but also to develop new products and services.

The purpose of the paper is, thus, to analyse the varying impact of components of local and international systems of innovation on firms located in Ghana applying the Miles and Snow terminology. Our empirical setting is based on a cross-sectional survey conducted in 2015. A sample of 500 business units was selected randomly from the Ghana Business Directory (2001), membership directory of the Association of Ghana Industries, National Board for Small Scale Industries (NBSSI), Association of Insurance Companies and Ghana Banking Association resulting in a sample of 393 firms, a response rate of 78.6%. Over a third of the firms are from the finance sector (37.7%) and 20% were subsidiaries of foreign MNEs. Our initial findings suggest that domestic SMEs and subsidiaries of MNEs have different forms of interaction with various actors of NSIs and thus creating different developmental prospects to the host country, contrary to previous studies which have shown that countries in Africa have not been known to exhibit NSIs for firms to tap into.

PATTERNS OF URBAN SPATIAL EXPANSION IN EU CITIES, 2006-2012

Stefano Pareglio, Fondazione Eni Enrico Mattei, Italy

The most struggling aspect of the ongoing urbanisation in Europe is undoubtedly the linkage with population. The spatial expansion of built-up areas usually responds to the increase in the demand for houses caused by growing population, but more and more evidence is emerging documenting how weak this relationship is in some circumstances. One common explanation is that the demand for houses shifted from the centres to the peripheries, where more space is often available at a lower price. The objective of this paper is to describe the urban spatial expansion of cities in Europe looking at the variation of the total urbanised area during the period 2006-2012 across the cities in Europe and analysing the statistical correlation between the variables that best represent this change: the change in total population; the change in urban population density; and the change in the level of fragmentation of the built-up areas. We use Configurational Frequency Analysis (CFA) to search for clear patterns, hence combinations of the values of the three variables that reproduce a clear circumstance to relate to the growth of the urbanised area. The findings in this paper shed new light on the urbanisation process occurred in the European cities in recent years, evidencing clear trends of population decentralisation, that is decreasing urban population density and increasing fragmentation. Surprisingly this trend is common to both growing and shrinking cities. We conclude that urban sprawl remains a substantial challenge for future urban development.

STRONG LOCALISM, WEAK REGIONALISM: THE STRENGTHS AND WEAKNESSES OF LEGA NORD GOVERNANCE OF THE VENETO REGION

Fred Paxton, University of Vienna, Austria

Patrizia Messina, University of Padua, Italy

To explain the current distinctiveness of the regional governance of Veneto, Italy we must examine the particular mode of governance of the populist Lega Nord party at regional and local government levels. Furthermore, we must trace its roots back to the (historical and inherited) 'White' political culture of the region, to explain the localist preferences evident in the Lega Nord governing style. This paper will demonstrate a continuity between certain traits that have characterized this so-called 'White' local political culture, in particular its localism and anti-statism, and the typical values of the Lega Nord, which today translate into a hyper-localist local government culture. These characteristic traits, while potentially an asset for the maintenance of local identity and autonomy, constitute a point of weakness for the regional government by increasing administrative fragmentation and impeding progress in regional coordination. The analysis of the regional government strategy, or lack thereof, will be conducted using the programme documentation for regional development and EU Structural Fund policies. Comparisons will be made with the neighbouring region of Emilia-Romagna, which has significant differences in political culture and regional planning style. This analysis will help to explain the current absence of a real strategy for the regional development of Veneto, and will argue for the seriousness of this area of weakness amidst the intense demand for regional competitiveness in today's global economy.

CLUSTER DYNAMICS OF FINANCIAL CENTRES IN THE UNITED KINGDOM: DO CONNECTED FIRMS GROW FASTER?

Vladimir Pazitka, University of Oxford, United Kingdom

Dariusz Wójcik, University of Oxford, United Kingdom

The value of knowledge and network connections for firms has been long recognised in economic geography. Empirical evidence linking network connections, knowledge spillovers and firm performance is however still quite limited in the context of financial services. This study investigates the relationship between inter-cluster network connections and firm growth. We draw a sample of 3,224 financial services firms located in the United Kingdom to study their growth performance in the aftermath of the global financial crisis. We use data on syndicated capital market deals sourced from Dealogic databases, combined with micro-geographic data for financial services firms, to construct measures of inter-cluster network connectivity as a proxy for the theoretical concept of global pipelines in our spatial econometric models of long-term firm growth. This allows us to investigate both the direct effect of inter-cluster network connections on firm growth and the indirect effect of such connections on spatially proximate firms. The results show that firms with network connections to related companies in other financial centres grow faster. Contrary to expectations, such connections generate substantial negative spatial spillovers to proximate firms, leading to a divergence of growth rates between globally connected and locally embedded firms. More generally, this implies that the knowledge transfers via inter-cluster connections do not necessarily benefit the wider group of firms in the cluster, but instead appear to be a source of competitive pressure.

THE NEW EU URBAN AGENDA AS A CASE OF POLICY ENTREPRENEURIALISM. FROM TERRITORIAL POLICY TO METAGOVERNANCE

Serafin Pazos-Vidal, UNIVERSIDAD NACIONAL DE EDUCACION A DISTANCIA (UNED), Belgium

On May 2016 the ministers from the EU member states responsible for urban matters agreed what was called the “Pact of Amsterdam”. This is a prime case of policy entrepreneurialism that has been sustained for over two decades (Faludi, 2009) to address urban matters at EU level by a small group of committed policy entrepreneurs, notably the Dutch Government. It reflects Kingdon (1984) model of policy entrepreneurs within government – and their outside policy communities- wait for the political window of opportunity to turn ideas into formal rules and policies. Indeed, the aim of achieving EU recognition for urban matters took priority over content: what was originally an EU-wide initiative focused on territorial socio-economic development was turned into a form of multi-level governance. The new European Commission focus on “better regulation” offered the opportunity of achieving that recognition by creating 12 partnerships of EU, national and city officials to assess the appropriateness of existing policies for urban areas; they address not just “classic” Territorial Cohesion/funding targeting issues but also a wider set of domains such as digital, migration or climate adaptation. This successful recasting is however problematic: what is a “city” remains a normative concept and many of these 12 themes are not necessarily “urban” in nature. This will affect the survival of this initiative in the future for it fails to build a sufficiently large multi-level coalition (Type II, Marks and Hooghe,2003) to be self-sustained if the current Commission, national and city network policy entrepreneurs falter in their support.

THE GEOGRAPHY OF SOCIAL CAPITAL AND INNOVATION IN THE EUROPEAN UNION

Jesús Peiró-Palomino, Spain

Regional development has historically been at the core of the economic scholars’ agenda. In this scenario, innovation has been identified as a stimulant of regional performance and, accordingly, it is one of the pillars of the Europe 2020 Strategy (H2020) to achieve smart, sustainable and inclusive regional growth for the period 2014–2020. One potential factor that can affect innovation is social capital. In the current knowledge-based societies, knowledge transfer is essential and social capital appears to play a crucial role. However, as Camagni and Capello (2013) have explained, the geography of innovation is complex and the one-size-fits-all approach is not simple to apply when regions are highly heterogeneous. In addition, the form in which social capital affects innovation might adopt different forms depending on the regressors included in the analysis. This paper assesses the role of social capital in regional innovation for 257 EU-28 regions in the pre-crisis (2000–2007) and the crisis (2008–2012) period. The analysis is carried out from a totally flexible non-parametric approach, which allows for exploding heterogeneity across space and over time, which might help for region-specific policy design. The results suggest no different impacts for the two periods, cross-regional heterogeneity driven by geographical features and the level of development being much more important. In particular, the larger effects are found for the periphery of Europe, especially for regions with low levels of development and in transition. In contrast, for most of the EU core regions no significant impacts are found.

ENABLING FACTORS FOR DIGITAL UPGRADING: THE CASE OF VENETO REGION (ITALY)

Dejan Pejčic, University Ca' Foscari of Venice, Italy
Giancarlo Corò, University Ca' Foscari of Venice, Italy
Mario Volpe, University Ca' Foscari of Venice, Italy

The research aims to analyse the diffusion of digital technologies in Veneto region (Italy), together with some enabling factors facilitating their adoption. The work is based on a representative sample of firms from manufacturing, construction and tertiary. Enabling factors taken into account are internationalization, financial composition and human capital. The analysis shows a heterogeneous diffusion of Industry 4.0 technologies among industries, allowing to identify different technology frontiers across sectors. Logit regression shows a positive relation between adoption of digital technologies and openness to international markets, as well as with high skilled and high educated human capital. Digital users show better productivity indexes than other firms, even though a value-redistribution problem exists. The financial side is less clear. Firms adopting technologies show better financial position but profitability ratios are quite similar for both groups. Are investments in digital technologies lowering profitability? How much time is required to realize a significant return on investments?

IMMIGRATION AND INNOVATION: EMPIRICAL EVIDENCE FROM THE COLLAPSE OF THE SOVIET UNION

Gabriele Pellegrino, EPFL CDM ITPP IIPP, Switzerland
Gaétan De Rassenfosse, EPFL, Switzerland
Julio Raffo, WIPO, Switzerland

This paper assesses the extent to which the international migration of inventors affects the level of innovation of the receiving country. To this aim we make use of a new database, mapping migratory patterns of inventors, and we draw on the end of Soviet Union and the consequent post-1992 influx of ex-Soviet inventors in the United States. Econometric analysis on a panel of U.S. cities and technological fields shows that propensity to patent by local inventors increases significantly after the arrival of ex-Soviet Union inventors. Interestingly, estimations reveal technological fields specific effects. The positive impact of migrant inventors appears to be particularly relevant in physics and chemistry.

RURAL DEVELOPMENT POLICY IN THE CONTEXT OF PRODUCTIVISM, POST-PRODUCTIVISM AND NEWLY FORMED NEO-PRODUCTIVISM: CRITICAL REFLECTION OF LOCAL DEVELOPMENT CHALLENGES

Martin Pelucha, University of Economics in Prague, Czech Republic

The paper responds to the current inconsistencies in theoretical definition of rural studies and practical implementation of the rural development policy by the European Union (EU). These contradictions reduce the effectiveness of this policy, particularly with regard to the ability to achieve predefined goals related to the balanced territorial development. Contradictions are in many cases the result of a misunderstanding of the nature of the rural development definition which is further supplemented by the new paradigm of neoproductivism. Concept of the neoproductivism doctrine is often misunderstood and less adequately and critically researched. Existing academic debates focus

mainly on the discussion of “neo-productivist agriculture” and agricultural change, with less attention to implications for rural development policymaking.

The establishing of a separate European Union (EU) rural development policy was supposed to represent a certain stage of a comprehensive approach to rural areas in the programming period 2007-2013. The end of the first decade of the new millennium was affected by the economic crisis, the consequences of which were reflected in the formulation of the Europe 2020 strategy. The agricultural sector regained its importance as an instrument for more sophisticated forms of environmentally friendly production and support for rural employment. This shift in the paradigm of the rural development policy means a new challenge for local development in rural areas.

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THE SENSITIVITY OF REGIONAL CONVERGENCE IN THE EU TO PARAMETER SHIFTS & POLICY SHOCKS

Marco Percoco, Università Bocconi, Italy

Andries Brandsma, Joint Research Center of the European Commission, Spain

Olga Diukanova, Joint Research Center of the European Commission, Spain

Francesco Di Comite, Joint Research Center of the European Commission, Spain

The narrowing of GDP per capita gaps between sub-national regions in Europe through economic growth may depend on distance and degree of economic integration, as reflected in the parameter settings and market structure assumptions of a spatial computable general equilibrium (CGE) model. In this paper we develop and apply a new method of stochastic sensitivity analysis that allows for the interactions between key parameters and is parsimonious in the number of model runs combining policy shocks. The application results in a mapping of all NUTS2 regions showing overall sensitivity and the extent to which regions are prone to converge to the average GDP per capita of the country and the EU as a whole.

Spatial CGE models pose a number of specific challenges to systematic sensitivity analysis (SSA) that are turned into numerical advantages in the method applied, in particular by allowing multiple model run processes to be executed in parallel. The practice of borrowing econometric estimates from empirical growth studies and setting elasticities which are the same for all regions is overridden by a process in which information on the interaction within and between policy shocks and behavioral parameter changes is gradually extracted from the iterations with the model. The results will give an indication of which regions are most sensitive to moves towards greater integration in either direction, good or bad.

While computable general equilibrium (CGE) models are the established tool to analyse policy impacts whose effects are transmitted through multiple markets, they notoriously suffer from uncertainty in the selection of behavioural parameters, which are the elasticities of substitution or transformation. Where modellers lack the data for reliable econometric estimates, a common practice is to use elasticity values from other models or econometric studies.

While borrowing elasticities is a sensible starting point in any modelling exercise, it remains uncertain whether elasticities from other time periods, countries, statistical units or models are applicable for a given policy exercise.

In point of fact, the commonly applied stochastic methods of systematic sensitivity analysis (SSA) strongly depend on assumption about the distribution functions (Arndt, 1996). Besides, elasticities on lower nests of production functions can be dependent on elasticities on higher nests, making their joint probability distribution ever harder to pin down. Although the ranges of elasticity parameter are different, the sensitivity analysis will require a comparison of the uncertainty bandwidth of the parameter and the effect of an equally sized change.

This leaves a systematic sensitivity analysis, even if it were feasible, with results that are meaningless and cannot easily be interpreted as confidence intervals.

Although in CGE models the values of elasticity parameters have no effect on the baseline solution (which requires that the model reproduces a base-year database without policy shocks), it is of paramount importance to test model performance with respect to the interaction effects between policy shocks and behavioural parameters, as in Percoco et al (2014).

However, so far little attention has been paid to the investigation of interaction effects.

The purpose of this paper is to illustrate an efficient approach of conducting sensitivity analysis with a very large and complex multi-regional CGE model RHOMOLO, describing a computationally parsimonious way of programming this exercise and suggesting an approach of analysing the results which permits to put the variation in the parameters on the same footing.

First, we run RHOMOLO changing one elasticity at a time when each elasticity takes 3 values (base-year, +X%, - X%). Doing it for all policy shocks one-by one, permits us to identify the most and the least influential elasticity parameters.

Second, we run RHOMOLO for all possible combinations of the values of the most influential elasticities (as before, each elasticity taking 3 values: base-year, +X%, - X%). This exercise provides us the correlation in the responsiveness of macro indicators and direction of economic impacts following elasticities' variations.

Third, following the approach of Percoco et al (2014), we run RHOMOLO

- a) for all possible combinations of scenario shocks
- b) for the combinations of scenario shocks and the most influential elasticities.

In order to specify summary statistics on which the comparison is based putting the variation in the parameters on the same footing, we experiment with the correlation matrix of the effects on the selected main macroeconomic variables looking at averages, maximum, minimum and the variance of the effects over the regions. We use the following macroeconomic indicators: real GDP, cumulative output, employment (or labour supply), real wages, net trade, terms of trade, household consumption, investments, all measured at the regional level.

Since the SSA process with a very large and complex multiregional CGE model is highly time- and CPU intensive, in order to run computer simulations looping over the values of elasticities and/or policy shocks, we coded this exercise as concurrent processes using a virtual machine with 24 cores and 120 GB of physical memory. Following the recommendations of Rutherford (2007) and Kalvelagen (2012), we built an algorithm (programmed in GAMS) that allocates multiple model runs for different combinations of elasticities to 24 processes that all are executed concurrently (all processes start simultaneously and run in parallel, but wait for each other to finish). Within each concurrent process, several model runs are executed consecutively. We used MS DOS for batch scripting of parallel processes. When all model runs are finished, all results are automatically merged, producing Excel

Pivot tables that show variation of regional or country macroeconomic indicators for all combinations of elasticity parameters and/or policy shocks. For the technical details and the programming codes, please refer to Di Comite et al. (2015).

UNRAVELLING THE TRAIL OF A GPT: THE CASE OF ELECTRICAL & ELECTRONIC TECHNOLOGIES FROM 1860 TO 1930

Sergio Petralia, Utrecht University, The Netherlands

It has been argued that episodes of acceleration in economic growth can be driven by particular technologies. These revolutionary technologies, often referred to as General Purpose Technologies (GPTs), have the power to change the pace and direction of economic progress. While theoretical models have advanced greatly providing a precise and coherent characterization of how a GPT should look like and the economic consequences of its diffusion, there is a lack of systematic and comprehensive empirical evidence supporting both of these claims. This paper contributes to the literature in two ways, first it provides a way of characterizing GPTs using patent data and shows that the most iconic example, electricity, fulfils these criteria. Secondly, it documents the positive impact of the diffusion of electricity-related inventions on income per capita, wages, and growth at county level in the United States from 1860 to 1930. Results are in line with previous historical accounts on the subject, and are consistent with theoretical predictions.

EU COHESION POLICY: A SHORT HISTORY OF ITS FUTURE

Wolfgang Petzold, Committee of the Regions, Belgium

Almost 30 years ago, the foundations of what was coined EU cohesion policy were laid down by the Single European Act and subsequent regulations. Ever since, four reforms in 1993, 1999, 2006 and 2013 kept the key beliefs underpinning the policy's design surprisingly unchanged despite manifold challenges. This article takes a brief look at these reforms, questions options for the next one and lists a number of elements, which may influence its direction. In particular, I will argue that the future design and financial allocation of EU cohesion policy is highly predictable. Uncertainties such as the influence of Brexit, the volume, financing and duration of the EU's next multiannual financial framework (MFF), the pressure of shifting funds to other headings, etc. will be outweighed by the pressure of the unanimous vote in the Council on the MFF, which will favour path dependency over radical changes. This hypothesis will be tested against the results of (a) a discourse analysis on EU cohesion policy post-2020 of stakeholders' positions at the level of the EU institutions, EU governments and governments' groupings, associations and interest groups, and academics; (b) a limited number of qualitative interviews with representatives of the former; (c) an online survey among public authorities in the EU member states implementing EU cohesion policy. Towards this background, the final argument of the paper will be developed through a review of literature focusing on the question of how a genuine EU cohesion policy would look like.

REGIONAL FINANCIALISATION AND CONVERGENCE: EVIDENCE FROM ITALY

Peter Phelps, United Kingdom

Against a backdrop of financialisation, turmoil and evolving economic and financial disparities across and within European regions, this paper's primary contribution is to investigate further the spatial

scale and temporal evolution of regional convergence of bank lending conditions. The empirical strategy makes use of a relatively powerful convergence testing methodology, which facilitates a robust analysis. The empirical results reveal that the divergence has broadly increased across difference spatial scales since the onset of the global crisis, and notably during the prolonged sovereign debt crisis. Important policy implications follow from the analysis.

THE EFFECTS OF PUBLIC POLICIES IN FOSTERING UNIVERSITY SPINOFFS

Eleonora Pierucci, Università Della Basilicata, Italy

Michele Meoli, University of Bergamo, Italy

Silvio Vismara, University of Bergamo, Italy

The present work aims to contribute to the economic literature on the institutional and contextual determinants of academic spin-offs. Exploiting a sample is composed of 1,275 year-University observations (from 85 Italian universities between 1999 and 2015), the main objective consists in evaluating if the introduction of the performance-based research funding system produced the desired impact on the proliferation of academic spin-offs. Further, we investigate if the introduction of the performance-based funding system (which should foster academic spin-offs creation in line with the European policy addresses since the Lisbon agenda), positively moderates the exploitation of academic scientific knowledge as in the objective of the University third mission. Last, we test if these research assessment and spin-off stimulating policies exacerbate the role of other than third mission determinants of spin-off creation such as the lack of academic opportunities or the presence of relative skilled unemployment. Our results shed a light on the ineffectiveness of these policies in stimulating academic spin-offs as the result of the exploitation scientific academic research and as a mean of technology transfer. On the contrary, the positive impact on the proliferation of academic determined by the performance-based funding system has been exacerbated by those variables which proxy lack of job opportunities for skilled workers in and outside academia. This ultimately casts doubts on the role and the design of policies meant to foster the establishment of academic spinoffs, as well as on the use of their numbers as a measure of technology transfer.

THE PUBLIC WEALTH OF CITIES AND REGIONS?

Andy Pike, University of Newcastle, United Kingdom

Peter O'Brien, Newcastle University, United Kingdom

Andy Brown, Leeds University Business School, United Kingdom

Richard Whittle, Manchester Metropolitan University Business School, United Kingdom

Amidst continued fiscal crisis, alongside efforts to stimulate growth, address major societal challenges and expand public service reform, national and local government actors are being compelled into considering how best to manage public assets. A series of variegated institutional arrangements of public ownership are emerging in different places and at different geographical scales, seeking to steer the use of public assets – particularly land, property and infrastructure. Against growing concerns about the ‘under-utilisation’ of public assets deemed ‘surplus’, sub-national and local governments are seemingly being transformed into ‘commercial’ actors’ in the search for new revenue and capital resources.

This paper reviews the changing context, and political-economic debates about public assets and the role of the state. The findings suggest multiple types of assets, management strategies and institutional ownership and governance models are being adapted to align with local and regional

needs, purposes and circumstances, leading to an uneven pattern of public asset portfolios and wealth in cities and regions. Analysis reveals that local public actors, under severe financial pressures, are establishing new or bringing back existing assets under the control of public authorities to help implement decentralised economic, social and environmental strategies, and generate new income, revealing an assemblage of managerial and entrepreneurial local state activity. Although a profound set of normative and political questions are being posed about the role and nature of the state, something akin to a re-working rather than retreat of the state in the ownership and management of the public assets in cities and regions is becoming evident.

KNOWLEDGE LINKAGES AND TECHNOLOGICAL CHANGE IN EUROPE

Enrica Pinca, University College Dublin, Ireland

It is a well-known fact that a tendency exists for innovative activities to cluster geographically and these clusters are subject to changes both in time and in space. A further element to consider is the role played by networks in shaping knowledge creation. A growing literature has recently shed light on the geography of innovation in Europe and its evolution, focusing on the sectorial distribution of innovative activities and the relationship existing between the different branches of fields which the knowledge is dealing with. No study has investigated the relationship between this evolution and the existence of networks in place between regions yet.

This work starts from a descriptive analysis of the geography of innovation in European regions and its evolution in the last decades, i.e. clustering of patent classes, describing the main tendencies in terms of structural changes in the knowledge base (which are the incumbent, novel and abandoned technological sectors).

Furthermore, the author takes into consideration the evolution of the technological structure of EU regional economies across a more extended time-frame (1981-2008) trying to disentangle whether the existence of knowledge linkages in place between regions has influenced such evolution.

The research employs the model used by Boschma et al. (2014), slightly modified to account for the influence of knowledge linkages (patent co-authorship) on the probability of having patents granted in new sectors. The model includes independent variables accounting for: the existence of knowledge linkages between regions, control variables and fixed effects.

REGIONAL AUTHORITIES, TRANSBOUNDARY NETWORK MOBILIZATION AND THE PURSUIT OF CENTRALITY

Melanie Plangger, University of Innsbruck, Austria

Scholars widely apply relational approaches to capture the inclusive and horizontal effects of cross-border and transnational cooperation. From a spatial perspective, fluid connections allow overcoming territorial and scalar boundaries. From a governance perspective, horizontal linkages allow overcoming hierarchical patterns of subordination. At the same time, research finds a persistence of established and the emergence of new hierarchies.

How can we make sense of the co-existence of territorial, scalar and political hierarchies and networks in transboundary spaces? While different approaches address this question, the paper embeds their key findings in a strategic-relational framework. It develops the concept of “transboundary metagovernance” to capture the interaction between network, territory and hierarchy along three

dimensions. First, networks are, along with other dimensions of space and governance, consciously mobilized, modified and manipulated. Second, networks follow the perceived need to connect in a context of interdependence and resource dispersal. Connections allow profiting from resources outside of the own territorial and political realm and to exert influence over distant actors and processes. Third, networks, territories and hierarchies give certain actors more power than others. While established hierarchies impact upon network relations, actors may exploit connections to overcome subordination.

Empirically, the paper illustrates the argument with the EU macro-regional strategy for the Alpine region. It investigates how regional authorities strategically mobilize transboundary connections. To increase the leverage over the own territory, they transcend scalar and political hierarchies. At the same time, they establish new forms of exclusion and subordination in the pursuit of centrality.

ENVIRONMENTAL SECURITY AND REGIONAL INTEGRATION DYNAMICS - ADDRESSING THE COMPLEXITY OF RIVER BASIN DEVELOPMENT: THE DANUBE RIVER AND THE LANCANG/ MEKONG RIVER BASINS

Christian Ploberger, Independent Researcher (China & East Asia), United Kingdom

When addressing environmental issues, a standard response is that environmental/climate change related risks are viewed of lesser relevance for regional cooperation and integration than topics related to development and national security. Indeed, it is argued that cooperation on subjects like environmental security may contribute to cooperative behaviour between states even when confronted by more serious issues of national security. Yet the paper question if such a perception is still accurate, since non-traditional security threats have become more significant in their impact, with environmental security representing a prominent example since environmental/climate change related risks are identified as a potential 'threat multiplier'. After all, the risks and development challenges related to environmental security are not only diverse but increasing in their severity with regard to their impact on the development prospect of societies and the livelihood of people. Adding to this challenge is, that environmental/climate change related risks are trans-national and not constraint by national borders, therefore proximity does become a different connotation, one with in conflict when considering that proximity is interpreted as positive factor for regional economic integration. Consequently, environmental/climate change related risks indicating a new quality of security risks with potential far reaching consequences for development and regional integration processes. In comparing the Danube Region and the Great Mekong Subregion, both are characterised by a trans-national river network, the complexity of addressing environmental/climate change related risks, development and regional integration became noticeable.

COHESION THROUGH SCIENTIFIC COLLABORATION IN THE EUROPEAN UNION

Adam Ploszaj, Centre for European Regional and Local Studies EUROREG, University of Warsaw, Poland

Agnieszka Olechnicka, Centre for European Regional and Local Studies (EUROREG), University of Warsaw, Poland

Framework Programmes for Research and Technological Development remain the flagship of the European Union science policy. The rationale behind the programme is twofold: to enhance Europe's scientific excellence, and to deepen European integration. The latter facet is in line with the broad idea of the EU cohesion policy. The paper discusses the role of the Framework Programmes in the

integration of the European Research Area. The empirical analysis – at the regional level (NUTS2) – is based on two sources: 7th Framework Programme project database, and scientific papers indexed in Web of Science database.

WHEN DO KNOWLEDGE GATEKEEPERS ACT AS TECHNOLOGY BROKERS?

Anne Plunket, BETA, ISAM-IAE, Université de Lorraine, France

Regional studies are increasingly concerned with the role of technology gatekeepers or boundary spanners within industrial clusters (Giuliani & Bell 2005; Morrison 2008; Graf & Krüger 2011; Breschi & Lenzi 2015). These actors endorse a mediating role as they establish unique linkages to external sources and diffuse their knowledge within their industrial cluster.

As such, gatekeepers act as social brokers between separate regions within science and technology networks. Because of their specific network position, they contribute to renew the cluster's knowledge base (Breschi & Lenzi 2015) and as a consequence they should have more opportunities to increase the level of innovation novelty. However, we lack micro-level evidence regarding the influence of knowledge gatekeepers on technology brokering understood as a creative process of technology recombination, although this relation is often taken for granted (Verhoeven et al. 2016; Arts & Veugelers 2015).

Based on a social network analysis of patent inventors, , this study examines the influence of knowledge gatekeepers on technology brokering and investigates whether gatekeepers have a specific advantage in generating new technologies measured by recombinant novelty compared to other inventors in their region.

This study explores these issues using European patents from the CRIOS Patstat database and focuses on inventors located in France. European patents based on the CRIOS Patstat database (Coffina & Tarasconi, 2014) between 1995 and 2010.

EXPLAINING THE GROWING DIVIDE BETWEEN LARGE AND SMALL CITIES: EVIDENCE FROM CANADA

Mario Polese, INRS. University of Quebec, Canada

The Brexit vote and the Trump victory brutally awakened us to the deep social divide between small and big places. London voted massively against Brexit just as New York voted overwhelmingly against Trump. Canada (fortunately) has witnessed no such political upheaval; but the big city / small town divide is no less real... and growing.

Using data for 135 Canadian urban areas over a forty year period, we document the evolving differences between cities of varying sizes. The divide between Canada's great metropolitan areas (Toronto, Montreal, and Vancouver, sometimes adding Ottawa and Calgary) and other places has grown on a number of indicators, notably with respect to education levels and employment structure by industry. A number of explanations are proposed. The growing concentration of 'brains' in large metropolitan areas is, we argue, a direct consequence of the rise the knowledge-intensive information economy, the corollary of which is the expulsion of 'brawn' to smaller places. However, in the Canadian case, the presence of resource-based communities with both comparatively low education levels and high wages creates a second divide, superimposed on the first. The result is a more complex set of relationships that go beyond the simple big/small divide.

INPUT FOR AND OUTPUT OF LOCAL GOVERNANCE IN RURAL DEVELOPMENT

Kim Pollermann, Thünen-Institut of Rural Studies, Germany

Petra Raue, Thünen-Institute of Rural Studies, Germany

Gitta Schnaut, Thünen-Institut of Rural Studies, Germany

Support for balanced regional development with participatory approaches has a long tradition in EU funding for rural development. LEADER started 25 years ago and now has 2600 Local Action Groups (LAGs). These LAGs collaborate as a kind of a public-private partnership on the basis of an integrated local development strategy and administer own budgets to support projects.

To examine the contributions of LEADER to local governance, we can present results from the ex-post-evaluation of Rural Development Programs (2007-2013) in six federal states in Germany. A mixture of qualitative and quantitative methods has been used. In addition first evaluation results are shown for the 2014-2020 funding period, especially from a survey of 115 LAGs in four German federal states.

To examine governance matters on the input-side we look at the type and structure of participation while on the output-side we focus on contributions to rural development.

On the input-side the involvement of civil society and economy actors was successful, but inadequate funding conditions for private actors set limitations for their involvement in project implementation. In addition, the LAG-compositions show a lack of underprivileged groups and noteworthy shortfalls in gender representation.

Looking at the output-side and the factors favoring the success of governance arrangements like LEADER, the estimations of LAG-managers show that the most important factors are: commitment, financial/material resources, involvement of key-personalities as driving forces, level of acceptance/cooperation and support from local/regional political actors. Remarkably, the quality of the local development strategies was rated still relevant but less important.

THE GEOGRAPHY OF BRAINS IN THE US RUSTBELT AND SUNBELT

Jessie Poon, University of Buffalo - The State University of New York, United States

Wei Yin, University of Buffalo, United States

Narratives of creative and skilled cities have correlated regional and urban productivity to new skills that are characterized by non-routine work with significant inputs of creativity. In the United States, Rustbelt cities' high concentration of less creative blue-collar brawn workers are said to encourage shrinking cities, urban disinvestment and unhappy residents (Florida 2010). The narratives suggest that a combination of cold weather, lagging amenities and unhappy residents do not bode well for attracting or retaining the skilled in Rustbelt cities. This paper examines the geography of brains in the cities of US Rustbelt and Sunbelt. It finds that brain profiles are relatively similar in cities of both regions, and calls for a rethinking of narratives of the uncool Rustbelt.

SPANISH REGIONS: NETWORKING RELATIONS AMONG TECHNOLOGIES, TERRITORIES, AND ORGANIZATION

Igone Porto Gomez, EHU-UPV, Spain

Loet Leydesdorff, University of Amsterdam, The Netherlands

Introduction

Using Storper's (1997) metaphor of a "holy trinity among technologies, territories, and organization" and a methodology developed in the context of Triple-Helix (TH) research about university-industry-relations (Etzkowitz & Leydesdorff, 2000), we analyze Spanish regions at NUTS-2 and NUTS-3 levels using firm data (N = 1,098,587) obtained from ORBIS. Firms are characterized by geographical address, size in terms of numbers of employees, and NACE code indicating technological knowledge base. Is the knowledge base of the Spanish innovation system regionalized or national? Do Catalonia and/or the Basque Country entertain their own innovation system given their regional autonomy?

Methodology

An innovation system develops evolutionarily, but leaves a retention network behind as a footprint. The latter network is relational and generates Shannon entropy; being necessarily positive. The trade-off between historical network of relations generating positive entropy and the evolutionary functions operating as feedback and therefore producing negative entropy results in mutual redundancy.

For the future of an innovation system, the availability of not-yet realized options given a configuration may be more important than the already realized options (Petersen et al., 2016). Mutual redundancy enables us to measure this expectation quantitatively. Since all (Shannon) formulas are decomposable, inter-regional or inter-sectorial reduction of uncertainty can also be measured (Theil, 1972). If the regions prevail, the national level is not expected to add redundancy (but information), and vice versa.

Expected results

Preliminary analysis reveals a strong knowledge base of the economy in the provinces that border to France, including Catalonia and the Basque Country. Catalonia is also by far the strongest province in terms of knowledge-intensive services and high-tech manufacturing. The Basque Country follows with more options for developing medium tech.

ARTISTS IN RESIDENCE: EXPLORING INFORMALITY IN INTERSTITIAL URBAN SPACE

Rebecca Prescott, Northumbria University, United Kingdom

Tom Mordue, Northumbria University, United Kingdom

The dynamic and often symbiotic relationship between artists and urban space remain important. However, this relationship is often viewed through the lens of the large institutions that both physically and symbolically dominate the landscape. By focusing our attention, and prior research on these large organisations we reinforce the idea that art is something to be housed in (often funded) purposive buildings. Furthermore we miss the numerous urban spaces that are quietly and incrementally in the process of 'becoming.'

This paper explores the interrelationship between art and urban space evident in interstitial artistic communities; the (often) temporary reclamation of derelict or disregarded urban space for creative 'meanwhile' use. Their experimental practices, materialities and infrastructures challenge the binary discourses that suggest space can either be legitimate or illegitimate; formal or informal, planned or

unplanned. However, the contingent nature of funding, work spaces and labour practices combine to produce a space that is often precarious. This study asks, if the nuances of urban space are complicit in shaping artistic practice, how then are these interstitial spaces simultaneously shifting, altering or restricting this practice? Furthermore, how does the imposition of formal planning and/or increased institutionalisation affect what was once experimental and informal?

Drawing from ethnographic data collected across the artist-led communities in East Pilgrim Street, Newcastle upon Tyne this paper explores how artists individually and collectively respond to and negotiate the boundaries between formal/informal interventions in urban space. The aim is to give a rich account of artists' experiences of place in all its messiness and complexity.

COMPARING INSTITUTIONAL DETERMINANTS OF ECONOMIC GROWTH IN DEVELOPING REGIONS

Karla Prime, Northumbria University, United Kingdom

Roseline Wanjiru, Northumbria University, United Kingdom

A range of institutions perform key roles in supporting the effective functioning of national markets in developing economies. Debates on the role of institutions in economic growth assume that particular institutional frameworks drive economic performance in developing economies. However, institutions vary greatly across economies. This study conducts a comparative investigation into the relationship between institutional quality and economic growth in selected developing economies of West Africa and the Caribbean. The persistence and quality of institutions in these West African and the Caribbean countries can historically be traced to their different colonial legacies including Belgium, Italian, French, Portuguese and English heritage. Despite exhibiting different institutional characteristics, these economies achieve similar levels of economic growth. This study investigates the impact of colonial heritage on the evolution, quality and characteristics of their institutional infrastructure on long-run economic growth. In particular, we identify those institutions that positively and significantly impact levels of productivity. Forty-one institutional indicators were categorised using principal component analysis and the institutional categories analysed using Arellano-Bond dynamic panel GMM model. Granger causality tests examined the directionality of the relationship between these categories of institutions and economic growth. Our findings confirm the existence of a long-run relationship between institutional quality and economic growth and that institutions cause economic growth. In particular, different categories of institutions are found to exert varying degrees of influence on levels of productivity. We also find evidence of a relationship between colonial heritage and the evolution and quality of institutions of these countries.

BIFURCATED CITY REGION: R&D CLUSTERS, TRAP OF SPATIAL-INSTITUTIONAL FAULT-LINES AND THREAT OF COMPETITIVENESS

Alena Procházková, Czech Republic

City regions play important role for national competitiveness as the key concentrations of economic and R&D activities. Public policies therefore support the development of regional innovation systems and knowledge producing facilities. However, the selective nature of such investments creates competitive environment between regions and may further strengthen economic fault-lines within metropolitan areas with inner fragmentation of administrative divisions and respective economic objectives. In Prague city region, which is the main economic and knowledge centre of Czechia, major public investments have been directed to several new R&D facilities. However, due to regional policy directives and administrative divisions of city region, they were allocated to suburban localities, far

away from the existing knowledge clusters. Internationally, the development of knowledge and innovation clusters usually builds on already functioning knowledge environment in urban settings. Urban clusters benefit from existing infrastructure, human resources, and creative ambiance. This practice is in sharp contrast with the nascent clusters in Prague city region, which would require transfer and implantation of human, material, and financial resources. Furthermore, it fosters economic rivalry between the two administrative regions forming Prague metropolitan area. The presentation focuses on the emergence of these new fault-lines in the uneven development of knowledge clusters in Prague city region. It points to the risks of the newly emerging economic barriers between the Capital city of Prague and Central Bohemia region that can undermine the overall competitiveness of knowledge and innovative environment in the metropolitan area.

AN INTERNATIONAL REVIEW AND ANATOMY OF TERRITORIAL DEVELOPMENT CONTRACTS AND PLACE-BASED DEAL-MAKING

Lee Pugalis, University of Technology Sydney, Australia

In a move intended to enhance the coordination and effectiveness of urban and regional policy, contractual devices are being utilised in a variety of international contexts. Reflecting the commercial practice of striking profitable deals for all governmental and non-governmental parties involved, a deal-making mode of urban and regional development is guided by the place matters principle of devising and tailoring policies, programmes and investment in accordance with local specificities, capabilities and capacities. Influenced by contractual theory, notions of multi-level governance and political debates about decentralisation, place-based deals and territorial development contracts offer the promise of local institutions negotiating bespoke 'settlements', new fiscal competencies, policy tools and flexibilities with higher levels of government. Nevertheless, meanings, definitions and understandings of these territorial specific contractual devices and deals are vague and diffuse. Consequently, the purpose of this paper is to anatomize the various elements of territorial development contracts and deal-making processes.

NEW INDUSTRY CREATION AND DEVELOPMENT MODELS

Korneliusz Pylak, Lublin University of Technology, Poland
Dariusz Majerek, Lublin University of Technology, Poland

The formation and development of a new industry is an evolutionary and a region-dependent process. The economic literature assumes that four factors of production (land and natural resources, labour, capital stock and a fourth factor that various economists define as organisation, entrepreneurship or social and intellectual capital) are crucial to creating a company. In turn, the business literature indicates that market incentives like buyer and supplier power, competitive rivalry, threats of substitution and new entries are necessary to start production. However, these resources and incentives are insufficient to create and develop new industries, as the creation and development process is exposed to various influences and interferences associated with the region's dependence on its current development path and the self-perpetuating mechanisms that cause regional lock-in on the current path. More path-dependent regions are unlikely to create new industries, especially industries unrelated to the main development path.

This paper describes models of the creation and development of new industries. Covariance analysis is used to create different models based on industry-specific resources, market forces and interferences. New company creation is a dependent variable, resource and market forces are

independent variables and path influences and interferences are nuisance variables (covariates). By examining 2,531 Polish communities and dozens of variables obtained from national statistics, we built 86 industry-creation models that businesses can use for developing their growth strategies and politicians for implementing regional innovation strategies.

EXPLAINING THE INDUSTRIAL VARIETY OF NEWBORN FIRMS: THE ROLE OF CULTURAL AND TECHNOLOGICAL DIVERSITY

Francesco Quatraro, University of Torino, Italy
Alessandra Colombelli, DIGEP, Polytechnic of Turin, Italy
Anna D'Ambrosio, DIGEP, Polytechnic of Turin, Italy
Valentina Meliciani, LUISS University, Italy

We investigate the determinants of the sectoral variety of newborn firms in different regional contexts. Based on the knowledge spillovers theory of entrepreneurship, we study the role of different dimension of knowledge variety, i.e. technological diversity and cultural diversity. This latter is measured with respect to the nationality of both foreign residents and foreign entrepreneurs. We use a unique dataset stemming from the combination of different sources of information. The results confirm that all the dimensions of knowledge variety are relevant in shaping the sectoral variety of newborn firms and point to the differential contribution of immigrant entrepreneurs in fostering the sectoral diversification in unrelated activities.

THE SEARCH FOR THE SOCIAL CONTRACT IN ENGLAND'S REGIONS

Martin Quinn, University of Leicester, United Kingdom

This paper will outline a new research project that has recently been awarded funding by the RSA. This research will establish what sub-national institutions have to be/do/represent in order to establish a social contract with the local population and economy. It will do this by using a case study of the Leicestershire region and analysing data through the lens of Social Contract Theory (principally through the work of Rousseau, Hobbes and Locke). The project is one of the first to use Social Contract Theory to analyse regional studies data and this will develop our empirical understanding of how sub-national governance can engage with the local population and business community in these ways to form the networks that drive local economies. The use of Social Contract Theory allows for new theoretical insights which will extend regional studies theories relating to network building, trust and regional leadership. Hobbes, Locke and Rousseau argued that it is only when it is clear to the population that a government or institution can provide them with protection and prosperity that they will submit to their authority. This research will use Social Contract theory to assess what sub-national institutions need to be able to offer to their populations in order to increase engagement.

REGIONAL HIGHER EDUCATION INSTITUTIONS CHANGING THE BALTIC AND NORDIC GEOGRAPHIC PERIPHERIES

Garri Raagmaa, University of Tartu, Estonia
Jari Kolehmainen, University of Tampere, Finland
Janis Paiders, University of Latvia, Latvia
Donatas Burneika, University of Vilnius, Lithuania

This paper focuses on the role of higher education institutions (HEIs) in place leadership and the development of local/regional innovation systems (LIS/RIS) in the Baltic and Nordic geographic peripheries.

In the long run, the metropolization promoted by global transnational corporations is neither the only nor the most sustainable solution for locating population and economic activities. In Europe, small and medium size urban networks have proven to be a fairly viable and pleasant alternative.

A shift from the Fifth Kondratieff wave to the Sixth allows us expect ground-breaking economic geographical changes in 20-30 years' time. When society is transforming, it challenges places and their leadership. Regional HEIs seem to have a promising role in this, connecting places on the global scale, searching for new knowledge and technologies useful for local entrepreneurs. But HEIs may act not only as educators but also as institutional entrepreneurs, proactively networking, shaping regional strategies, and attempting to change local routines as well as national policies. They not only interact with other institutions but also create new and modify existing ones.

This paper aims to compare the very dynamic Baltic and Nordic regional HEIs developments since 1990s and their progress as integrated components of LIS as well as partners for regional and national innovation policies. How have the regional HEIs contributed to the development of peripheral regions? The paper will analyze statistics and policy documents as for a background and carry out a number of interviews with national and local/regional policymakers and experts.

ELÄVÄ PORI – PORI LIVE -INNOVATIVE COLLABORATIVE INQUIRY AS A RESOURCE FOR SUSTAINABLE DEVELOPMENT OF URBAN SPACE

Taina Rajanti, Aalto University, Finland
Anna Jensen, Aalto University, Finland

Our joint project "Pori Live" with University of Turku, Degree Program in Cultural Production and Landscape Studies aims at creating an innovation platform for urban development founded on collaborative inquiry. We focus on innovations that do not need massive investments, but that are based on knowledge stemming from the experience of different urban stakeholders. To collect this experiential knowledge and make it visible and sharable the project has performed a series of experimental artistic and cultural workshops and events, also experimenting with uses of urban space. Artistic interventions have been, not traditional community art, but art within the community. Interventions have been a method of disturbing everyday practices, taking a stand in space, open to reactions by the community. Thus artistic interventions create new knowledge about the lived urban environment.

We shall present the examples of "Office", a former commercial space in the city center, now both a gesamtkunstwerk in itself and a site for interventions, events, workshops; the experimental course The Art of Suburb that brought together Resident Association activists and doctoral students to study

the “art” of living in the suburb of Sampola, Pori; and Ideas City exhibition that combined an art exhibition and a set of workshops open for public. The “innovation platform” we see as a collection of all these practices and knowledge gathered in the project in the form of exemplary instances, stories, lists and links to be applied and used by activists or interested citizens and other stakeholders.

MULTI-DIMENSIONAL ADDITIONALITY OF NETWORK MEMBERSHIP

Shan Rambukwella, University of Derby, United Kingdom

Nicola Lynch, University of Derby, United Kingdom

Firms benefit in many ways by interacting with other firms, such as, reduced transaction costs, access to shared resources and opportunities that lead to increased profits, to name just a few. On the other hand, networks may create bottlenecks, closed personal circles, overload staff with additional work, cause mutual aggression between members (if opportunists are present) to possess or gain access to rather scarce resources, and can be counter-productive if done excessively. It should be noted that, even though the consensus is that network membership is beneficial, the decision to enter, remain or withdraw from a network is made by companies individually after evaluating the potential long-term benefits for the company of being in the network. Whilst there have been several attempts to examine the benefits, costs and overall impact of network membership, there is a lack of research in estimating the impact of networks on firm’s performance, especially in terms of behavioural improvements. Additionality is a concept widely used in policy evaluation which measures the impact of an intervention. This study investigates the effects of network membership by employing the additionality concept. Although its focus is on a network within the D2N2 region of the UK, lessons can be learned for other firms and regions. This paper is timely given the positive impact networks are expected to have on firm performance and their subsequent impact on the local economy.

CONTEMPORARY NORTHERN IRELAND, BREXIT AND THE BRITAIN BEYOND ITS BORDER

Phil Ramsey, Ulster University, United Kingdom

Stephen Baker, Ulster University, United Kingdom

The constitutional crisis that grows within the UK in the wake of the referendum result to leave the EU has seen resurgent calls for independence, or for greater control over governance in the country’s constituent nations and regions. The focus in this paper is Northern Ireland (NI), a region where the economy has struggled to deal with the twin-pincer movement of the conditions of neoliberalism, and a lack of financial growth with roots that lie in the Troubles (a decades long conflict that led to the deaths of thousands). As the only part of the UK to share a land border with the EU, it may be disproportionately negatively impacted following Brexit. It is in the context of this socio-economic and political fragmentation that we will draw on the concept of critical regionalism (Frampton, 1983) as an analytical framework for the analysis of contemporary NI.

In particular this paper will address how Jameson’s (1990) ‘post-modern market’ has given way to a ‘post-conflict market’, a culture industry of peace and conflict that is complicit in the commodification of the region. While most critical studies of NI rely on comparing NI to other post-conflict societies, this paper will rather seek to compare NI to the Britain beyond its border, and draw on comparable regions in Wales, Scotland and the north of England. In this paper critical regionalism will serve as a theoretical frame to allow us to propose how scholars might “engage in a critical rebuilding of place” (Ali, 2015) for NI.

INCREASING THE REACH AND IMPACT OF YOUR RESEARCH: HOW TO USE KUDOS TO BUILD READERSHIP AND CITATIONS

Charlie Rapple, Kudos, United Kingdom

RSA is partnered with Kudos (www.growkudos.com) to help members and authors increase readership and citations of their published research. Kudos provides two services: a platform for you to add a plain language explanation of your work (helping more people find and understand it), and a tool for helping you track your efforts to share your work (e.g. by email, in presentations, or via academic networks / social media). Kudos brings together a range of metrics (views, downloads, citations and "Altmetrics") to help you track the effect of your efforts, learn which communications are most effective, and save time in future by focusing on those efforts that correlate to improved readership and citations. A 2016 study showed that articles for which the Kudos tools had been used had, on average, 23% higher readership.

Charlie Rapple, one of the Kudos founders, will lead this session, explaining how to get started and showing examples of how other regional studies researchers are using the system to increase the reach and impact of their work. The session will also include (a) some of the wider evidence that connects plain language explanations of research, or efforts to communicate more actively, with improved impact and (b) findings from the 2016 study including which sites researchers most commonly use to share links to their work, and which sites actually result in the most people clicking those links.

POVERTY IN SWEDEN 1991-2015: A REGIONAL PERSPECTIVE

Daniel Rauhut, Karelian Institute, Finland

Lovisa Broström, University of Gothenburg, Dept. of Economic History, Sweden

Since the late 1990s the share of households as well as the share of population receiving social assistance in Sweden has decreased. Parallel to the decreasing trend in the three metropolitan regions, rural and peripheral regions have experienced the opposite development. As a majority of the Swedish population resides in the three metropolitan regions, a decline in demand for social assistance in these three regions will impact the national trend.

This paper aims at discussing the demand for social assistance and its drivers at a regional level. We argue that the policy changes with an impact on poverty during the analysed period must have had different impacts in different parts of Sweden.

The findings indicate that during the last decade, a majority of the jobs created in Sweden, both in the public and private sectors, have been created in or around the three major cities. The government policies have stimulated growth and economic expansion in the three metropolitan regions, i.e. the reforms to create more jobs have had different outcomes in different parts of the country. The three metropolitan areas have also benefitted from financial investments, tax reductions and subsidies. The increase in job-opportunities in the metropolitan areas has created a widening employment gap in Sweden. Again, this process is displayed in the regional social assistance statistics.

A CRISIS NOT WASTED? THE RESHAPING OF THE IRISH PLANNING SYSTEM

Declan Redmond, University College Dublin, Ireland

Never let a good crisis go to waste is the guiding philosophy of many ruling elites and this can be seen in the reshaping, some might even say evisceration, of the Irish planning system in the period since the onset of the economic crisis. In seeking to re-establish a functioning land and property market, the planning system has been identified as an obstacle, slowing development and imposing onerous regulations on the development sector. This argument is somewhat counterintuitive, especially when we consider that during the Celtic Tiger years Ireland had one of the highest rates of new housing supply in the EU and housing was developed and located in unsustainable ways, not indicative of a highly restrictive planning regime. Nonetheless, in recent years there have been an array of policies which have sought to ensure that planning is more accommodating to development interests. Such policies have included the reduction of minimum apartment standards, justified as ensuring project viability for developers, and a series of so-called 'fast-track' planning mechanisms to speed up housing supply. In addition, planning gain requirements have been eased and there have been significant reductions in development levies charged to developers. The changes do not stop there, as Government have stated that a 'route and branch' review of the planning system is to be undertaken in 2017. This paper critically examines this reshaping of planning, one which has been driven by a well organised and influential development lobby alongside a compliant state.

DO UNIVERSITY CHARACTERISTICS INFLUENCE THE RETENTION OF GRADUATES IN THE HIGHER EDUCATION REGION?

Stefan Rehak, University of Economics in Bratislava, Slovakia
Rikard Eriksson, University of Umea, Sweden

The context for higher education provision has changed during last decades. In Sweden, the number of universities grew from 4 in 1950 to 55 in 2016. Nowadays, universities differ in their specialization, age, size, research intensity, ownership and type (college, university). Our main focus in this paper is to explore the relation between the structure of higher education and the ability of the region to retain graduates. In other words, we will analyse the migration decisions of university graduates. We use data from the unique database of all individuals from the whole Swedish economy. Our analysis is based on 42 438 individuals graduated from higher education in 2004. The results show that the chance that the graduate will stay in the region of graduation is higher for individuals who are older, married and female. On the other hand more years in higher education (higher level of human capital) and favourable family background (parents with university degree) drive the individuals to migrate from the higher education region. Students who migrated for the higher education from their domicile are often migrating again, however with the decreasing rate with regard the distance to higher education. The chance for staying in the higher education region is higher for individuals graduating from colleges and independent universities. Graduates from highly ranked universities tend to stay in the higher education region. However graduating from ranked university for Northern Sweden is associated with a higher chance for outmigration.

IMAGINE EUROPE... WITHOUT COHESION POLICY! OR: WHAT DOES COHESION POLICY MEAN FOR THE FUTURE OF THE EU?

Simone Reinhart, Greens/EFA group in the European Parliament, Belgium

The EU has always found ways to respond to challenges however severe they might have been. Currently, different scenarios are feeding the debate, ranging from collapse to adaptation strategies.

In such an atmosphere, any Union policy is judged whether and how it fits into the scenario preferred. Cohesion policy, also because of its budgetary importance, undergoes a particularly tough stress-test. However, a strong and targeted cohesion policy could be a key element for responding to the crises and therefore play a significant role for the future of the Union, in particular through

- strengthening cohesion by reducing regional disparities, improving well-being of and providing equal opportunities to all citizens;
- expression of solidarity in the EU and among Member States, a commitment to help each other, to cooperate with each other and to learn from each other;
- symbol of European integration and a strong weapon against populism, as it delivers tangible results on the ground;
- reducing the negative effects of frontiers;
- cohesion policy as a pillar of the peace promise of the EU;
- unique arrangement in EU politics that combines specific needs of a given territory with European priorities, taking into account the importance of diversity;
- footprint left in daily life of Europeans and mind-set changed, among the closest policies to the citizens and most visible to the public.

Imagining Europe without cohesion policy brings us back to some of the most fundamental values the EU has to uphold when tackling the current challenges. Marginalisation of cohesion policy would lead to increasing the gap between citizens and the EU and reducing the Union to business between national governments and Brussels.

INSTITUTIONAL DISTANCES IN THE CONTEXT OF M&A: AN EXPLORATORY ANALYSIS OF CHINESE INVESTMENTS TO GERMANY

Miriam Richter-Tokar, Ernst Moritz Arndt University of Greifswald, Germany
Daniel Schiller, University of Greifswald, Germany

Germany has become one of the most attractive destinations for Chinese investments. Especially the number and volume of Chinese merger and acquisitions (M&As) of German “Mittelstand” firms has risen. The majority of existing research on Chinese foreign direct investments stems from International Business studies, covering topics such as investment motifs and forms of market entry (e.g. Chaminade, 2015; Child & Rodrigues, 2005). These studies show, Chinese investors perceive M&As as an opportunity to get access to strategic resources, needed to compete internationally (Anderson & Sutherland, 2015). However, multinationals from developing countries such as China need to overcome additional obstacles as institutional distances between the home and host region exist.

In this exploratory paper, Chinese M&As in Germany are analyzed from an institutional perspective. Even though institutions have gained importance in geographical studies their conception in the context of foreign direct investments and multinational firms has primarily been based on quantitative indicators (Rodríguez-Pose, 2013; Phelps et al., 2003). A goal of this paper is therefore to explore possibilities to further develop the conception of institutional distance in geography taking new

research findings into account. To that end, this paper evaluates the effects of institutional distances on the success of M&As and changes in regional networks of the involved companies using semi-structured qualitative interviews. Furthermore, the results are used to derive implications for public policy as German firms assess the feasibility to bridge institutional distances positively.

PLACE AND CORPORATE STRATEGY: THE VIEW FROM THE BUSINESS

Philip Riddle, University of Edinburgh Business School, United Kingdom

The paper argues that a firm's choice of its place of business is an important strategic consideration that can influence both its own prosperity and the prosperity of the place where it is located.

Step 1 has been to identify, from the wide range of literature on the relationship between business success and regional prosperity, a number of key determinants that can influence corporate decision making in this area.

Step 2 has been to set these in a framework of contextual rings through which to analyse individual firms' views.

Step 3 has involved data collection through semi structured interviews with key figures working in the financial services clusters of Edinburgh and Glasgow. The firms involved include locally headquartered giants like Standard Life, overseas multinationals like Morgan Stanley, long established investment managers like Baillie Gifford and relatively new, challenger banks like Tesco Bank.

Step 4, the analysis, showed that despite the heterogeneity of the companies there is a strong convergence around certain key determinants. It is also clear, however, that these combine in a complex mix unique to each firm-place relationship and the particular moment in time. This mix of determinants with their relative strengths has been mapped for each situation and maps have been aggregated to show emerging patterns.

This has resulted in both creating a robust framework within which to analyse decision making about place and in highlighting the current priorities and concerns of financial services in the two cities.

THE GEOGRAPHY OF NOVELTY

David Rigby, UCLA, United States

Christopher Esposito, UCLA, United States

Sergio Petralia, Utrecht University, The Netherlands

Carsten Reitman, UCLA, United States

Christoph Rossler, UCLA & University of Hanover, United States

Breakthrough patents are commonly understood to introduce new types of knowledge with the potential to disrupt established trajectories of innovation. Using new historical patent data that span the period since 1836, breakthrough patents are identified as those that introduce new sub-classes, or technological novelty, into the United States Patent and Trademark Office classification system. Approximately 160,000 novel patents are identified, dated and mapped to the city of their primary inventor. The history and geography of these novel patents are explored in this paper. Analysis shows that where novel patents are created exerts an enduring influence on the geography of subsequent

technological development at the sub-class level, and that the emergence of novel patents has a significant impact on the pace of invention more generally.

SMALL ENTREPRENEURSHIP AS A PROVIDER OF VIABILITY IN RURAL AREAS

Baiba Rivza, Latvian Academy of Sciences, Latvia

Maiga Kruzmetra, Latvia Academy of Sciences, Latvia

The rural areas of Latvia are characterised by mostly small agricultural holdings less than 9 ha in size whose owners are little engaged in the production of conventional agricultural products, as they produce the products for own-consumption and urgently need monetary income to meet their basic needs. An analysis of the statistical data shows that those living on such small farms are mostly part-time employees, and they can objectively focus only on the expansion of multifunctional economic activity. An analysis of the real situation reveals a number of economic activities assisting in tackling this problem.

The first one is food crafts. The market demand for healthy, fresh and traditional foods, especially those perceived as a component of national cultural heritage, increases in the society. Food crafts associations are established, which mobilise resources for production, cooperate for the purpose of sales and establish their own stores or special sales sites. The Crafts Association in Jelgava municipality and a common greenmarket established by towns of three municipalities, which was initiated by Gulbene municipality and which is held every week in another town, could be mentioned as positive examples.

The second economic activity is the contribution of the micro-credit movement as a entrepreneurship support system to small entrepreneurship. The twenty-year long performance of the movement proves the effectiveness of this approach. The micro-credit movement in Latvia is a result of synergy of cooperation among the participants of the movement, their integration into the Latvian Rural Women Association and cooperation with scientists of Latvia University of Agriculture. The micro-credit movement in Latvia demonstrates the role of cooperation between scientists and practitioners within the smart development strategy.

TERRITORIAL DIMENSIONS OF SUBJECTIVE WELLBEING: A FOCUS ON EUROPEAN REGIONS

Paolo Rizzi, Universita Cattolica Del Sacro Cuore, Italy

Paola Graziano, Università Cattolica del Sacro Cuore, Italy

The research on individual and community wellbeing has made remarkable progress in recent decades, showing a spread of models of analysis focused on theme such as collective happiness and quality of life. Some of these models display the role of territory in the description of the phenomenon, attempting to reach measures of wellbeing focused on multidimensionality and sustainability.

In the context of studies on social and economic components of wellbeing new approaches emerge, related to the concepts of territorial resilience as essential condition for sustainable development of local systems. From these theoretical and methodological aspects, an approach to regional wellbeing that is sustainability-oriented is proposed in this work. The purpose is to study the effect of the economic, social and environmental resilience on life satisfaction, adopting a quantitative representation that catches the multidimensionality of the phenomena. The conceptual framework

proposed in these papers is applied to the European regions at NUTS-2 level, observed over the last decade. It highlights the linkages between subjective wellbeing and resilience capacity of territories in their economic, social and environmental dimensions.

SMART CITY, GOVERNMENTALITY AND ECONOMIC GEOGRAPHY – A CRITICAL AND RELATIONAL PERSPECTIVE

Nuno Rodrigues, CEG, IGOT-UL, Portugal

Mário Vale, CEG, IGOT-UL, Portugal

Pedro Costa, DINÂMIA'CET – IUL, Portugal

The objective of this paper is to critical examine the current logic and proposals on Smart Cities. For this, we intend to relate the contributions of the Governmentality Studies and critical perspectives in Economic Geography. The concept of Governmentality allows to explore the hypothesis that urban space and population can be taken as means and ends of government, stressing the need to produce specific urban environments and taking a conception of government as the act to structure the possible field of action of others". In this sense, it is important to explore the possibility of the city being taken as a space of production and experimentation, encompassing the spheres of life and the common. In a related way, there are several perspectives in Economic Geography that emphasize the importance of proximity and agglomeration to the dynamics and processes of territorialization of innovation and knowledge - particularly, dimensions such as interactions or the scale, density, complexity and diversity that characterize urban space and the specific atmospheres they provide. In this sense, there is a reference to phenomena that relate to the sphere of life and the common. The analysis of the intersection between these phenomena is the purpose of this paper. That is, how the city, and especially smart cities, can be taken in an instrumentally way and constitute spaces of production and social reproduction in all its totality. This is something that implies certain urban forms and a structuring of subjectivities and practices and social relations to reach those ends.

TOWARDS POLICY INSTRUMENTS TO RELIEVE CITIES' TOURISM-BASED WASTE BURDEN

Arie Romein, Delft University of Technology, The Netherlands

The tourist industry is being considered a source of revenue in many regions and cities worldwide. Unlike many industries, its size has grown continuously, unhampered by the economic downturn, and is being forecasted to grow further. However, the industry is far from environmentally sustainable in many destination areas. Various forms of pollution and unsustainable land uses are related to touristic processes like transport, accommodation, consumption (food) and leisure activities. The tension between economic and environmental impacts is considerable in cities where the population present during the tourist high season is several times larger than the resident population.

The paper focuses on one specific environmental issue of tourism: waste. The underlying question is how the environmental burden of tourist waste can be diminished without proportionally discouraging (the growth of) tourism. To explore this question, the paper is based on a review of academic literature and on data of case study cities – ten in total - in the EU-funded H2020 project UrBAN-WASTE. The review is primarily about tourists' waste generation attitudes and behaviour, and waste management practices in tourist (hospitality) industry. The local data is mainly about waste policies and management practices in the waste hierarchy.

The paper concludes by some suggestions for policy instruments to relieve the waste burden in tourist cities. To develop elaborated waste prevention and management strategies - the final objective of UrBAN-WAST- more research is necessary. The conclusion of this paper can be seen as a preliminary stage.

INNOHPC: HIGH-PERFORMANCE COMPUTING FOR EFFECTIVE INNOVATION AND TRANSNATIONAL CLUSTERING - THE CASE OF THE DANUBE REGION

Borut Roncevic, School Of Advanced Social Studies In Nova Gorica, Slovenia

Victor Cepoi, Faculty of Information Studies in Novo mesto, Slovenia

Erika D. Ursic, Faculty of Information Studies in Novo mesto, Slovenia

Tamara Besednjak Valic, Faculty of Information Studies in Novo mesto, Slovenia

In this paper we will explore the underpinnings of a transnational project on high performance computing (HPC) and its role in enhancing efficient innovation and effective transnational clustering, focusing on the Danube macro-region. HPC is an emerging general-purpose technology that can drastically increase effectiveness of innovations and reduce product development time. However, while most advanced HPC infrastructure and knowledge are located in well-off western parts of the Danube region, enterprises – especially SMEs – from its eastern parts have very limited access and competencies. Transnational cooperation in the region is limited, which is further hindering innovation. This provides unique challenges, i.e. to create transnational HPC infrastructure for co-designing knowledge-intensive innovative products with high value-added in transnational value-chains, by pooling regional HPC infrastructure and encouraging transnational collaboration and clustering.

To achieve them, the project will, first, conduct a focused regional HPC benchmark, collecting the data providing unique insight to macro-regional clustering, its structure and dynamics, as well as the competencies in this specific area. This will allow us to design and create a transnational HPC laboratory with web platform providing HPC access and capacity-building tools. We will also pilot-test this in two pilots with SMEs in electronic and automotive sectors.

InnoHPC project is a pioneering effort to improve framework conditions for innovation by providing unique institutional and technological infrastructure, designed specifically to pool and exploit HPC infrastructure on a transnational level. This is of immense relevance for researchers in regional studies and research-informed regional innovation policy alike.

SMART SPECIALISATION IN A SMALL FINNISH REGION – THE CASE OF CENTRAL OSTROBOTHNIA

Olli Rosenqvist, University of Jyväskylä, Kokkola University Consortium Chydenius, Finland

The aim of the presentation is to consider challenges of a small, semiperipheral, European region in keeping pace with the economic growth and regional regeneration. The case in question is the region of Central Ostrobothnia in Finland. The size, positioning and national context have an influence on the prospects of a region. The industrial structure of a region is characterised by something of a path dependence. A small regional economy is more open than a large one. This means that external relations are important to the vitality of a small region. One of the central challenges for a small region is to set a balance between place-based development and development of external relations. In discussions on the regeneration of regions considerable weight has been given to regional innovation systems. Innovations are of many kinds. In developing a regional innovation system, it is important to

achieve a balance between top-down and bottom-up approaches. Approaches developed by theoreticians do not turn into practice by themselves. There must be actors who find the approaches meaningful. A real bottom-up approach requires participation of companies, entrepreneurs and citizens in the innovation activities. The participation of only the representatives of various development agencies and institutions is not enough. To understand bottom-up actors, it is important to analyse their identity, action, and willingness and ability to exercise power. From viewpoint of a region like Central Ostrobothnia, it is important to address the challenges mentioned above, to be able sketch out what smart specialisation means in its case.

COHESION AND ACCESSIBILITY SPATIAL PATTERN AS A CONSEQUENCE OF INFRASTRUCTURE DEVELOPMENT AND POPULATION CHANGES

Piotr Rosik, Institute Of Geography And Spatial Organization Polish Academy Of Sciences, Poland
Marcin Stępniaik, Institute of Geography and Spatial Organization Polish Academy of Sciences, Poland

The accession of Poland to the EU has led to the unprecedented development of transport infrastructure, in particular road network. Poland has experienced also a significant change in population distribution. Population tends to concentrate in main metropolitan areas, while peripheral, mostly rural areas have experienced significant depopulation process. Potential accessibility measure uses population size as a proxy of the destination's attractiveness and transport projects are a main factor responsible for decreasing origin-destination travel times. The population distribution as well as transport infrastructure developments are mutually responsible for an accessibility change. We investigate the overall accessibility change in Poland in the twenty-years-long period of time (1995-2015). The timespan covers the period of stagnation with the very limited infrastructure development (before the EU accession period) and the investment's boom after the accession to the EU and gaining of access to EU-funds (2005-2015). We focus on the dynamic interplay between population and infrastructure components of accessibility change, investigating them as main drivers of accessibility change and territorial cohesion process. We find that, since the transport infrastructure investments have accelerated, the population component of accessibility became almost negligible and with smoother distance decay function, the impact of population component decreases even more. The results of the analysis underline a need of responsible transport planning that responds to the political goals: territorial cohesion and the effectiveness of transport infrastructure investments in terms of accessibility improvement.

LEAVE OR STAY? RELOCATION OF FIRMS IN TICINO: AN ORDERED LOGIT APPROACH

Federica Rossi, Institute for Economic Research (IRE) - USI, Switzerland
Rico Maggi, Institute for Economic Research (IRE) - USI, Switzerland

Location and relocation decisions of firms are popular topics in regional economics, thanks to their importance from both a theoretical and practical point of view. In particular, relocation provides at the same time the best showcase of entrepreneurial decision-making with regard to location choice, and the ideal context to inspire goals for regional development policy (Van Dijk and Pellenbarg 2000). This paper wants to contribute to the empirical literature on relocation of firms. We focus on the influence of company and territory characteristics on the probability of moving away from a region. In particular, we analyse the firms' propensity to relocate in the next five years out of Ticino, the southern Swiss canton. Our main curiosity regards if and how this probability changes if there are some hypothetical external shocks, which are particularly relevant for the Swiss context. In particular,

we take into account relocation decision in case an appreciation of the Swiss Franc will occur or in case there will be changes in the bilateral agreements between Switzerland and the European Union. An ordered logit is applied in order to model the relocation probability, controlling for the characteristics of the firm, the agglomeration features, the accessibility conditions and the distribution of firm's clients and suppliers.

Preliminary results show that firms having local clients and suppliers have a lower propensity for moving. On the other hand, branches and headquarters show a higher propensity toward relocating. Finally, if one of the two shocks occurs, the propensity to relocate will be higher than in the ordinary situation.

INSTITUTIONS, PLACE LEADERSHIP AND PUBLIC ENTREPRENEURSHIP: REINTERPRETING THE ECONOMIC DEVELOPMENT OF NOTTINGHAM

Will Rossiter, Nottingham Trent University, United Kingdom
David Smith, Nottingham trent University, United Kingdom

This paper presents a reinterpretation of Nottingham's recent economic development through the prism of institutions, place leadership and public entrepreneurship.

Accounts of regional and local economic development have placed increasing emphasis on the role of institutions in facilitating path creation, promoting resilience and enhancing competitiveness. Latterly there has been a growing focus on the importance of place leadership as a 'missing ingredient' in accounts of economic development. This growing literature invites the fundamental question – how do individuals interact with institutions to effect change/promote adaptation? This paper argues that by integrating a third body of literature – that of public entrepreneurship – we can start to understand some of the processes by which individual actors (leaders) interact with institutions in order to facilitate positive local economic outcomes. In essence, leaders 'in' place are able to access and deploy the resources of institutions to promote initiatives conducive to enhancing public good through the act of public entrepreneurship.

Context is also important – public and private institutions co-evolve over considerable timescales to produce an industrial milieu that may be more or less conducive to facilitating adaptation and new path creation in economic development. These complementary perspectives on local economic development are used to re-interpret the recent development of Nottingham as its leaders have sought to respond to the challenges of de-industrialisation and fashion a positive post-industrial future for the City.

PLANNED CREATIVITY? CULTURAL ACTIVITIES AND STRATEGIC REGIONAL DEVELOPMENT

Olli Ruokolainen, University of Tampere, School of Management, Finland

There has been a vivid discussion on the (economic) impacts and meanings of cultural activities on the development of cities and regions. However attention has not focused on how to bring about all the expectations related to cultural activities. Therefore the research question of this paper, and the doctoral thesis it is based on, is: How can the cultural activities and creative industries of cities and regions be strategically developed? This question is approached by looking at two Finnish case examples with qualitative methodology.

The cultural activities of a city or a region appear as a complex and systemic phenomenon in this study. The complexity of cultural activities and actors is perceived as tensions between public governance intentions and the emergence of grassroots cultural activities, as well as tensions between the cultural and economic value of cultural capital. In this way four forms of regional cultural activities are formed: the emergent avant-garde, high culture, cultural industries and regional development.

The strategic development of these cultural activities is opened up by introducing three sections of strategy: process, intention and pace. Related to these sections, three tasks of regional and city development organisations are also introduced: mediating, directing and pace setting. All in all, based on this study planned creativity is not the risky endeavor of interfering with the artistic core of cultural activities but instead it is the strategic development of the prerequisites for creativity.

CONTEXT AND ENTREPRENEURSHIP: THE THICKNESS OF REGIONAL INNOVATION SYSTEMS AND ITS EFFECT ON ENTREPRENEURIAL INNOVATIVENESS AND GROWTH AMBITIONS

Jan Ole Rypestol, University of Agder, Norway

Jarle Aarstad, Centre for Innovation, Bergen University College, Norway

Evolutionary economic geography argues that regional industries evolve along historically and culturally influenced pathways. It further argues that the process of industry creation is rooted in existing knowledge and competences, and formed by the dominating economic and technological structure of the region. One consequence of this argument is that regions are differently preconditioned to host industry creations and to foster industrial renewal. In their attempt to describe and explain regional industrial development, most path dependency research has focused on either a regional or a firm level perspective, or a combination of the two. Less attention has been placed on how the individual entrepreneur influences this evolutionary process. In this paper we address this gap in the literature as we argue that entrepreneurial ambitions are differently distributed in thick and thin regional innovation systems (RISs). Our main argument is that thick RISs are better conditioned to promote path creation and path renewal than thin RISs as firms and entrepreneurs located in thick areas experiences more competitive and demanding environments and because they benefit from either Jacobs or MAR externalities. This paper examines the relationship between regional thickness and, respectively, entrepreneurial innovativeness and growth ambitions. Based on a survey of 918 entrepreneurial firms in the Agder region of southern Norway, we find that the business idea of entrepreneurs located in thick RIS are more radical than entrepreneurs situated in thinner regions. We further find that entrepreneurial growth intensions are equally distributed amongst entrepreneurs despite regional thickness.

TOWARD NEW SPACES OF ECONOMIC GOVERNANCE: DEFINING POINTS AND PRACTICE IN STATE-MARKET SCALAR CONVERGENCE

Jacob Salder, Birmingham City University, United Kingdom

Spatial economy is increasingly considered a networked phenomenon. In response to continuing liberalisation of the global economy, spatial production systems have become more fragmented and dispersed, with firms operating across and dependent on multiple and individually distinctive geographies. This shift toward networked practice runs contrary to more orthodox and singular interpretations of spatial economy adopted by the state. Despite ongoing scalar shifts and a move toward multi-scalar approaches to economic governance, sub-national governance has maintained a highly bounded model at odds with constituent firms' spaces of production. As a result, a clear and

persistent bifurcation has emerged in conceptualising spatial economy between transitional but singularly demarcated spaces of economic governance and more dynamic, manifold and esoteric spaces of economic production.

Despite this bifurcation, a high dependence remains between state and market actors at the sub-national scale, each providing critical resource for one another. Such interaction between these two sets of actors is in need of greater examination in the context of networked practice. Using the relational viewpoint, this paper considers the evolving ways in which state and market integrate at the sub-national scale and how this is reconceptualising spatial economy. Whilst emerging in functionally separate distinctions, the paper argues these spaces integrate through the consolidation of institutional interests, reframing interpretations of (spatial) economy and similarly notions of space. This introduces a form of strategic selectivity privileging spatial and sectoral interests, characterising sub-national spaces, rather than as individual systems, as points of convergence or divergence for both production and governance interests.

PERIPHERAL RURAL REGIONS IN SERBIA – FROM EMIGRATION TO REVITALIZATION. CASE STUDY KNJAZEVC MUNICIPALITY, SERBIA

Danica Santic, University of Belgrade - Faculty of Geography, Serbia
Marija Antic, University of Belgrade - Faculty of Geography, Serbia
Mikica Sibinovic, University of Belgrade - Faculty of Geography, Serbia
Ivan Ratkaj, University of Belgrade - Faculty of Geography, Serbia
Aljosa Budovic, University of Belgrade - Faculty of Geography, Serbia

Peripheral areas in Serbia represent traditionally underdeveloped rural areas, formed by the complex influences of natural, social, economic and demographic factors. Since population and economic polarization in socialist time left those areas marginally affected by development, a huge number of inhabitants migrated from villages to towns and cities, causing massive depopulation with scale similar to exodus. Subsequently, rural shrinkage has become one of the largest structural development problems of the Serbian peripheral areas starting from 1960s.

According to those development processes, peripheral areas were left without adequate human resources, production capacities, and infrastructure, it is difficult to establish proper sustainable development strategy for their sustainable development. This paper focuses on opportunities of rural development of Knjazevac municipality – emigration and peripheral region in Eastern Serbia that witnessed the most intensive emigration and shrinkage loss since WWII. At the other hand, this region is one of the rarely peripheral areas which has experienced positive development trends during the last decade through the advantages of its preserved nature and cultural heritage by developing ecologically sustainable rural tourism activity.

THE AWAKENING OF SENIOR TRAVELLERS: NEW OPPORTUNITIES FOR HEALTH TOURISM

Gonçalo Santinha, University of Aveiro, Portugal
Joana Pereira, University of Aveiro, Portugal
Zélia Breda, University of Aveiro, Portugal

Particularly since the beginning of this century, the challenges presented by the demographic shift towards ageing societies have led nations to outline strategies to foster what is labelled as ‘active ageing’. Tourism emerges in this context as a segment to promote actions on such path, as well as to

foster social, economic and spatial development. Recently, health tourism gained in this arena extraordinary visibility, with people attempting to engage in wellness experiences during their holiday time. The rise of chronic diseases and the stress of modern life make people demand for destinations that deliver physical, emotional, spiritual and environmental health. The rising costs of health care in developed countries, long waiting lists, and improved human and technological resources in developing countries are also contributing to this phenomenon. For countries like Portugal, with exceptional conditions regarding natural resources (thermal and sea water) and wellness oriented services, there are 'competitive advantages' in the promotion of health tourism as a strategic tourism product. However, it is still not possible to determine such impacts in Portugal, namely regarding the senior market. The aim of the paper is to portray the current situation in Portugal regarding this issue and to promote a debate from a public policy perspective. Focused on the North Region, a qualitative exploratory study based on secondary data and semi-structured interviews to key stakeholders was conducted, showing that there is still a long path to fulfill in order to take fully advantage of this niche.

THE GEOGRAPHY OF CULTURE, PRODUCTION AND LOCAL SYSTEMS: A PERSPECTIVE FROM ITALY

Erica Santini, Fondazione per la Ricerca e l'Innovazione, Italy

Marco Bellandi, University of Florence, Italy

Daniela Campus, University of Florence, Italy

Alessandro Carraro, Food and Agricultural Organization of the UN, Italy

Place-based processes, promoting competitiveness and open to development paths, are changing their key elements, challenged by contemporary international tendencies of social, market, and technological change. The cultural factors, defined by local cultural heritages and culture-based activities, are enlarging their overlap with both productions models and socio-demographic structures, possibly contributing to sustainable socio - economic development. Indeed, they may play as a catalyst and engine of new social and production relations, assuming a strategic function as lever of local identities, soft power, and propensities to open innovation and social cohesion.

Employing Italy as a reference case study, this paper contributes to regional and urban studies by examining empirically the relations between the local geography defined by the density of cultural heritage and culture-related activities, and the local geographies distinguished either by production specialization, or by socio-demographic features. We adopt the ISTAT (Italian Statistics national institute) cultural vocation index (2015) as an approximation of different levels of accumulation of cultural factors. The local geographies correspond to the maps of the "local systems" identified by ISTAT, and partitioning Italy in sets of contiguous municipalities relatively self-contained as Local Labour Market Areas (LMAs). We rely on a large set of data and elaborations provided by ISTAT at the level of the LMAs. By means of an Ordered Probit model, we show that the territorial synergy between the manufacturing specializations and the accumulation of cultural factors is largely driven by the socio demographic and place based peculiarities of the local systems.

THE TWO FINANCIAL FLOWS OF PRIVATE EQUITY: FUNDS VERSUS MANAGERS

Christoph Scheuplein, Institute Work And Technology, Germany

The private equity industry connects the business locations of acquired companies with the financial centres in which private equity managers are located, as well as with offshore financial centres in which private equity funds are located. Although approximately US\$2.5 trillion in investments is currently being managed through private equity funds, little is known about the income flows of fund

investors and of private equity managers. In this presentation, I examine about 150 funds that acquired companies in Germany between 2013 and 2016. Data from Preqin, an information service provider, was used to estimate these two types of income and to reconstruct their respective financial flows. First, both revenue streams were found to be transferred initially to an offshore financial centre. Second, it became clear that the private equity firms could secure a considerable part of the pie by charging management fees and through profit-sharing. Third, for private equity managers, the financial flow is directed to a few specialized financial centres, among which foreign locations (London) compete with domestic locations (Frankfurt and Munich). In light of Brexit, this geography of financial flows, which has been emerging over the years, will be called into question.

COPING WITH THE MARKET: INNOVATION POLICY IN TIMES OF DISRUPTION

Ann Camilla Schulze-Krogh, University of Agder, Norway

Hans Christan Garmann Johnsen, University of Agder, Department of Working Life & Innovation, Norway

Jan Ole Rypestøl, University of Agder, Department of Working Life & Innovation, Norway

In an increasingly competitive world, innovation policy instruments play an important role initiating and supporting innovation activities within and amongst firms and industries. As instruments, these policy supporting initiatives will influence future industrial development in mainly three ways. Firstly, they could aim to correct system failures. Secondly, they could aim to form, cultivate and renew the present industry portfolio, and thirdly, they could aim to influence future industrial development by identifying and promoting new and promising industries. Thus, policy instruments relate to the market in three different ways, namely by chasing it, correcting it, or paving the way for it. In this article, we examine how the intentions of innovation politics have changed over time. Using the case of Norway, we examine how the national innovation policy has changed from 1850 and up till today. Based on official documents and existing literature we identify four historically path breaking changes within the evolution of industrial policy support in Norway, namely 1905, 1950, 1980 and today. The article discusses how policy instruments have contributed differently within the various epochs of Norwegian history, and why a change of strategy became evident and implemented. Departing from these historical 'snap shots', the article discusses what type of innovation policy would be most suited for the nation to develop growth in the future.

KNOWLEDGE NETWORKS IN REGIONAL DEVELOPMENT: AN AGENT BASED MODEL AND ITS APPLICATION

Tamás Sebestyén, University of Pécs, Hungary

Attila Varga, University of Pécs, Hungary

Innovation is a collective process requiring the interaction of many different contributors. Moreover, in regions, where it is difficult to build innovation on local resources (critical mass of actors, knowledge base, industries) external links in global knowledge and innovation networks may be crucial factors in economic development both directly, by enhancing the local innovative basis and indirectly, by providing access to global knowledge.

In the paper we propose an agent based model as a tool for the evaluation of regional development policies through fostering link formation. The model uses the agent based approach to capture complex dynamics in the network formation process at the regional and interregional level. The agent based approach is useful in this context as it is able to account for heterogeneity and nonlinear

dynamics which seems to be an inherent part of both innovation processes and network formation associated with innovation.

The model captures regions as the unit of analysis, and model the search process of regional research actors for possible profitable partnerships on the basis of a gravitational approach: agents are looking for cooperation according to the attractiveness of others. We present a possible way of fitting the model to empirical data and simulate the effects of an illustrative development policy focusing on network formation. We employ a dynamic approach where the model is calibrated to fit longitudinal data which makes it more sensitive in modeling policy impact over longer periods of time.

GOVERNANCE ISSUES IN AN ENERGY FLAGSHIP REGION – EXPERIENCES FROM A WINTER TOURISM REGION IN AUSTRIA

Sabine Sedlacek, MODUL University Vienna, Austria

Dagmar Lund-Durlacher, MODUL University Vienna, Austria

Tanja Tötzer, AIT - Austrian Institute of Technology, Austria

Austria is a market leader for winter holidays and in many mountainous regions winter tourism represents an important economic factor and an essential source of income. At the same time, the alpine space is extraordinary affected by climate change. Thus, winter tourism regions have to deal with new issues like climate change and the sustainable use of energy and resources. At the same time companies and institutions of the tourism sector in such regions are facing major challenges like structural change, preserving of snow conditions, enhancement of product diversification and a tough competition between world-wide competing top ski resorts. All these challenges go hand in hand with the need to lower energy and operating costs. As a consequence regional stakeholders are confronted with conflicts of interest which make it hard to initiate the needed transitions.

The importance of local stakeholders and citizens for successfully implementing adaptation and mitigation measures is evident in the literature. There is a lot of discussion about the mixture of stakeholders and their different roles in the implementation process which clearly refers to collaborative governance. Collaborative governance mechanisms which are based on networks, increase legitimacy, strengthen accountability and enhance the implementation capacity of an ambitious climate agenda. Coordination within such a governance process implies acceptance of often contradictory perspectives and bottom-up driven participatory processes.

The paper particularly focuses on these coordination aspects and uses the insights of an ongoing project which proposes the formation of an energy flagship region in an area which is on the one hand famous for its winter tourism in Austria and on the other hand located in the heart of the Alps and part of the national park 'Hohe Tauern' where nature preservation is the core goal. The region 'Pinzgau' is located in the provincial state of Salzburg. With the support of the LEADER region 'Hohe Tauern', the big ski resorts in the region, as well as key-stakeholders of the tourism sector both at the regional and national level we set up a multi-stakeholder forum which is jointly engaged in developing an energy flagship region for tourism. The paper will provide insights into the related governance process and will analyze the role of the different involved stakeholders.

MOBILITY CIRCUITS: REFLECTING ON EVOLUTIONARY TRAJECTORIES OF URBAN POLICY

Tatiane Cristina Serrano, University of Porto, Portugal

Isabel Breda-Vázquez, University of Porto, Portugal

Policy Transfer and Urban Policy Mobilisation recent debates shows an evolution expressing “(...) the governing metaphors in critical policy studies are not those of transit and transaction, but of mobility and mutation.” (Peck and Theodore 2010, 170). The intense circulation of policies and practices produces new relationships and networks at various spatial levels (Crivello 2015). However, little clarity is noticed regarding trajectories and tracks of urban policies related to all subjects - movements of ideas, people and things – which make up policies in different places (Robinson 2015).

Thus, this work proposes analyse the mobility circuits (McCann 2011) and its evolutionary trajectories of urban policies mobilisation and mutation. To identify its multiple tracks and movement singularities, complementary methodologies will be used, such as ‘Mobile Methods’ (McCann and Ward 2012), ‘Relational Methodology’ (Serrano 2015), and ‘Translation Notion’ (McFarlane 2011). The case study associated, Porto Alegre/Brazil Participatory Budget, is a policy model which still circulates worldwide with various formats and characteristics. Moreover, it presents a high level of diffusion, an interesting process of global mobilisation, and different mutations at the local level.

In general, it is expected to contribute shedding light to scientific knowledge on the multiple trajectories inherent to mobility circuits, its networks and knowledge spaces. Additionally, it is intended to understand the travelling nature of policy models as well as to the unpredictable character of espousal and emulation (Wood 2016).

MEASURING SECTOR SKILLS GAPS: A REGIONAL ANALYSIS OF A LOCAL LABOUR MARKET

Deniz Sevinc, University of Birmingham, United Kingdom

John Bryson, University of Birmingham, United Kingdom

Simon Collinson, University of Birmingham, United Kingdom

A limited number of academic studies explore the issue of skill gaps and any dampening effect on the UK economy. The problem with skills is that they are difficult to measure, decline or alter over time, may be employer specific, accredited versus unaccredited and current demand in a local labour market. Understanding the relationship between regional economies and productivity requires an appreciation of regional assets, both hard and soft. A key asset is the quality and skills of the labour force within a travel-to-work area combined with an appreciation of employer demand; quality is difficult to measure but skill levels can be assessed using proxies based on accreditation, for example, national vocational qualifications (NVQs). The difficulty is in identifying the relationship between the available skilled population in a local labour market and actual or potential demand. This is not about employability or unemployment but in developing a technique that relates employer demand with current and near future supply in a local labour market. It is this challenge that is explored in this paper.

Our study aims at providing an in-depth analysis of skills gap, and provide a framework that covers England in addition to three main local enterprise partnership areas in West Midlands: Black Country, Greater Birmingham and Solihull and, Coventry and Warwickshire. The models are estimated over the period 2004:2020. The variables included in each region specific model are: a set of indicators to reflect the economic value of the government funded qualifications including government training, voluntary sector providers, colleges and private training providers and consist of di

erent NVQ levels, economically active working age population (demography), and labour demand (current and projected) for twelve main sectors. Based on Labour Force Survey data we forecast supply of skills by NVQ levels in each local authority of economically active working age population, and based on economically active working age population forecasts we calculate absolute number of people with specific NVQ levels. A further module has been added in an attempt to provide useful information on possible labour market imbalances and skill mismatches in West Midlands. This module compares the skill demand and skill supply projections (focusing on qualifications) and attempts to reconcile the two. Thus, this study provides both a detailed picture of the UK's skill situation as well as the desired skills needs to be developed in the labour market, and aids future decisions on both whether more should be done to tackle skills gap and how this is best done in practice.

KIBS INNOVATION ACROSS TIME AND SPACE: FACTORS OF KIBS INNOVATION IN QUÉBEC REGIONS, 2007 AND 2014

Richard Shearmur, McGill University, Canada
David Doloreux, HEC Montréal, Canada

Most studies that examine the geography of innovation are cross-sectional, and longitudinal studies are rarely spatialized. In particular, few studies have examined how factors associated with KIBS innovation vary (or remain constant) from one period to another. In this paper we examine the factors associated with KIBS innovation across four types of geographic context, and compare these factors and geographic effects across two years, 2007 and 2014. The data consist of two separate cross-sectional innovation surveys of the same population of KIBS, and the innovation factors analysed comprise sector, size, labor characteristics and sources of external information. Three types of innovation – new service, internal management, and marketing, are examined.

MEASURING INNER PERIPHERIES: SPATIAL REORGANISATION, SOCIAL COHESION AND QUALITY OF LIFE

Martin Šimon, Czech Academy of Sciences, Institute of Sociology, Dept. of Local and Regional Studies, Czech Republic
Josef Bernard, Czech Academy of Sciences, Institute of Sociology, Dept. of Local and Regional Studies, Czech Republic

The aim of this paper is to presents analytical framework and methodology for delimitation of inner peripheries, which might have a broader validity for a study of regional development. The analysis itself reflects the discussion about the rising importance of relational proximity at the expense of geographical distance by utilising multi-dimensional approach to peripherality. The delimitation of inner peripheries by multi-criteria time-accessibility modelling in GIS is put in contrast with delimitation of inner peripheries by statistical model based on socio-economic variables. The regional differences between spatial and statistical model are elaborated in detail. The findings from this regional analysis are further triangulated with data from recent large-scale social survey in Czech rural regions. The analysis will show how significant is the spatial dimension for social and economic inequality in rural regions, that is, to what extent life in peripheral regions works as a mechanism of social exclusion for inhabitants. This 2016 research follows previous studies conducted in 1980's and 2005; therefore, we can discuss and evaluate spatial reorganisation of inner peripheries in a long-term perspective.

EVALUATION OF INNOVATION SUBSIDY IN SELECTED CEE REGIONS

Miroslav Sipikal, University of Economics in Bratislava, Slovakia

Valeria Nemethova, University of Economics in Bratislava, Slovakia

Maria Siranova, University of Economics in Bratislava, Slovakia

Innovation support belongs to the main areas of aid among the priorities of the European Union regional policy. Huge amount of development resources are distributed especially to the lagging regions of the multinational grouping. Direct subsidies for companies are one opportunity how the aid can be implemented. As in the literature stated, this aid may have different impact on supported depending on the firm and regional characteristics, but also on the attributes of the support measure. The main aim of this research is to evaluate the effectiveness of European Union regional policy supporting innovation and competitiveness of private companies in less developed CEE regions within Slovakia. The study discussed the short and long term effects of the innovation and competitiveness support at firms in the Slovak Republic. These regions offer a specific example to measure the impact of support, while Slovakian regional development is highly dependent on the European Union support. This aid makes up more than 80% of the total development resources in the country. A positive and significant impact was identified that disappears shortly after one year following subsidy allocation. It suggests only temporary short term effects of support.

STIMULATING ECONOMIC RECOVERY THROUGH EURO AREA FINANCIAL GROWTH POLES

Maria Siranova, University of Economics in Bratislava, Slovakia

Jana Kotlebova, University of Economics in Bratislava, Slovakia

In light of recent development in the ECB monetary policy the Japan-like stagnation scenario might seem to be a near-future economic modus operandi. Per definition, the growth pole economies help to drive the growth process in other economies, thus the money spent to boost domestic credit provisioning are likely to spill over to other adjoined economies and help them to recover even in the presence of depressed domestic demand and/or over-leveraged domestic banking sector. This paper investigates this issue by computing growth pole scores for EA19 countries and comparing it to the official distribution key. We modify the procedure developed in World Bank (2011) for growth pole computation in order to account for strength of linkages connecting member states through net of cross-border trade and financial flows. Our results suggest that the official distribution key might not be completely optimal once looking at the growth pole distribution derived from the internal characteristics of a domestic banking sector and level of real and financial interconnectedness. Countries small in economic size (Baltic states, Slovakia and Slovenia) would benefit from a more differentiated distribution as they strongly outperform their benchmark set by the official distribution key. On the other hand, big EA economies do not achieve levels used in official distribution key taking into account their growth pole potential for other EA economies.

INCLUSIVE GROWTH IN UK CITIES: MAINSTREAMED OR SIDELINED?

Paul Sissons, Centre for Business in Society (CBiS), United Kingdom

Anne Green, Warwick University, United Kingdom

Kevin Broughton, Coventry University, United Kingdom

The concept of 'inclusive growth' is increasingly invoked as offering prospects for more equitable social outcomes. However 'inclusive growth' is subject to a variety of interpretations and lacks definitional clarity.

In the UK, via devolution and deals, cities are taking on new powers and responsibility for policy areas which can influence inclusive growth outcomes. This opens-up potential opportunities for innovation in 'doing things differently' to address central issues of poverty, low pay, housing and access to services. Yet a range of challenges remain to placing cities at the core of an inclusive growth agenda. These include constraints associated with the scope of powers and resources being devolved, as well as longer-term patterns of geographically uneven development and labour market change.

The breadth and significance of activities flowing from city devolution as they relate to inclusive growth aims is to date poorly synthesised. This paper examines recent experiences of devolution against a framework through which to assess the extent to which inclusive growth concerns form a central or peripheral concern in policymaking, and which maps the nature of various activities with the potential to contribute to inclusive growth outcomes. It explores definitional issues and framings of inclusive growth across city devolution, including the extent to which economic and social concerns are integrated or considered discretely. It concludes by considering what the nature of early stages of devolution suggests for the prospects of an inclusive growth agenda in cities going forward.

CULTURAL HERITAGE COMMUNITY OF "PUUVILLA" AND USE OF HISTORY

Anna Sivula, University of Turku, Finland

The heritageisation of the industrial landscapes of Pori have been going on for 50 years. The multiple identity work with an old cotton mill is mostly conducted by the re-users of these historical buildings. In my presentation I will summarize the monumentalizing, possessive and historicizing identity work that have transformed the old cotton mill from an immanent remnant of the industrial past to a living combination of tangible and intangible cultural heritage. In my paper I discuss the material, social and local cultural heritage from the perspective of regional identity work.

'RESPONSIBLE TRANSITION' – OUTCOME OR PROCESS?: RESPONSIBLE INNOVATION IN THE GREENING WESTERN NORWEGIAN MARITIME INDUSTRY

Svein Gunnar Sjøtun, Western Norway University of Applied Sciences, Norway

This paper seeks to bridge 'transition studies' (i.e. Geels, 2002) and 'responsible (research and) innovation (RI)' (Stilgoe et al., 2013) in a spatial context. It does so by building on literature that emphasises 'geographies of transition' (Coenen et al., 2012), while adding insights from RI—itsself in need of spatial integration (Macnaghten et al., 2014). This integration is motivated by the observation that while transition studies has been good at studying dynamics leading to predefined end-goals, it has been limited in explaining how innovation processes themselves are formed in a responsible way. To illustrate this, I focus on the greening Western Norwegian maritime industry. Methodologically, I

deploy the concept of 'social field' (Fløysand and Jakobsen, 2011). As each field are guided by field-specific institutions, practices and narratives, various narratives around what is responsible might co-exist in the regional context. This, in turn, potentially makes transition a not-so-straightforward process. The paper thus seeks to reflect upon how responsible innovation in a regional industry in transition can help to properly operationalise RI principles (Stilgoe et al., 2013)—which often has proven problematic (Koops, 2015). Thus, the paper focuses less on how principles of responsible innovation are strictly adhered to per se, and more on what stakeholders in different social fields perceive responsible innovation to be. I ask:

- What does various stakeholders in the Western Norwegian maritime industry perceive responsible innovation to be?
- How is this mediated by the geographical context?
- Which narratives are actually driving green maritime innovation projects in the industry?

MULTIDIMENSIONAL ASPECTS OF IMPLEMENTATION AND PERFORMANCE COHESION POLICY IN EU REGIONS

Maciej Smetkowski, Centre for European Regional and Local Studies (EUROREG), University of Warsaw, Poland

Adam Płoszaj, Centre for European Regional and Local Studies (EUROREG), University of Warsaw, Poland

Jakub Rok, Centre for European Regional and Local Studies (EUROREG), University of Warsaw, Poland

The aim of the study was to present different dimensions of diversity of European regions in terms of implementation and effects of Cohesion Policy. On the basis of factor analysis we highlighted three main factors of these differences related to the scale of Cohesion Policy allocation, significance of the reported achievements of this policy and the context of intervention in the form of growth dynamic of the regions. This indicated - due to the fact that the factors were uncorrelated - the weakness of the link between the expenditure incurred and their effects, as well as the broader impact of the intervention on the processes of economic development. Moreover, the classification of European regions carried out by use of these three factors demonstrated the importance of the national dimension of the differences in this respect, while regional differences played only a minor role and was noticeable above all in those countries whose regions were covered by the different objectives of Cohesion Policy. This indicates that the most important dimension of the differences between regions is related to the eligibility of individual countries and regions to use the funds of the policy. This differentiation is in turn derived from the processes of integration and enlargement of the European Union and the changes taking place in the framework of Cohesion Policy.

VOTING, VOLUNTEERING AND ENVIRONMENTAL ACTIVISM IN EUROPE

Ian Smith, University of the West of England, United Kingdom

Stephen Hall, University of the West of England, United Kingdom

The paper addresses the question of whether self-organising (voluntarist) activism on environmental issues is more or less likely to be associated with trust in government as might be expected under the mobilisation thesis (Rogers et al 1975). This paper explores the relationships between political activism, voluntary engagement on environmental issues, conceptions of good citizenship and the socio-economic characteristics of individuals (building on a model developed by Dalton 2005) for

Germany, the UK and the Netherlands. The paper uses data from the 2002 European Social Attitudes Survey where there was a module on civic engagement.

The findings suggest that there is an association between engagement in voluntary associations and trust in institutions, generalised trust, seeing the good citizen as a political activist and seeing the good citizen as one who works within the law. This broadly confirms the mobilisation thesis. However, the association differs for examples of non-political voluntary association (eg with sports clubs) than is the case for political voluntary association (eg environmental activism). Thus those who engaged with environmental associations were less likely to see a good citizen in terms of obeying the law (for example) than for respondents who engaged with non-political association. This would infer one aspect of environmental activism whereby activists might reject existing governance mechanisms albeit that there is not a wholesale rejection of government. Activism also varied in relation to country, level of education and age.

DYNAMIC ORDERING OF MULTIDIMENSIONAL OBJECTS

Andrzej Sokołowski, Cracow University of Economics, Poland

Małgorzata Markowska, Wrocław University of Economics, Poland

A popular approach in constructing composite indicators is to use minimal and maximal values in variable normalization process. The distance to minimum for stimulants, and to maximum for destimulants is being divided by range. This operation transforms each variable to [0;1] interval, changing destimulants into stimulants at the same time. If minimum or maximum values are outliers, the uncontrolled weighting system is introduced, forcing skewness to transformed variable distribution. A method of dynamic iterative ranking method is presented in the paper. In each step, the best object is found from the set of objects not ranked yet. With global normalization procedure, the composite indicator is no longer relative, and consecutive values for the same object can be safely compared. The procedure is illustrated by data used for Human Development Index, and set of variables introduced to it since 2010.

KNOWLEDGE ECONOMY AND CRISIS AT INTRA-CITY-REGION LEVEL. THE CASE OF MADRID (2010-2015)

Eloy Solis, University of Castilla-La Mancha, Spain

Kayvan Karimi, University College London, United Kingdom

Jose Maria Ureña, UCLM-University of Castilla-La Mancha, Spain

Vicente Romero, UCLM-University of Castilla-La Mancha, Spain

This paper investigates spatial patterns of knowledge economy workers during crisis period (2010-2015) at intra city-region level. Based on sectorial, functional and spatial approach, the relationship between knowledge economy (KE), crisis and city region performance is explored. In order to understand the geography of KE-workers a typology is proposed: FIRE -finance, insurance and real state-, KIBS -knowledge intensive business services-, KITS -knowledge intensive technological services-, HTI -high technology industries-, C&C -cultural and creative activities- and OTHERs. Combining this sectorial approach with the functional (highly skilled workers) and spatial (pre-conditions crisis, accessibility, proximity,...) the paper evidences the emergence of a new socioeconomic regional landscape. This is characterized by a new spatial hierarchy, the reinforcement of multicentric structure and the increase of dichotomous territories (core-periphery; north-south; rural-urban areas). The new spatial order is driven by those more resilient cities, which are those with diversity of

knowledge economy (sectorial approach), high skilled workers (functional approach), good accessibility, high-income and proximity between cities (local context conditions approach).

A SPECULATIVE MAP OF INDIA? TRACKING NEW LANDSCAPES OF PRIVATE AND GREENFIELD URBAN DEVELOPMENT

Ashima Sood, NALSAR University of Law, India
Ashish Andhale, Indian School of Political Economy, India
Sharadini Rath, Indian School of Political Economy, India

The opening up in 2002 of foreign direct investment in township development heralded the emergence of new policy architectures at sub-national state levels in India for facilitating and regulating the growth of private townships. While such private-led urbanization in India shows clear parallels with urban development in this mode across Asia, India provides a relatively more transparent policy arena for analyzing its shape and trajectory. Surveying central and state-level policy frameworks across India, this paper highlights the tensions that underlie attempts to regulate such townships, especially around issues such as gating, the provision of low-income housing and governance mechanisms.

Few national level estimates of the scale of urban development in this mode however exist. Against this backdrop, this paper also presents a preliminary estimate and mapping of the size and scope of new town development in this mode across India, and examines the extent to which extant demographic and policy definitions are adequate in attempts to comprehend the phenomenon. Our findings also reveal important patterns of spatial concentration around select metropolitan hubs.

Even as private urban development in India finds increasing policy momentum, the club urbanisms that it presages hold useful lessons for private urbanization elsewhere in the developing world.

INSTITUTIONAL AGENCY AND PATH CREATION: AN INSTITUTIONAL PATH FROM INDUSTRIAL TO KNOWLEDGE CITY

Markku Sotarauta, University of Tampere, School of Management, Finland
Nina Suvinen, University of Tampere, Finland

In this paper, we argue there is a need to focus more explicitly on institutions and related agency to understand better path creation. Many studies have shown how institutions mediate in subtle but pervasive ways economic development and path creation. Institutions frame the choices and actions of many actors as well as their interaction, and consequently, it is institutions that frame emergence of new industrial paths and are potential sources of lock in. More specific conceptualisations of institutional agency and related strategies are called for, as path creation is about (a) releasing the future potential beneath existing institutions and (b) institutionalising the released potential. Understanding institutional agency in the context of path creation is crucial, as it aims to mould, simultaneously being affected by, many kinds of history informed social practices and routines.

This paper investigates the core concepts related to path creation and institutional agency and asks what are the main institutional strategies adopted by intentional actors, independently or in collaboration, in their efforts to boost institutional path creation and renewal. We scrutinise these questions in the context of a knowledge city development and use Tampere, Finland as a case in point.

THE WINNER TAKES IT ALL? REGIONS AND WELFARE IN SWEDEN

Malin Stegmann McCallion, Karlstad University - Centre for Regional Studies, Sweden

Like many European states, Sweden has built its welfare system upon economic growth, with orthodox policy assumptions requiring ongoing economic growth to support continued welfare provision. However, such assumptions have come under attack in recent years: ecological economists question the possibility and desirability of continued economic growth on a finite planet, and neoliberalism has undermined commitment to the provision of high levels of public welfare by public actors. In Sweden, this general situation is complicated further by the ongoing process of regionalisation: in fact, economic growth is now a shared policy area between all four political levels within Swedish politics (municipal, regional, national, and the EU). The ecological issue is addressed at best indirectly: each region must develop a Regional Development Plan which privileges economic growth. Moreover, the rules according to which this must take place are primarily set at EU and national levels, and each plan is focused on a given region, with no mechanism to manage competition between them as they all seek to maximise their economic development. This paper asks whether and how it is possible for all Swedish regions to gain from such a structural shift, and if not, what are the implications for the provision of public welfare? In a neoliberal economy, can all regions be 'winners'? Or will one, or some, of them find that their 'victory' in economic development requires the failure of other regions in the country?

SEARCHING FOR PLACE-MEANING IN UNIVERSITY/REGIONAL PARTNERSHIPS: AN AUSTRALIAN CASE STUDY

Daniela Stehlik, Griffith University, Australia
Lesley Chenoweth, Griffith University, Australia

The continued, contentious and often challenging search for 'place meaning' within Australia's tertiary education sector is a powerful characteristic of the three decades since the introduction of a national neo-liberal, market-driven and globalized higher education framework in the late 1980s.

This framework was promoted as offering equity and efficiency, with a very specific targeted goal of regional economic development (RED), a concept that was taken up enthusiastically by neo-liberal champions of university regional development. The pressure to conform to it became, in time, a powerful determinant of a definition of 'success'. It became known as 'university/regional engagement', and an analysis of its influence shows its failure, largely because of its 'top/down', managerial approach.

Our paper argues that the 'promise', which underpins the concept of any 'engagement', was not realised here, thereby putting potential future relationships at serious risk.

In recent years, a different approach to community-university engagement can be observed. This comes from the blurring of boundaries between universities and their communities, the changing profile of students and the need for deeper collaboration of universities with community organisations, local government and businesses to further economic and social development in their regions.

We consider the search for place-meaning and its importance to long-term engagement from the perspective of two very different Queensland universities and their relationships with their regional communities. We examine the impact of the rapid uptake of the neo-liberal RED and its subsequent

failure, and a more recent ground-up collaborative approach, and considers its potential for sustainable success.

VARIETIES OF CAPITALISM AND TRANSNATIONAL CITY NETWORKS: ENTRENCHMENT OR INDEPENDENCE?

Supraja Sudharsan, Georgia Institute of Technology, United States

This paper examines the influence of variation in national systems of political and economic institutions on cities' participation in global governance. Cities are increasingly portrayed as the spaces where long-standing global public good challenges are resolved (Acuto, 2013). A "global city" perspective brings to light similarities in production processes in certain cities across the world (Sassen, 2001). On the other hand, varieties of capitalism literature in International Political Economy indicates that institutional differences matter and influence outcomes. This is true not only at the national level, but also at the regional and city-level as institutions are also location-specific owing to the space-oriented nature of production processes (Kratke and Borst, 2007, Hall and Soskice, 2001). This paper undertakes an exploratory study to understand whether city participation in transnational networks varies in accordance with that indicated by the varieties of capitalism literature. Do global cities act similarly despite being situated in different political-economic conditions? In studying this question, the paper focuses on cities participating in transnational networks for climate change. Climate change mitigation and adaptation is one area where there is growing support for cities to take the lead (Bulkeley, 2010). The study would be useful for non-government and international government organizations designing programs and projects through transnational networks to enable city participation and local climate policy action.

FAULT-LINES OF ECOLOGICAL SUSTAINABILITY INTERPRETATIONS IN SPATIAL PLANNING

Andrea Suvák, Hungarian Academy of Sciences, University of Pécs, Hungary

Inequalities between advanced and following regions within Europe do not only concern divergent economic trajectories but also marked differences in the interpretations for and attitudes towards one of the main issues of policy-making today – ecological sustainability and all other matters, including climate change and smart cities, that relate to it. Spatial and urban planning have an especially strong relation to this issue. However, discourses about how natural environmental issues should be handled within spatial planning and development still reflect fluid and unsettled interpretations of notions both in practice and theory. New and old expressions are invented and reinvented to describe currents of approaches. The way these approaches enter the European Union's environmental policies and are then translated to national interpretations and practices marks a clear fault-line between European countries. The present study attempts to formulate categories for investigation based on environmental ethics, starting from the assumption that all the conflicts and incoherence of present trends of „green” spatial planning originates from the difference of underlying values and that these values reflect different ethical approaches. Understanding these might be a further step forward in the elimination of incoherence and conflicts within environmentally concerned spatial planning.

SPATIAL APPROACHES TO THE MANAGEMENT OF FAMILY FIRMS - THE CASE OF NORTH-AMERICAN AND JAPANESE MID-SIZE COMPANIES FROM THE MANUFACTURING SECTOR

Lech Suwala, Humboldt-University Zu Berlin, Germany

Neither management nor family firms play an appropriate role in economic geography and were often even neglected in the past. At the same time, they contribute at least to half of most advanced economies' GDP and employed workforce, in emerging markets to figures even beyond these numbers. The rise and expansion of many family firms led to often unconscious debates on the role of space (f.e. as an economic location, social place or cognitive landscape) within the companies' strategies. Against this background, the paper develops a theoretical spatial framework towards the management of (family) firms in the first part. This framework will be applied to a sample of interviewed North American and Japanese non-stock listed mid-size family firms from the manufacturing sector in a second part. The resulting typology shows that differences in the spatial management of these firms rather depend on inherent family routines with mixed spatial strategies either on economic, social or/and cognitive circumstances and to a much lesser extent on their country of origin.

THE REPRESENTATIONAL CLAIMS OF METRO-MAYORS

David Sweeting, University of Bristol, United Kingdom

A new wave of directly elected mayors will be chosen in May 2017 in England, to lead 'Combined Authorities'. These authorities will operate at the city regional level in different provincial cities, and comprise members of different constituent local authorities. 'Metro-mayors' have emerged from the Conservative Government's 'devolution agenda', specifically the Cities and Local Government Devolution Act 2016, and also a longer term trend whereby UK central governments of all political persuasions have encouraged the creation of directly elected mayors in local government. The West of England Combined Authority, covering Bath, Bristol, and South Gloucestershire unitary authorities is being created as part of this process, and will include a metro-mayor for that city region.

Questions of representation abound for this new wave of mayors. Drawing on theories of representation, this paper will analyse, through consideration of their public statements, how mayoral candidates in the West of England mayoral election make 'representative claims'. This approach engages with the direct relationship that directly elected mayors have with voters, who may or may not stand on party labels, and make various claims around their understanding of local issues, their identity, and their abilities to represent the interests of the area as a whole, which, in many cases for metro-mayors, will be polycentric.

TRANSNATIONAL DIASPORA LINKAGES AND REGIONAL ECONOMIC DEVELOPMENT: THE ROLE OF POLITICISED DIASPORIC ENTREPRENEURSHIP IN THE KURDISH DIASPORA

Stephen Syrett, Middlesex University, United Kingdom

Janroj Keles, Middlesex University, United Kingdom

Recent years have seen an ever growing interest in the role of transnational diaspora linkages within the urban and regional economic development process of both host and homeland economies. Alongside the increased economic significance of diaspora populations as a result of increased global mobility and levels of forced displacement has been an important political impact. Diaspora groups

are increasingly significant political actors, and particularly in relation to conflict and post-conflict situations, have often become highly politicised. In certain diaspora groups, particularly stateless ones such as the Kurds, Tamils, Palestinians and Sikhs, engagement in economic activities is often informed by, and intimately related to, the evolution of a highly politicised diasporic identity.

Yet this relationship between diaspora politicisation, business development and processes of regional economic development has to date remained both under theorised and under researched. This paper has two objectives. First, it develops a conceptual understanding of the relationship between politicisation and regional economic development within highly politicised diasporic contexts through considering the particular emergence and development of politicised diasporic entrepreneurship. Second, it explores the practice of politicised diasporic entrepreneurship through analysis of a range of transnational Kurdish entrepreneurial ventures, rooted within Kurdish communities in Europe, and their linkages into homeland areas in Kurdistan in Iraq. This analysis raises important implications for policy and practice in relation to processes of economic development and reconstruction in post-conflict and conflict areas in unstable political conditions and the role of host communities within these processes.

CHARACTERISATION OF INNER PERIPHERIES IN EUROPE: COMMON FEATURES AND REGIONAL SPECIFICITIES

Gergely Tagai, MTA KRTK, Hungary

Joan Noguera, University of Valencia, Spain

Bálint Koós, MTA KRTK, Hungary

Hector del Alcazar Indarte, University of Valencia, Spain

Annamária Uzzoli, MTA KRTK, Hungary

Although, the phenomenon of inner peripheries is present in academic and policy literature, there is no common European understanding and comprehensive knowledge on their nature and characteristics.

With the support of observations of an ongoing research project – ESPON, Processes, Features and Cycles of Inner Peripheries in Europe (PROFECY) –, the paper aims at presenting several key evidences on the socio-economic status of inner peripheries in Europe. The analysis of different (demographic, labour market, SGI availability etc.) characteristics of areas regarded as inner peripheries, identified by PROFECY project, might answer the question whether they form such a type of territorial reality, which has entirely unique features in the socio-economic space of Europe.

Analyses exploring this objective focus on two main questions. Firstly, what makes these territories differentiable from other areas in terms of various socio-economic characteristics? In this case, the status of inner peripheries compared to regions with geographical specificities and other European regional typologies is investigated. Secondly, do inner peripheries form a group with common characteristics or these areas are rather different from each other, with having different reasons to be peripheral? In this latter case, the analysis of ‘profiles’ of inner peripheries is in the centre of interests.

Besides these thematic aspects, the paper also intends to explore geographies of socio-economic features of inner peripheries and changing positions of today’s inner peripheries in the recent past (as a reflection on the dynamic nature of the concept).

THE IMPACTS OF TELECOMMUTING ON TRANSPORTATION BEHAVIOURS, HEALTH AND PRODUCTIVITY: A CANADIAN STUDY

Georges A. Tanguay, Université du Québec, Canada

Ugo Lachapelle, Université du Québec à Montréal, Canada

This research applies the time use module of the 2010 Canadian General Social Survey conducted by Statistics Canada to establish a characterization of Canadian telecommuters and to estimate some of the impacts of telecommuting on transportation behaviours, health and productivity.

We first present the general context leading to the growth of telecommuting, and some estimates of the sizes of the population of different telecommuter types as a function of industries and of socioeconomic and spatial characteristics. These results are compared with other international experiences regarding the extent of telecommuting, and incentives introduced to develop and regulate telecommuting. We show that telecommuters are on average wealthier and more educated than traditional workers, and live mostly in urban areas.

Second, we econometrically estimate the effects of telecommuting on: i) travel; ii) work schedule and work places; iii) stress and health and iv) number of hours worked. Estimates consider that variations in behaviour are a function of the different types of telecommuters, their socioeconomic characteristics, industry classifications and time usages.

Results show the potential of telecommuting to stimulate the growth of private and government revenues, and to reduce social costs related to health and transportation. These benefits could justify government measures to favour telecommuting such as tax exemptions or the regulation of telecommuting on the labor market.

THE CREATION OF A COMPLEX DATASET FROM DIFFERENT SOURCES: AN INVESTIGATION INTO THE EVOLUTIONARY STRUCTURES OF KNOWLEDGE PRODUCTION IN REGIONAL ECONOMIES

Gianluca Tarasconi, Università Commerciale Luigi Bocconi, Italy

Dieter F. Kogler, University College Dublin, Ireland

The shortage of suitable data that serves as an indicator of technical knowledge at various scales, resulting in a lack of empirical evidence, has hampered the refinement of existing theories of technological change and economic development. In an attempt to correct this, the ERC funded project 'Technology Evolution in Regional Economies' (TechEvo) attempts the assemblage of a complex dataset derived from a variety of sources suitable in order to facilitate the analysis of technological change and economic growth across a variety of socio-economic and spatial settings.

TechEvo project will take advantage of advanced data sources, including scientometric, patent and trademark data, which aim to capture scientific, technical and entrepreneurial advances across a wide range of knowledge production activities. To demonstrate the fluidity of regional knowledge spaces and the significance of place-based properties, these data will be complemented with information pertaining to the properties of actors and entities, information concerning local institutional and policy environments, all aiming to take into consideration the unique histories and dynamics as well as the network embeddedness of particular localities.

The scientific goal of TechEvo is to undertake a comprehensive investigation of why regions enter and exit scientific and technological knowledge domains based on their past activities (path-dependency),

their regional characteristics (place-dependency), and their embeddedness in regional, national and international networks. The development of a TechEvo database is a first step towards this goal, and this presentation provides a first glimpse on the database architecture that is being implemented.

JOB POLARIZATION IN THE DUTCH LOCAL LABOR MARKETS - AN EMPIRICAL EVALUATION

Nikolaos Terzidis, University of Groningen, United Kingdom
Raquel Ortega - Argiles, Birmingham Business School, United Kingdom
Steven Brakman, University of Groningen, The Netherlands

Extensive literature documents the pervasiveness of job polarization in the labor markets of the developed world. We utilize detailed data from Netherlands Statistics (CBS) to empirically analyze employment structure in the Dutch local labor markets from 1999 to 2012. Sorting occupations according to both their wage and their skill requirements, we provide robust evidence of polarization as the main trend in the national labor market. Furthermore, our analysis confirms the differentiated impact of technology on different types of occupations (routinization hypothesis) as the main source of polarization. Rather importantly, we also conclude on considerable spatial heterogeneity in the sub-national level. Despite the extensive economic and social disparities of local labor markets, alternative regression techniques (shift – share, segmented regression analysis) identify common patterns in the local labor markets consistently exhibiting job polarization dynamics. Preliminary results indicate the importance of demographic (labor force composition, female participation in the labor market etc.) and economic (urbanization economies, industrial composition favoring the service sector etc.) sub – national conditions as the main contributors to regional polarization. Acknowledging the importance and the exact implications of the above factors is crucially important to directly addressing job polarization at the sub-national level.

THEORY ON PARTICIPATORY RESEARCH & PLANNING: AN INDIGENOUS EXAMPLE

Michelle Thompson-Fawcett, University of Otago, New Zealand

As an indigenous planning researcher, I maintain a close eye to working on a very grounded level with indigenous groups – whether my own or other groups with whom I have on-going relationships. I have ethical, cultural and personal motivations for remaining connected to real problems facing indigenous communities and their planning aspirations. But, in addition, because I work within the non-indigenous establishment of a university, I have to work hard to keep credibility with my indigenous roots and nurture relationships at community level.

At the core of my paper is the concept of decolonisation; making sense of the indigenous understandings, furthering indigenous planning aspirations, while also seeking to transform priorities in the seats of power. The approach of the research I report in the paper needed to be culturally appropriate but also politically empowering of indigenous ambitions. Hence the research activity itself has been dictated by what has been prioritised and determined by the indigenous communities with whom I work collaboratively. My research foci were established by the indigenous communities who approached me, as was the research process. I am accountable to those local communities in terms of the research and planning outcomes.

The approach I have taken necessarily involves a tightly knitted relationship between the community and the researcher, and that bond is an on-going one, with associated long-term obligations and

expectations. The interlacing between the researcher and the communities' entails communication, intellectual development, and shared growth and wisdom.

URBAN PARADOXES AND QUALITY OF LIFE

Lela Tijanic, Juraj Dobrila University of Pula, Croatia

Historically, urban areas are known as the places where centripetal forces pull the population to a "better life". Despite the numerous possibilities in the urban areas, analyses which deal with measuring urban characteristics confirm urban paradoxes. This implies that urban concentrations can lead to growth but also to diminishing the urban development potential, where inequalities live in close proximity. Urban paradoxes may also have an influence on territorial cohesion and can represent an obstacle in managing urban concentrations. Researches have confirmed that urban inequalities significantly affect the quality of life.

The aim of this study is to define the relationship between urban paradoxes and quality of life in chosen European cities. Another important question which must be observed before determining this relationship is the possibility to measure the quality of life regarding different approaches and various determinants that make the measuring more complex. After theoretical overview of the previous investigations on defining urban paradoxes, measuring the quality of life and results of the study that presents the quality of life in European cities, analysis will be conducted to define if there is significant connection between urban paradoxes and perception of the quality of life in European cities. The results address that it is important to define the regional policy initiatives which will timely recognize these paradoxes, as well as to implement measures on urban level in order to prevent the saturation and negative effects on the quality of life.

AN EXAMINATION OF UNIVERSITY AND CORPORATE ATTRACTIVENESS AS ANCHOR TENANTS IN THE CONCEPTION (PRE-BIRTH) OF A NEW CLUSTER

Phil Tomlinson, University of Bath, United Kingdom

Felicia Fai, University of Bath, United Kingdom

Using survey results from a single UK case study of the conception or pre-birth stage of a cluster, we investigate the ability of a proposed new university research centre to act as an anchor tenant which attracts SMEs into the region. We examine how SMEs' attitudes alter when it is proposed that the university centre will be supported by a global original equipment manufacturer (OEM) corporation.

Our findings suggest that the attractiveness of the university centre is of moderate attractiveness to SMEs within the related industrial sector. It is greater for SMEs with high levels of R&D activity, than those with medium to low activity. However, when the centre has the strong support and partnership of a global OEM, its attractiveness increases across both high and medium level R&D active SMEs.

We suggest that the university centre acts as an anchor tenant for the creation of localised knowledge networks, whereas the corporate partner acts as anchor tenant for the creation of potentially globalised production networks/ value chains. For high-R&D SMEs access to both networks is of interest, whereas for SMEs of medium-low R&D access to global production networks is more important. Moreover, the perceived 'value' of the university research centre to SMEs are enhanced by its partnership with a global OEM in the same industry.

This gives important insights into the key actors in the conception stage of a cluster lifecycle, their relationship and the respective roles of these in attracting SMEs to the region.

SPATIAL PATTERNS OF INCOME INEQUALITIES IN ROMANIA

Ibolya Torok, Babes-Bolyai University, Romania

The main aim of this study is to evaluate the local income inequalities in Romania from a spatial econometric perspective. To our knowledge the paper analyzes for the first time in the literature the spatial relationship of the local incomes in Romania by employing spatial exploratory data analysis techniques. Global and local measures of spatial autocorrelation have been computed using the Moran's I index and G_i^* statistics in order to obtain estimates for the existing spatial autocorrelation in the local income level. Using this information, we have determined the spatial clusters of significantly auto-correlated local income distribution. The first major result of the paper consists in the measurement of the local income levels, a novel contribution to the advancement in this field due to the fact that the local level economic data in Romania is generally not available, and therefore, until now, no such estimation of local income levels has ever existed. We constructed this data using the budget of local public administration units as main information source, more exactly the locally generated incomes to the budget. The second major result of the paper is the identification and delimitation of different spatial structures (core regions, peripheries, highly polarised areas and areas with reverse polarisation) by using the smallest territorial units of the country (around 3 200 towns and communes), which enables a high definition of the areas which need different spatial policy interventions. The third major outcome of the paper brings empirical evidence for the existence of highly significant spatial interactions and for the strong spatial interconnections between areas of similar local income levels.

URBAN IMPROVEMENT PROJECTS IN HO CHI MINH CITY, VIETNAM: PRIVATE CAPITAL FINANCING AND STREET VENDOR LIVELIHOOD IMPLICATIONS

Niall Traynor, University College Dublin, Ireland

With many parts of the Global South experiencing unprecedented rates of urbanisation, the so-called informal economy continues to serve an enduring, critical role as a provider of sustenance and livelihood for many of its urban residents. This is particularly so in Vietnam's cities, where street vending has remained an important, highly-visible livelihood strategy catering to the provision of goods and services, particularly for low-income populations. Yet, in the context of Socialist Vietnam's rapid urban development and recent promotion to 'lower middle-income country' status, it is unclear how such 'traditional' activities fit into the country's aspirations concerning urban redevelopment and modernisation.

Through a case study of Ho Chi Minh City (HCMC), the largest and most rapidly-developing city in Vietnam, this research seeks to examine how informal street vendors (*hàng rong*) are being impacted by and responding to urban improvement projects in HCMC. Financed by private businesses from HCMC, these improvements involve the greening and re-paving with granite of 134 streets and sidewalks in the city's inner district. This research aims to uncover the role of this private finance in the Vietnamese authorities' urban order and civility discourses which attempt to prevent vendors from operating on streets and sidewalks, as well as the strategies used by vendors to contest such policies.

INTERNAL BORDERS AND GEOPOLITICS IN A (SEMI)FEDERAL STATE: A LOCAL CASE STUDY BETWEEN GALICIA AND CASTILLA Y LEÓN (SPAIN)

Juan-Manuel Trillo-Santamaría, University of Santiago De Compostela, Spain

Borders studies have mainly focused their interest in international sovereignty limits and their socio-spatial impacts. Boundaries can be read as doors to open new paths for cross-border regionalization processes, or as barriers that impede economic, social and political relations. But these boundaries could also be those separating different regions or states in a federal state. This could be the case of Spain, a (semi)federal state with 17 Autonomous Communities (ACs) with legislative, executive and judicial powers.

We aim to analyze a frontier area between two ACs, Galicia (As Frieiras and Terra do Bolo) and Castilla y León (As Portelas/Alta Sanabria), characterized by a low population density, a striking depopulation, a high ageing index and scarce economic activities. This is also a territory that shares cultural and linguistic features (Galician language). The objective is to analyze how the internal border between two ACs facilitate or impede cooperation between different municipalities: the local level is prioritized in order to understand geopolitical implications on the regional level. Local development and spatial planning policies will be at the heart of the research, but also socio-cultural initiatives will be strongly taken into account. As for methodology, a qualitative approach through semi-structured interviews will be applied.

DIVERGENT RESILIENCE: THE EMPLOYMENT GROWTH PATHS OF AMSTERDAM AND ROTTERDAM, 2000-2014

Jan Jacob Trip, Delft University of Technology, The Netherlands

Robert C. Kloosterman, Centre for Urban Studies, University of Amsterdam, The Netherlands

Arie Romein, Faculty of Architecture and the Built Environment, Delft University of Technology, The Netherlands

This paper addresses the issue of resilience of urban economies. Based on employment data time series, it looks into how two different urban economies within one national institutional framework, i.e. Amsterdam and Rotterdam, have coped with the effects of the credit crisis of 2008.

Our data show that both cities displayed similar patterns of growth and moved in step with the national trends before 2008. After 2008, both Rotterdam and the Netherlands struggled and employment decreased. Amsterdam, however, recovered much faster after 2008 and has bounced back beyond its pre-crisis level. It even seems that Amsterdam has moved to another growth trajectory with an accelerated growth of employment.

We have applied a shift-share analysis to the employment trends of both cities before and after the outbreak of the credit crisis to be able to identify, on the one hand, the effects of the local sectoral composition and, on the other, those related to more local factors. Our results suggest that this divergence cannot be primarily explained by the differences in sectoral composition. Instead, It appears that particularly city-specific factors play a decisive role in the strong recovery of Amsterdam after 2008.

The final part of the paper zooms in on these local factors. We focus particularly on the question to which extent on the business and occupational structure and labour market in Amsterdam may explain this city's distinct growth trajectory.

SMART SPECIALIZATION OF RUSSIAN REGIONS

Irina Turgel, Graduate School of Economics and Management, Ural Federal University, Russia
Dmitry Tolmachev, Graduate School of Economics and Management, Ural Federal University, Russia

In recent years the elaboration of documents of strategic development for Russian regions has become an active process. Regions demonstrate the different approaches to the strategic planning. While most strategies approach socio-economic development similarly, they can differ significantly in identifying innovative development priorities. We have analyzed 18 strategies/programs of development of regions and cities, differed by size and specialization, and found out some peculiarities concerning rationale for the priorities choice and the level of their aggregation.

Three basic approaches towards the specialization can be identified.

1. Innovations in particular industries. The most telling example here – priorities of innovation development in the closed city, specialized in nuclear energy. Advantage of this approach is that innovations are linked to the development of specific economic sectors. At the same time S&T sector in this model is considered to be an appendage of the real economy. The strategy in this case looks at immediate effects and fails to realize a bigger potential.
2. Prioritization on the base of external sources (foresight forecasts, priorities defined in the documents of the federal level).
3. Extreme case: slightly modified list of critical technologies of Russian Federation. The approach takes into account the federal agenda, high potential of getting federal funding. But there is no focus on real competences of the region.
4. Technological niche. The example is innovations in Science City. It's easy to define specific stakeholders and support mechanisms. Focus on infrastructure development and R&D support irrespective of whether the demand.

Priorities need to be well justified from three positions: the current demand, future markets, the current competences (and the conditions of their development). Level of priorities aggregation should allow to identify foreign partners and investors (collaboration with the scientific groups, projects with companies), support entities (companies).

KNOWLEDGE-INTENSIVE TRADEABLE SERVICES AND CITY ECONOMIES: THE ROLE OF SOUTH AFRICAN CITIES IN THE REST OF AFRICA

Ivan Turok, Human Sciences Research Council, South Africa

High order business services (ICT, engineering, design, management consultancy etc) are drivers of growth in an increasingly knowledge-based, global economy. They cluster together in large, connected European, US and Asian cities with access to regional markets. Their role in the global South is poorly understood because of the emphasis on manufacturing. This paper analyses the contribution of these 'Knowledge-Intensive Tradable Services' (KITS) to the economy of South Africa's major cities. KITS are important in linking SA to the rest of Africa by opening up markets for the supply of inputs to the infrastructure required for rapid urbanization. Hence they are complementary to manufacturing, construction, mining and agriculture, rather than substitutes. They can reinforce industrialisation by improving the productivity of manufacturing and mining (through specialized expertise), and stimulating demand for their outputs (by developing external markets). Physical proximity through the concentration of firms, their suppliers and collaborators in a city-region can enhance the overall

performance of the cluster and improve wider regional prosperity. This depends partly on the scale and strength of the intangible interactions (such as information sharing) and trading links between firms. Gauteng has an advantage over rival cities because of its strategic location, strong established companies and diverse technical capabilities and skill-sets. However, the sector also faces serious risks. The paper examines whether KITS function as a cluster with powerful multiplier effects or separate industries located in the same place?

GLOCAL REGIONS, GLOCAL LIVES – AND WHAT ABOUT HUMAN’S NEEDS?

Martina Ukowitz, Klagenfurt University, Austria

Regional awaking in a globalised world comprises both, to get active in the regions and to recognise the regions as part of this globalising world. The latter requires a kind of interface management and intermediation between the spheres. Societal discourses in Europe mainly deal with the refugee crisis and the problems of integration. The “outgoing-perspective” and the question how resident people manage their lives in a globalised world is less discussed. It seems to be a matter of course. Theoretic considerations in regional sociology instead point to the field of tensions that derive from the ongoing dynamics.

In the context of economy, globalisation implicates increasing international activities of enterprises. Since employees are the central actors in this processes of internationalisation, within a transdisciplinary project attitudes towards international mobility in professional lives and further development and experiences with stays abroad were investigated. The results provide a better understanding of the attitudes of humans, which is not only scientifically interesting, but also allows to conceptualise a mobility program for further professional development.

From the qualitative study, a picture characterised by ambivalences and inconsistencies emerges: Emotionality lying behind the everyday self-evidence of routines, ambivalence in emotional access to stays abroad in general and the mobility program in particular, discrepancies between claim and reality, conflicting values and conflicting needs can be described.

The contribution discusses the results of the study and the relevant consequences for enterprises and, in a more general view, for regional development.

OF TREES AND MONKEY. EXPLAINING THE TECHNOLOGICAL SPECIALIZATION OF EUROPEAN REGIONS

Stefano Usai, University of Cagliari, Italy
Emanuela Marrocu, CRENoS, University of Cagliari, Italy
Erika Uberti, Università Cattolica Milano, Italy
Mario Maggioni, Università Cattolica Milano, Italy

The technological and productive specialization of regions has always been an important issue both from a theoretical and empirical viewpoint. While globalisation and the ICT revolution have transformed the geography of production, contrary to some early prophecies (such as “the World is Flat” and “the Death of Distance”), which forecast the irrelevance of location, they have spurred the importance of regional specialisation in order to compete (or even survive) in the global arena.

The question about how regions develop and evolve along their productive and technological path has been recently raised in many scientific fields from international economics, to economic geography, from industrial economics to regional science. Within an evolutionary perspective, we believe that a region is most likely to develop new industries or new technologies which are closer to its pre-existing specialization. The theoretical framework behind this approach is a mix of “recombinant growth” (RG, Weitzman 1998) and “localised technological change” (LTC, Atkinson and Stiglitz, 1969): new technologies emerge from the recombination of existing knowledge, skills and competences, and that technological, spatial and social proximities are crucial to develop new knowledge, skills and competences.

Our research builds on a stream of literature (Hausman and Klinger, 2007; Hidalgo et al. 2007; Hidalgo and Hausman, 2008) initially conceived for a country-based analysis in order to map the evolution of industrial specialisation based mainly on trade flows. We refocus this line of analysis on the regional European technology/knowledge space in order to investigate the evolution of regional specialisation in terms of the interaction of (i) endogenous processes of knowledge recombination, (ii) exogenous technological paradigm shifts and (iii) trans-regional spatial and technological spillovers and networking dynamics.

More specifically, our paper aims at mapping the technological trajectories of EU regions over thirty years, from 1980 to 2010, by using data on 121 patent sectors in 198 NUTS2 regions of 11 innovative European countries plus Switzerland and Norway. We map the knowledge space according to two – possibly complementary - dimensions: one, at the micro level, is technology-based and is shaped by the proximity of technology classes suggested by the co-classification information contained in patent documents (as in Kogler et al., 2015); the other one, at the macro level, is more geography-oriented and is based on information on co-specialisations in regions (as in Hidalgo et al., 2007). These two representations of the knowledge space are then used for understanding the evolution of the specialization process, measured in terms of the sector-region relative technological advantage (RTA), and for modelling its dynamics as a function of spatial, technological and socio-cognitive proximity.

Preliminary econometric results show that both LTC and RG significantly influence the sector-region RTA. However, while LTC of first order proximate sectors is relevant for both the macro (regional co-specialisation) and the micro (co-classification in patents) representations of the knowledge space, the LTC attributable to higher order neighbouring sectors is relevant only in the former case and RG is effective only in the latter case. This result signals the importance of accounting simultaneously for both the micro and the macro-level determinants of RTA. We also find evidence of negative spillovers generated by proximity in space, possibly due to competition effects, and positive externalities generated by socio-technological proximity. Finally, it is worth emphasising that the effects maintain their significance even when we control for inertia in the sector-region RTA by means of estimating dynamic spatial specifications.

PUBLIC INSTITUTIONS AS INNOVATION ACTORS. THE ROLE OF PUBLIC PROCUREMENT

Elvira Uyarra, Manchester Business School, United Kingdom

The role of the state actors has been relatively overlooked in recent evolutionary economic geography debates path creation and regional anchoring (Dawley, 2014; Morgan, 2013). McKinnon et al (2009) suggested a need to reassert place- specific institutional environments and arrangements within and beyond firms, including “deliberate intervention through public institutions such as the state” and to situate evolutionary concepts within a broader geographical political economy. In particular, the literature has paid little attention to the role that the public sector, through its purchasing decisions,

have in shaping regional economies (Morgan, 2013). Whilst as already noted there is a growing recognition of the role that (public sector) anchor institutions such as universities, hospitals, and local authorities can play in contributing to place based innovation, this has hardly been incorporated into the debates around knowledge anchoring in economic geography debates.

The idea of anchoring mobile knowledge and investment to place is not new but has recently captured much interest. Markusen (1996) early on discussed how regions should make themselves more 'sticky' in 'slippery spaces' by anchoring and upgrading income-generating activities. For Crevoisier and Jeannerat (2009), knowledge develops in several stages namely generation, use circulation and anchoring. Anchoring is the other side of knowledge mobility and refers to the way in which this new knowledge interacts—or does not interact—with its new context (see also Vale and Carvalho 2013). Binz et al (2016: 182) adopt a more strategic view of anchoring as “an interactive process where regional actors mobilize knowledge, markets, legitimacy, and financial investment” to make them more locally sticky. However, the focus is normally on the supply side and anchor actors such as large firms.

In this paper we seek to examine the role of the public sector as innovation anchors. We propose an extension to the literature by developing an analytical framework that explores the opportunities and trade-offs associated with 'anchoring' procurement to support place-based innovation driven advantage. Using a number of empirical examples, we explore the ways and contexts in which public procurement might be used to advance innovation-driven regional development goals.

DOES REGIONAL COMPETITIVENESS MATTER?

Saku Vähäsantanen, Regional Council of Satakunta, Finland

The presentation introduces the tasks of Regional Councils in Finland and proceeds towards research results on regional competitiveness as a basis for new development initiatives. Regional competitiveness means in this context the ability of a region to generate value added (GDP). Measures presented here are productivity, share of manufacturing industry (of region's total turnover of companies), employment rates, innovativeness, level of education of the populations and the dynamics of enterprises. The perspective is that of a practitioner and a researcher who utilizes research data to analyze the issues of regional change. The competitiveness of The Pori Region measured by the rank among 70 Finnish sub-regions has risen up during this decade. For example in 2011 the rank was 14th whereas in 2014 it was 12th despite the fact that export-oriented industry has faced difficulties between those years affecting productivity and share of manufacturing industry. Meanwhile the educational level has risen especially in academic class and one of the key factors is University Consortium of Pori (UCP), which has produced educated people for the companies and organizations in the area. UCP might also have affected to the rising of innovativeness. And in general UCP has contributed to the vigor of the Pori region as the domestic net migration among 20–29 years old youth has recovered during this millennium. This might affect in the future to the dynamics of enterprises, innovativeness and employment rate thus generating more value added and recovering the region's ability to compete in the international markets.

HUMAN GEOGRAPHY WITH NETWORKS

Joni Vainikka, University Of Oulu, Finland

As with most key concepts, it is nearly impossible to trace the inception of the term network.

Geographers, particularly, have employed network thinking and used networks in geographical practice for a long time, to the point that it would be more beneficial to chart when human geography became human geography than to trace the connection between networks and geography. The ways networks have been understood, however, have been subject to paradigm shifts. Geographers have moved from charting and visualizing space with networks to representing and visualizing space as networked. Still, the way social scientists lead the discussion about relational, networked space is not as novel as it might seem. Topological spatialities have parallels with the ‘topology of multiplicities’ as illustrated by Deleuze and Guattari which again strikes similarities with Tarde’s ‘nebulous clouds’ of ‘multiple agents’ an idea forwarded from Leibniz’s nomads. While there are numerous examples where novel progress is made through the eclipse of past philosophical discussion, the main purpose of this paper is to shed light how geographers have thought through networks and why human geographers cannot live without the concept. Based on a genealogical analysis of networks in geographical literature and a data analysis on Web of Science illustrating who human geographers cite when they use networks, the paper encourages geographers to see the links between geography, philosophy, social sciences and mathematics and to contextualize how and what kinds of networks shape space and regions.

EFFECT OF “NEGATIVE CLUSTERS” ON PRODUCTIVITY: THE CASE OF UKRAINIAN MANUFACTURING FIRMS

Volodymyr Vakhitov, Kyiv School of Economics, Ukraine

Presence of agglomeration economies for manufacturing firms, though quite moderate, is supported in numerous studies using the firm-level data. Firms seem to be more productive in areas where population and employment density is higher, due to many different factors, from sharing common markets to ideas exchange. My paper supports previous findings in the literature for Ukrainian manufacturing. A useful addition to the literature is the notion of the “urban capital decay”, defined as the share of obsolete capital in the overall capital stock of the city, which is shown to have negative impact on productivity and thus to reduce the agglomeration effect. Firms established in cities where capital is more depreciated seem to have lower productivity gains from standard agglomeration forces (measured as employment or the number of firms). New firms locating in such cities may experience an effect of a “negative cluster”, where total productivity effect turns out to be negative. At the same time, urbanization economies measured as presence of firms in other sectors than the firm’s own (services in particular) appear to have positive effect on productivity of manufacturing firms. This poses an interesting policy issue: to increase productivity, city policymakers can choose either attracting new investment to replace the obsolete capital stock, or expanding the services component in the urban production structure. Findings from our previous paper (Shepotylo and Vakhitov, 2010) confirm a positive effect of services restructuring on manufacturing, which makes it a viable recipe for urban development. The paper uses 2001-2010 firm-level data.

ASSESSING URBAN SUSTAINABLE LIVEABILITY IN SPANISH CITIES: A MULTICRITERIA APPROACH

Beatriz Valcárcel Aguiar, University of Santiago De Compostela, Spain

Pilar Murias Fernández, University of Santiago de Compostela, Spain

David Rodríguez González, University of A Coruña, Spain

The improvement of long term liveability is the main challenge that cities face today. In this context, urban planners have the obligation to assure a series of conditions which contribute to the improvement of the quality of life of their inhabitants, using the disposable resources in a responsible

way, and minimizing the impact on the natural environment. However, these efforts to improve the existing level of quality of life in cities require prior assessment of the conditions they offer, and it is not an easy task. In the Spanish case, some scientific works have addressed the evaluation of liveability but none of them has taken into account the necessity of establishing some environmental conditions to that liveability.

This work attempts to overcome this limitation by using a non-compensatory approach to construct a composite indicator of urban sustainable liveability which is applied to 59 Spanish cities. The composite indicator we propose uses an aggregation technique which is based on goal programming. The main advantage of this approach is that it does not allow for any compensation among the natural environmental indicators and other indicators when the former exceed a particular threshold which could compromise liveability in the future. The study exhibits some remarkable results. Fifteen of the Spanish cities are considered non-sustainable cities, since the vast majority exceed the desirable threshold of solid waste generation. Focusing the attention on sustainable cities, those that offer more liveability tend to concentrate on the north of the country, whereas the cities located in the south and east obtain worse results.

ESIF FINANCIAL INSTRUMENTS AND THEIR TERRITORIAL IMPACTS

Alessandro Valenza, T33, Italy

Kai Böhme, Spatial Foresight, Luxembourg

European Structural and Investment Funds (ESIF) increasingly make use of financial instruments. In particular, European Regional Development Fund (ERDF) and European Social Fund (ESF) programmes have significantly increased the amounts invested through financial instruments in recent years. Such amounts are expected to increase even more in the coming years, as well as in the context of the Investment Plan for Europe; and a clear shift from grants to financial instruments is expected for the post 2020 programme period.

Financial instruments follow a different logic from grants. Their revolving character implies that they need to focus on revenue generating projects. Only these types of projects can be supported by ESIF financial instruments through loans, guarantees, equity or other kinds of financial product.

The focus on revenue generating projects implies that different allocation criteria are at play. In addition, financial intermediaries, such as banks, are involved in the allocation of such resources. Accordingly, different types of players and projects will receive ESIF support, compared to grant recipients.

The question is whether this will also change the contribution ESIF makes to territorial development and to achieving territorial cohesion. The focus on revenue generating projects, different types final beneficiary (or recipient), different allocation decisions, complexity and the revolving character of financial instruments suggests that their territorial impacts are likely to differ from those of grant schemes. This paper will provide for a discussion on the territorial implications of these features.

THE RELATIONAL GEOMETRY OF THE PORT-CITY INTERFACE. CASE STUDIES OF GHENT, BELGIUM, AND AMSTERDAM, THE NETHERLANDS

Karel Van den Berghe, Ghent University, Belgium

Wouter Jacobs, Erasmus University Rotterdam - Schools of Economics, The Netherlands

Luuk Boelens, Ghent University, Belgium

This paper applies a relational approach to the study of port-city interfaces. Such approach allows us to analyse how actors are connected, transact and assign meaning and value to local development. Much of the literature and studies on the port-city interface have primarily focussed on late 20th-century transformation processes at the urban waterfront. This fails to appreciate the often continued presence of port activity within cities and falls short in understanding how development agendas of port cities are relationally constituted. In this paper, we develop the hypothesis that the port-city interface is not a closed system, but a relational construct through which heterogeneous flows of actors, assets and structures coalesce and take place. Using this perspective, a conceptual framework capable of categorizing different relational port-city interfaces is presented and applied in a schematic way to the port cities of Ghent, Belgium, and Amsterdam, the Netherlands. By mapping the relational geometries of these port cities, our results show how both public and private actors through networking strategically relate in different ways, across different territorial scales, within different institutionalised structures and between different economic sectors. Analysing the relational geometries provide us with examples of different dynamic actor-relational interplays and how this results in particular development trajectories. Eventually, our approach questions the perceived geographical dichotomy between port and city. This paper ends with a discussion about the value of relational geography to an understanding of the diversity of port-cities.

EXPLORING THE CHANGING STRUCTURES OF U.S. INVENTOR COLLABORATION BETWEEN 1836 AND 1975

Frank van der Wouden, University of California, Los Angeles, United States

Since the mid-20th century, scholars have used patent data as a measure of knowledge production. A key finding is that knowledge production is distributed unevenly across space (Sokoloff 1988; Audretsch and Feldman 1996; Feldman and Kogler 2010). Surprisingly, only a small number of scholars have turned their attention to the characteristics of US inventors and even less to the nature of inventor collaboration. Research focusing on inventors is often limited to a specific industry, technology or time-frame. Relatively little is known on the general structural characteristics of inventor collaboration in the U.S. over the long-run, especially before 1975. As a consequence, still little is known on the nature and characteristics of inventor collaboration in U.S. cities, how these networks change over time and how they vary across cities. In this work, a newly and unique inventor-patent database containing all U.S. patents, their inventor(s) and corresponding geographical location(s), is utilized to explore U.S. inventor collaboration in space and over time. The key findings of this paper show that (1) the average number of inventors on a patent has been increasing over time, (2) inventor collaboration networks are increasingly becoming denser over time, (3) inventor collaboration tends to span greater spatial distances over time and (4) inventor collaboration is increasingly becoming the source of new technological recombinations. These results add significantly to our understanding of the long-run history and geography of inventive activity in the United States of America.

RESILIENT THROUGH CHANGE? SOCIAL NETWORK CHANGE AND ENTREPRENEURIAL PERFORMANCE DYNAMICS OF DUTCH NEIGHBOURHOOD FIRMS

Frank Van Oort, Utrecht University, The Netherlands
Marianne De Beer, Utrecht University, The Netherlands
Gerald Mollenhorst, Utrecht University, The Netherlands

In times of economic austerity, the mutual and dynamic relationship between social network relations of entrepreneurs and firm performance can be beneficial for resilience. Changes in entrepreneurial networks can enhance firm performance over time as new or additional network contacts can be used to acquire new or additional resources. At the same time, changes in firm performance may prompt the need for network enlargement to foster resilience. Overcoming generally perceived data limitations, we contribute to the identification of the multidirectional effects using panel data from two waves (2008-2013) of the Survey on the Social Networks of Entrepreneurs (N=180). While confirming the dynamic nature of the relation between the social networks and performance of Dutch neighbourhood entrepreneurs by applying fixed-effects and multilevel models, firm performance change is conditioned by a number of factors besides the growth of the entrepreneurial network, while entrepreneurial network change on the other hand is impacted by firm performance change only. This is in line with the hypothesis that entrepreneurial network change is made productive for resilient firm performance - resilient through change.

IMPACT ASSESSMENT OF COHESION POLICY ALTERNATIVES: REGIONAL INDUSTRIAL SPECIALIZATION IN HUNGARIAN NUTS 3 REGIONS

Attila Varga, University of Pecs, Hungary
Norbert Szabó, MTA-PTE Innovation and Economic Growth Research Group & University of Pécs, Hungary
Tamás Sebestyén, MTA-PTE Innovation and Economic Growth Research Group & University of Pécs, Hungary

The aim of this paper is twofold. First, we introduce a new GMR (Geographic, Macro and Regional) - type economic impact model built for Hungary, and second, we study alternative regional development policies for Hungarian NUTS 3 regions. In this paper our main interest is to evaluate smart, sector-specific development policies. We explore the possibilities of regional development in local areas, where sectoral structure, factor endowments and innovation capacities are completely different. Our goal is to examine different cohesion policy settings based on smart specialization ideas both for prospering and lagging Hungarian NUTS 3 regions. In less developed regions we will identify those specific sectors, and capacities that are embedded in the region's economy and can provide comparative advantages, which can be targeted by development policy interventions. In lagging, less densely industrialized regions where many aspects of a successful smart specialization can be absent one could look for other policy recommendations to improve economic performance (e.g. improvement of infrastructure). Through our scenarios, the GMR-model is capable of predicting the impacts of different interventions tailored for each regional economy and allows us to choose between those programs that will lead to the highest economic and welfare improvements at regional and macroeconomic levels. Furthermore, we would also like to shed light on the extent of growth that will remain within the region and the extent of spatial spreading of development through interregional linkages in order to find the most effective alternatives that can serve cohesion policy objectives.

ARE RURAL AREAS TAKING ADVANTAGE OF PROXIMITY TO CITIES?

Olga M Vargas, Latin American Center for Rural Development - RIMISP, Chile

Juan D. Soto, Rimisp- Latin American Center for Rural Development, Chile

Julio A. Berdegué, Rimisp- Latin American Center for Rural Development, Chile

In this paper, we identify the positive and negative effects from proximity to cities on the economic development of rural areas in Chile. This work characterizes the changes in population and employment in rural areas as the partial adjustments on the location of households and firms due to the spatial variations in agglomeration economies, amenities, and public provision of services of nearby cities. In order to observe how rural areas are influenced by the scope and intensity of the linkages with urban areas, we estimate the effect of travel time to cities and market potential variables, over the change of population and employment for 22,161 rural areas in Chile, using the two last Chilean national censuses of 1992 and 2002, rural travel time estimates, and stable satellite light night.

CLIMATE CHANGE MITIGATION AND ADAPTION: FORECASTING PRO-ENVIRONMENTAL BEHAVIOUR IN REGIONAL CONTEXT

Viktor Varju, Centre for Regional Studies of the Hungarian Academy Of Sciences, Hungary

In the last decades EU became a key global actor in environmental issues launching new initiations, policy tools, cooperation in order to mitigate greenhouse-gas emissions. On the other hand, climate change adaption is arising as a key element of climate policy. What about citizens' information, "education" and behaviour?

Research on environmentally relevant behaviour often focuses on social psychological, socio-cultural and socio-economic constructs such as attitudes, values, social norms, and social identities. Besides a wide range of geographical, economic and sociological perspectives have also been applied to understand motivations.

The aim of the recent paper is twofold. Firstly the author will revise and categorise the approaches of pro-environmental behaviour from the viewpoint of climate mitigation and adaption. Secondly, using secondary analysis, the author will reveal the potential usability of major surveys (e.g. EUROBAROMETER, World Value Survey, European Social Survey) in the analysis, territorial comparison and forecasting of pro-environmental behaviour in relation to climate change mitigation and adaption and also will revise the results of a big sampled representative survey from Hungary in order to reveal some critical point of the measurement of pro-environmental behaviour.

The paper concludes by arguing that datasets behind (international) surveys provide a good chance for territorial analyses, however it is hard to forecasting. Based on factor analysis (and on other research results) we can see that pro-environmental behaviour is different on different fields due to the different influencing factors. On the other hand, based on analysis, there is not unambiguous correlation between pro-environmental intention and action.

MONOCULTURE OF TOURISM: A HOLDBACK IN THE REGIONAL DEVELOPMENT OF MOUNTAINOUS AREAS. THE CASE OF PALAIOS AGIOS ATHANASIOS, IN PELLA, GREECE

Alexandridis Vasileios, Aristotle University of Thessaloniki, AUTH, Greece
Stella Giannakopoulou, Aristotle University of Thessaloniki, Greece
Apostolos Arvanitis, Aristotle University of Thessaloniki, Greece

Mountain areas in Greece faced important loss of permanent habitants during the last decades. As a result, former traditional economic activities went through a steady decline and tourism appeared as a development panacea for many regions. However, at the absence of an integrated planning for a sustainable tourist development, old traditional settlements lost their architectural characteristics and were transformed into dull tourist resorts. The monoculture of tourist activity ruptured any pre-existing socioeconomic structure. Under the on-going economic crisis, many of these regions face severe decline and entire settlements remain deserted. We focus our research on the mountainous settlement of Palaios Agios Athanasios, in Greece; a small village that transformed from a vivid community to a well-known tourist resort and to a declining destination. It comes out that, a tourism-monoculture oriented development resulted in the depopulation of the area, the change of hands of the local properties, the waste of land and the irreversible alteration of the local built and natural environment. Furthermore, we examined the main strategic planning principles and goals, for the area, set in the Special Framework for the Spatial Planning and the Sustainable Development of Tourism. Research shows that rules regarding local built and natural environment weren't followed. New constructions outgrew permitted building limits, while planning wasn't focused on special forms of tourism, i.e. ecotourism, cultural tourism, hiking etc. We argue that a narrow, one-dimensional perspective centered on a short-sighted tourist development, ignoring Spatial Planning is blight for the local and regional development of an area.

FIRM DEVELOPMENT AND THE ROLE OF VENTURE CAPITAL AND PRIVATE EQUITY. PUBLIC POLICY FOR INNOVATION AND RISK CAPITAL

Eirik Vatne, Norwegian School Of Economics, Norway

The first part of the paper examines the importance of financial support for entrepreneurship, firm growth and progressive innovation in mature economies and accentuate the role of institutions raising venture capital (VC) and private equity (PE) as part of innovation and regional policy.

The literature on public involvement in equity financing is shortly reviewed; 1) as an active and early player in the development of a financial market for VC/PE; and 2) as a policy to bring down risk in seed/venture funding to attract private capital for investment in the early phase of new firm formation. Three models of funding are identified: 100% public or private funding, and public/private (hybrid) funding. Research questions are developed, focused on a comparative analysis of the performance of firms funded by hybrid contra private equity.

The empirical part is based on a sample of 680 Norwegian portfolio firms supported by VC/PE funds. Not surprisingly, firms supported by hybrid, policy-influenced funds are in the early seed/venture phase of development. Private funding is allocated to late stage development (buyout). The risk of bankruptcy and none-growth is much larger for firms based on hybrid funding, and the share of none-exited firms much larger. Different indicators, based on accounting data, are used to compare the performance of firms supported by the two types of funding. Results are discussed and policy recommendations outlined.

SPATIAL HETEROGENEITY OF THE 2008 CRISIS IN SPAIN: THE CASE OF THE URBAN LOCAL LABOUR MARKETS

Alexandre Vecino Aguirre, University of Santiago De Compostela, Spain
Maurias Fernández Pilar, University of Santiago de Compostela, Spain
Martínez Roget Fidel, University of Santiago de Compostela, Spain
Rodríguez González David, University of A Coruña, Spain

Although traditionally the Spanish unemployment rate has been very high, it considerably declined to achieve an 8 percent at the end of the intense growth period of the early 2000's. This trend abruptly inverted in the second half of 2008, when the global financial crisis hits Spanish markets and the national property bubble burst. After five years of unemployment rises, Spain emerged from recession at the end of 2013. At this point, aggregate unemployment figures were at their maximum but significant differences remained among regional and local units.

This paper studies the spatial heterogeneity in the consequences of the economic crisis in Spain, by analysing its impact across different local labour markets. Using data on the Spanish biggest urban municipalities, we identify four categories of local responses in terms of unemployment increase. Results show an important north / southeast divide in the evolution of local labour markets in Spain during the period 2006-2013.

We then use a discriminant analysis in order to explore and explain the differences between the four categories, trying to identify the factors behind the different responses. Among the most important factors associated with the best responses are the qualification of the human capital, the percentage of R+D workers and the characteristics of the economic structure. In particular, local areas in which jobs in the building and traditional manufacturing activities have more importance, seemed to be more vulnerable to the 2008 shock.

REGIONAL RESILIENCE FROM AN ECONOMIC WELLBEING PERSPECTIVE: THEORETICAL AND ASSESSMENT ISSUES

Alexandre Vecino Aguirre, University of Santiago De Compostela, Spain
Maurias Fernández Pilar, University of Santiago de Compostela, Spain
Martínez Roget Fidel, University of Santiago de Compostela, Spain
Beatriz Valcárcel Aguiar, University of Santiago de Compostela, Spain

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UNDERSTANDING THE SOCIO-SPATIAL DIMENSION OF SMALL SCALE FISHERIES IN COASTAL AREAS: A CASE STUDY FOR IRELAND

Amaya Vega, NUI Galway, Ireland

Naomi Foley, SEMRU, NUI Galway, Ireland

Emmet Jackson, Fisheries Economic Group, Bord Iascaigh Mhara (BIM), Ireland

Estimates suggest that the small scale fisheries (SSF) sector in the EU contributes to approximately 53% of the total employment in the catching sector. The sector is also of critical importance for the survival of coastal communities, with strong links with the local economy and the social structure of coastal areas. Despite its importance, studies on the characteristics and definition of sector in Ireland and elsewhere in the EU are limited, mainly due to poor data availability. This paper focuses on characterising, describing and comparing small scale fisheries and large scale fisheries sectors in Ireland. The two sectors are compared using socio-economic and environmental parameters including employment, landings, value and number of vessels. Furthermore the paper investigates the impact that local level employment has on the structure of the Irish fishing fleet along Ireland's coastal areas. Local employment opportunities play a major role in labour participation rates in the sector, as increasing unemployment at the local level contribute to an intensification of part-time fishing activities. The current research aims at understanding this trend further. The focus is on identifying spatial variations in the structure of the Irish SSF sector as well as those geographic areas that are more vulnerable to changes in its fleet structure due to external factors such as local or regional changes in employment. Habitat characteristics of seas do not respond to administrative boundaries hence, county level data cannot be considered independent from one another. Spatial data models are used to account for the potential spatial autocorrelation existing across contiguous coastal areas. The research contributes to improving our understanding of small scale fisheries in Ireland and the relationship between socio-economic indicators and the structure of the fishing fleets at the local and regional levels.

PROGRESSION FROM LOW PAY AND LOCAL LABOUR MARKET SIZE: EVIDENCE FROM GREAT BRITAIN

Sanne Velthuis, Coventry University, United Kingdom

Research has identified a range of factors which influence progression from low pay. A question that has received little attention, however, is whether wage progression among low-paid workers also depends on local labour market characteristics. Building on findings regarding the faster wage growth and occupational advancement associated with cities, theorised to be due to more efficient worker-job matching and/or knowledge spillovers (D'Costa & Overman 2014; Gordon et al. 2015), this paper examines the effect of city size on wage progression among the low-paid using panel data on a sample of workers living in Great Britain over the period 2009-2014. The importance of taking account of differences between local wage distributions is highlighted by the fact that results differ depending on how low-paid workers are defined. When defined as those with hourly pay below two-thirds of the median for all UK employees, workers in London are significantly more likely to make a transition into

higher-paid employment than workers in smaller local labour markets. But this higher estimated likelihood of escaping low pay is shown to be an artefact of using a pay threshold that is insensitive to geographic wage variations. For workers employed in low-paid occupations, neither living in London, a Core City, nor a smaller British city has a significant positive effect on wage growth, suggesting that for low-paid workers achieving wage progression is not made easier by living in cities.

DIFFICULTIES OF FINANCIAL CULTURE IN HUNGARY

Tamás Vinkóczy, Széchenyi István University, Hungary

The financial culture is an important factor nowadays, because financial crisis impacts on world economy, and as a result, people change their minds about financial products. Several countries in the European Union have similar problems about financial literacy. Hungary is not exception, so Hungarian people need to fight against the negative effects. I present a brief overview of the role of culture according to psychologists, economists and researchers and then describe my ideas about the education, which is a meaningful segment of this topic. In my opinion the following questions are unescapable: What is the financial culture/literacy? Which is the most important age group? When should we teach the logic of finance to children? What level of financial knowledge and skills are required from a simple person? Are there any attempts to increase the financial knowledge level? Competitions are also important for kids, because it provides opportunities to learn playfully. I illustrate some alternatives which should help Hungary to reach new goals about financial culture.

SPATIAL ANALYSIS OF THE WALKING ACTIVITY IN URBAN ENVIRONMENT. A CASE STUDY FROM THE CITY OF THESSALONIKI, GREECE

Alexandros Voukenas, Aristotle University of Thessaloniki, Greece
Stella Giannakopoulou, Aristotle University of Thessaloniki, Greece
Apostolos Arvanitis, Aristotle University of Thessaloniki, Greece

Walking is an everyday life's activity in an urban environment. Although older than the history of cities, remains at the forefront of the urban planning debate. There is a growing interest for cities to be more walking - friendly and several planning policies are focused on it. However, walking activity reflects individuals' preferences, choices, attitudes and beliefs. Therefore, urban walking patterns can reveal the social differences resting behind them. Understanding the way people choose to use the urban space through walking explains inter-regional disparities within the city and documents spatial inequalities. We examined certain walking preferences and attitudes of the local inhabitants of the Municipality of Evosmos, in Thessaloniki. We used spatial analysis methodology in order to map the way individuals understand and react to their surrounding built environment through their walking activity. Several conclusions came out from the research; existence of high mixture of land uses encourages walking for recreation, while it discourages walking for exercise. The size of the city blocks affects whether people are in favor of a local rehabilitation plan of the public space, while green spaces or aesthetic of the buildings appear not to influence walking choices. Extended application of spatial analysis tools on several parts of Thessaloniki, or on other urban centers of the country, can provide an elaborate mapping of the social inequalities reflected in the different walking patterns. Their understanding may provide useful guidelines for a friendly-walking city oriented design policy and lead to the gradual decline of urban inequalities.

INSTITUTIONAL ARRANGEMENTS FOR CITY DEALING: PRIORITIES, NARRATIVES AND TENSIONS

David Waite, Policy Scotland, University of Glasgow, United Kingdom

Des McNulty, Policy Scotland, University of Glasgow, United Kingdom

Duncan MacLennan, Policy Scotland, University of Glasgow, United Kingdom

Graeme Roy, Fraser of Allander Institute, University of Strathclyde, United Kingdom

The focus of the paper will be to draw attention to the origins and broad evolution of city deals and identify the range of policy actors involved in developing City Deals in the UK. Through extensive documentary material, collected over the past 4 years, we will consider: one, the roles different actors have played in developing and promoting deals; two, the aims espoused and the agendas and narratives the actors are responding to; three, at what points actors have had/sought influence on deal-making; and, four, what tensions are apparent across the multiple actors (and aims) involved. We will contextualise this institutional review within broader literatures about policy and fiscal decentralisation and the emerging literature on deals themselves (including links to international contexts), before setting out avenues and suggestions for further research.

RETIRES' CHANGING SPATIAL PRACTICES

Antti Wallin, University of Tampere, Pori Unit, Finland

In Finnish urbanization process only a few urban agglomerations attract young people. The City of Pori struggles staying among these. The ageing of the population has several social and spatial impacts. Differentiated neighbourhoods and senior citizens from various backgrounds have distinct spatial practices. By applying theories of spatial turn, this presentation draws from three qualitative case studies: 1) social gatherings of male retirees in the central city square, 2) everyday lives of female retirees in a demographically aged housing project, and 3) transnational lives of Finnish retirees in Spain. In urban setting retirees look for places for social interaction. Through these gatherings their being gets a reference point in the city and also structures their daily lives. The same process affects the ageing housing project: retirees find neighbourhood pleasant because of the large share of peers and by participation in collective activities. Some relatively affluent retirees are able to formulate their lives by increasing mobility. Finnish retiree communities with their own social networks are rising in Southern European countries. Thus, the ageing of the population is producing new spatial practices, in some case by differentiating the less affluent to fixed locations and by widening the mental scope of spatial being of the more affluent through mobility. One common denominator can be drawn: all retirees produce the best social space for their daily lives using the tools they have available, and the key tool is the social interaction among peers.

SPACES OF ENVIRONMENTAL GOVERNANCE: TOWARDS A RESEARCH AGENDA

Cormac Walsh, University of Hamburg, Germany

Regional approaches to environmental governance are coming to the fore as the limits to global, sectoral perspectives become increasingly evident. Such spaces of environmental governance are emerging at multiple scales from the local to the transnational and vary substantially with regard to their degree of institutionalisation. They, nevertheless, have in common, the objective of producing governance spatialities beyond the territorial boundaries of the nation-state. This paper reviews existing literatures pertaining to the issues of scale, regionalism and territoriality in environmental governance and seeks to identify the potentials and challenges of an emergent research field located

at the intersection of regional studies, political ecology and environmental policy. Emphasis is placed on an understanding of environmental regions as complex, multiscalar, institutional constructs embedded within but often transgressing national political-administrative cultures and territorial boundaries. Critical attention is furthermore placed on negotiation of society-environment relations in the construction and bounding of spaces of environmental governance. The international Wadden Sea region is employed as an illustrative case study to support the arguments made.

TERRITORIAL COHESION IN IRELAND AND EUROPE

James Walsh, NUI - Maynooth, Ireland
Edgar Morgenroth, ESRI, Ireland

For most of the period between 1960 and 1990 there was a significant and persistent gap in per capita GDP levels between Ireland and the EU average. In 1990 per capita GDP in Ireland was only 60% of the EU average. The relative position changed dramatically in the 1990s so that by 2002 the index had reached the EU average and further rapid expansion continued until 2007 by which time Ireland's index was 135, among the highest in Europe. Despite the severe adjustments after 2008 Ireland continues to have one of the strongest economic growth rates in the EU, and the labour market has improved very significantly over a short period.

This paper explores the factors that contributed to this somewhat unusual trajectory in cohesion between Ireland and the EU. The role of investment in education and human capital formation was central to the sectoral transformation of the economy and to improvements in trade competitiveness, which complemented the cohesion effects. Perhaps more importantly, the legacies of investments made with support from the EU Cohesion funds provided the resilience to support a rapid recovery.

The progress achieved in achieving economic cohesion between Ireland and the EU occurred against a backdrop of on-going concern within Ireland about uneven development between the metropolitan sub-regions and the remainder of the country. The paper will also review the experience in Ireland in relation to strategic spatial planning. Conclusions with wider applicability can be drawn from Ireland's direct and longer-term experience with EU cohesion policy.

EXPLORING CLUSTER TYPE EVOLUTION USING A REGIONAL DYNAMIC CAPABILITIES VIEW

Kevin Walsh, UCD, Ireland

The literature on cluster typology highlights the diversity of spatial forms, configurations and outcomes that regional economies can offer. However, using this lens to view the Dublin's Silicon Docks, a thriving cluster of internet firms in an urban area, it is unclear which type applies best, and when reviewing its 20 year evolution, it seems that different cluster types have been applicable. This paper explores the development of the supporting regional resources of the Silicon Docks and how these have impacted the transformation from one cluster type to another. Using secondary data to analyse the spatial collocation of regional resources endowments and internet firms, a sample of foreign multinational enterprises, local startups and spinoffs is developed which will be used to conduct semi structured interviews with senior management teams. The results from these interviews will be compared to secondary data sources in order to identify trends in regional resource configurations and the capabilities that affect them. This paper draws on a dynamic capabilities view at the regional level and in particular, highlights regional level dynamic capabilities that sense, seize, and reconfigure regional resources and capabilities to enhance regional outcomes and, in the process,

transform the cluster. This contributes an understanding of the dynamic nature of clusters and their ability to change from one type to another, as well as how dynamic capabilities impact cluster development.

A NEW APPROACH TO REBALANCING DEVELOPMENT: TRANSFER OF DEVELOPMENT RIGHT AS A MECHANISM FOR FUNCTIONAL DIVISION OF REGIONAL DEVELOPMENT

Xuefeng Wang, Newcastle University, United Kingdom

Traditional approaches to regional disparities focus on economic growth and rely either on state intervention or market, which have been proved less effective. While the interventionism is criticised relying solely on transfer payment but lacking motivation for economic incentives, market force can only enhance disparities. Facing the global challenges of eco-environment degradation and increasing inequality, there is a need for new approach to tackling the multi-faceted problems. This paper introduces an alternative concept – functional division of development (FDD). Drawing on the holistic understanding of development, local and regional development is redefined and activities are to specialise on their endowments and comparative advantages to pursue sustainable development. Assuming there are two places: one specialises on economic activities and the other on eco-environment protection. Both places are having same obligation on eco-environment sustainability and development rights. By concentrating on economic activities, the former place will pose more eco-environment responsibilities on to the latter which therefore deserves to economic return through transfer of development rights (TDR) to the former. This paper develops a framework for the transfer of development rights. It is argued that regional rebalancing development can be achieved if FDD facilitated by TDR is applied. It provides a market mechanism for economically lagging regions to work on eco-environment production for economic return.

UNDERSTANDING THE SPATIAL DYNAMICS OF LABOUR THROUGH A GEODEMOGRAPHIC CLASSIFICATION OF COMMUTING

Brian Webb, Cardiff University, United Kingdom
Stephen Hincks, University of Manchester, United Kingdom
Richard Kingston, University of Manchester, United Kingdom
Andreas Schulze-Baing, University of Manchester, United Kingdom
Cecilia Wong, University of Manchester, United Kingdom

Geodemographics have traditionally been utilised as a way to classify areas based on the characteristics of their residents. It has been widely used to inform urban policy, environmental management, health and crime policy, as well as retail analysis and marketing based on the assumption that where you live implies something about who you are. To date the main focus of geodemographics has been on place and the socio-economic features of those living in those places. The research presented here develops a new form of geodemographic classification derived not from the characteristics of people based on where they live but rather based on the characteristics of people commuting to and from home and work. This flow-based classification, built from origin-destination and socio-economic data collected through the 2011 census for England and Wales, provides for a deeper understanding of the spatial dynamics of labour. This paper will discuss the methodological approach used to develop the flow-based geodemographic classification and apply it to a case study of the Cardiff Capital Region in Wales. In doing so it will demonstrate how the classification can be utilised to improve strategic planning, economic development, and infrastructure decision-making at the scale of the city region.

SUSTAINABILITY – A (EUROPEAN) IDEOLOGY FOR THE 21TH CENTURY?

Gabriel Weber, ISM, Germany

Thomas Hoerber, ESSCA Angers, France

Ignazio Cabras, Newcastle Business School, Northumbria University, United Kingdom

After the fall of the Berlin Wall the reality of Communism and “Real Socialism” ended in many countries worldwide. Simultaneously, an increasing number of ecological crises and the rise of social problems such as poverty and economic migration showed the downsides of Capitalism and Liberalism. In this context, millions of people worldwide, from the poorest areas in India to religious leaders such as Pope Francis and the Dalai Lama, started to embrace the concept of sustainable development, thus “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987 p.41).

Based on this concept, sustainability emerged as a global movement. Many individuals or groups of individuals have dedicated and still devote their public and/ or private lives to the pursue of sustainability, for instance by working in sustainability related fields, or by changing their habits with regard to daily energy consumption, waste recycling and separation, diet, etc. Despite this global phenomenon, little research has been done to identify, explore and understand sustainability as an ideology.

This paper aims to fill this gap, by investigating issues and challenges related to sustainability, and by examining the concept as a possible new ideology involving masses at a local level and worldwide. More specifically, the authors use a Delphi approach to collect and investigate views and information gathered from survey questionnaires and in-depth interviews with experts. The paper assesses the regional power of sustainability in Europe, where commitment towards sustainability is particularly strong and promoted by both bottom up organizations, such as grassroots organizations or Local Agenda 21 processes, as well as top down organizations, such as the European Union.

IDENTIFICATION OF PROCESSES AND DRIVERS PLAYING A KEY ROLE IN MARGINALISATION OF INNER PERIPHERIES

Sabine Weck, ILS – Research Institute for Regional and Urban Development, Germany

Andrew Copus, Nordregio, Sweden

Sabine Beißwenger, ILS - Research Institute for Regional & Urban Development, Germany

Paulina Tobiasz-Lis, University of Lodz, Poland

Carsten Schürmann, TCP International, Germany

“Inner Peripheries” (IP) are getting more and more attention on the European policy agenda. While there has been some research on it, nationally as well as internationally, it is safe to say that at present knowledge on IP is fragmentary, there is no single concept, definition, or process narrative. The paper is a report from work-in-progress within the ESPON-funded project “PROFECY –Processes, Features and Cycles of Inner Peripheries in Europe”.

The objective of the paper is to provide insight and discuss main processes and drivers present in different, distinguishable types of IPs. As a starting point for further empirical research, three idealised and simplified types of IP, based upon separate academic discourses and highlighting different “triggers” for processes of inner peripherality, have been identified. These are (1) Enclaves of low economic potential, triggered by poor access or a long travel time to centres of economic activity; (2) Areas where the poor access to or provision of Services of General Interest is considered as main

driver; and (3) Areas lacking organised connectedness, where the relative inability of local stakeholders to connect to wider trends and a primarily cultural and institutional “lock-in” process is seen as a main trigger.

We present empirical findings from ongoing research and “test” some of the hypotheses on processes and drivers underlying the different types of IP by empirical data, through contrasting case studies and the analysis of secondary data.

PREFIGURATIVE POLITICS IN POST CRISIS LOCAL PARTNERSHIP? THE CASE OF YOUTH EMPLOYMENT PARTNERSHIPS IN ENGLAND

Peter Wells, Sheffield Hallam University, United Kingdom
Crisp Richard, Sheffield Hallam University, United Kingdom

Prior to the financial crisis of 2007-08 and subsequent great recession policy makers came to see partnership as a necessary component of delivering complex public policies. At times there appeared to be not a single policy arena, set of wicked issues or implementation gaps which could not be addressed through partnership. It became a leitmotif of many governing bodies at local, national and supranational levels. The austerity politics of public sector retrenchment implemented since the financial crisis appear to render many certainties of the 2000s useless. Fatalist public policy strategies appear to have taken hold. Partnership since 2008 has taken on a new complexion.

The shocks brought by austerity politics are for some not fatalist zero and negative sum games, but rather opportunity structures in which a new politics can be formed. As such they offer the potential to cast aside former institutional rigidities and create more progressive making spaces.

This paper examines the case of a large civil society led youth employment programme (called Talent Match) being implemented in 21 localities in England, between 2014-2018. It is a programme co-produced and co-delivered by young people. The paper asks whether this activity exemplifies and prefigures a new (local) politics. The paper draws on longitudinal case study research conducted in each of the 21 partnership areas.

The paper finds that whilst the Talent Match programme stands apart from harsher models of welfare policy, partnerships are required to work within and are circumscribed by combinations of organisational, local and national factors. The programme examined is subject to performance management and organisations face limited and highly competitive funding opportunities. As Lowndes and Gardner (2016) observe super-austerity now bears down on many local civil society organisations, and as we find, this curtails opportunities for prefiguration and innovation.

CAREER DEVELOPMENT AFTER UNEMPLOYMENT

Anet Weterings, PBL Netherlands Environmental Assessment Agency, The Netherlands
Marten Middeldorp, University of Groningen, The Netherlands
Arjen Edzes, University of Groningen, The Netherlands

In agglomeration economies literature, more dense and diverse regional labor markets are considered to provide better opportunities for unemployed jobseekers to regain employment. But, what is considered to be a dense or diversified labor market for some may offer limited opportunities for others. During their career, employees develop skills and knowledge which have important

implications for their attractiveness to alternative employers. Hence, the number of regional job opportunities for unemployed will also depend on to what extent the jobs match with the prior working experience of the unemployed jobseeker.

This paper explores how such regional differences in skill-related job opportunities affect the future career development of unemployed. To answer this research question, we use micro-data from Statistics Netherlands for all persons who received unemployed benefits between 2005 and 2009. First, we measure the regional number of job opportunities for each of these persons; both in total and only in industries that are skill-related to the industry in which the unemployed used to work. Next, we identify ideal-typical career paths for these persons over a period of five years after each person became unemployed. We apply sequence analysis, a method developed in bioinformatics, which allows us to take into account the interdependence and timing of labor market transitions (changes in labor market status, sector and region). Finally, using regression analyses, we estimate how both generic and person-specific characteristics of the regional labor market affect the probability of following a certain career trajectory, while controlling for differences between persons.

A WORTHWHILE PURSUIT? TRAVEL-FOR-WORK, WORKER WELL-BEING AND CAREER SUCCESS

Daniel Wheatley, University of Birmingham, United Kingdom
Craig Bickerton, Nottingham Trent University, United Kingdom

This paper contributes to understanding of the relationship between travel-for-work, worker well-being and career success in highly skilled occupations, using data from a 2015 mixed-method study conducted in the UK Midlands, comprising an online survey and semi-structured interviews. Findings identify travel-for-work as an important factor driving career success, but that travel has a number of negative impacts on leisure and family time, and well-being. Impacts are especially pronounced where travel is intense and requires absence from home (whether travel is domestic or international). While travel-for-work is a significant source of career capital (skills, professional networks, increased organizational visibility), many highly skilled workers report that travel is difficult to sustain in the long run. However, travel is increasingly required for career development and progression to the most senior roles. The relative travel tolerance of a worker, which may be influenced by a range of individual and household factors, therefore has significant implications for both worker well-being and career success.

LOCAL AND NON-LOCAL KNOWLEDGE TYPOLOGIES: TECHNOLOGICAL COMPLEXITY IN THE IRISH KNOWLEDGE SPACE

Adam Whittle, University College Dublin, Ireland

It is now commonplace to assume that the production of economically valuable knowledge is central to modern theories of growth and regional development. At the same time, it is also well known that not all knowledge is equal, and that the spatial and temporal distribution of knowledge is highly uneven. Combining insights from Evolutionary Economic Geography and Complexity Theory the principle aim of this paper is investigate whether more valuable (complex) knowledge is generated by local or non-local firms. From this perspective, a series of recent contributions have highlighted the role of non-local firms in enacting structural transformation, but such an investigation has yet to account for the complexity of the knowledge produced. Using a recently developed Irish patent database, our measure of knowledge complexity is based on over 3,500 patents and uses a modified two-mode network to link the technologies produced within cities, to their point of origin i.e. local or

non-local. Our results indicate that overall knowledge complexity has increased dramatically since the 1980s, but that the geographical distribution of this complexity is highly uneven. In addition we find that, despite their perceived knowledge intensive abilities, that the majority of complex knowledge is produced by local and not foreign firms. The paper concludes by theorising what an understanding knowledge complexity means for innovation policy, chiefly in relation to technological relatedness and regional diversification.

WHY DID CORNWALL VOTE FOR BREXIT? ASSESSING THE IMPLICATIONS FOR EU STRUCTURAL FUNDING PROGRAMMES

Joanie Willett, University of Exeter, United Kingdom

Rebecca Tidy, University of Exeter, United Kingdom

Garry Tregidga, University of Exeter, United Kingdom

Of all of the regions in the UK that voted to leave the European Union on June 23rd 2016, the big surprise was in areas that had benefitted from a high degree of structural funding. For example, Cornwall had received 17 years of the highest levels of EU monies, and yet voted to leave by a 57/43% majority. It might have been supposed that these regions would have experienced a higher degree of affinity with the European Union and European institutions; and that this would have been evident in how they voted. The case of Cornwall is an interesting one, as there is compelling evidence to claim that EU regional investment has been more consistent in supporting peripheral regions than UK national policy.

This raises questions about the reasons behind Cornwall's Brexit vote. On the one hand, there is a large body of literature that questions the efficacy of structural funding programmes and seeks to improve its performance (see Di Cataldi forthcoming; Esposti and Bussoletti 2008). One possible explanation is that people in Cornwall simply did not experience significant appreciable benefits. Equally, there may be alternative reasons, such as the debates and discourses found in national media. We use qualitative research to assess the rationale provided by Brexit voters in Cornwall, and to assess what regional development in general and Structural Funding programmes in particular, need to do in order to make a visible impact on the people in a region.

ASSESSING TRANSFORMATIONS OF REGIONAL GOVERNANCE

Yasmine Willi, Swiss Federal Research Institute WSL, Switzerland

Marco Pütz, Swiss Federal Research Institute WSL, Switzerland

In this paper, we assess and compare the formation and functioning of regional governance during different time periods and across different regions in Switzerland. Regional governance refers to how regional development processes are coordinated by interdependent state and non-state actors with unequal resources, means of influence and interests. Regional governance transforms as the composition of actors as well as the institutional framework change during the different coordination phases. We examine this transformation of regional governance by first focusing on the role of non-state actors and second on two specific phases of the policy making process: formulation and implementation of regional development strategies. We analyze how the involvement of non-state actors changes during the formulation and implementation phase, and to what extent these changes are driven by state and non-state actors. We focus on four aspects: a) actors' access opportunities: non-state actors options to participate in decision-making processes; b) actors' access strategies: strategies non-state actors apply to participate in decision-making processes; c) actors'

interdependencies: relations between state and non-state actors and how these are shaped; d) institutional framework: the formal and informal rules framing the involvement of the non-state actors. Furthermore, we aim at explaining how the state is both shaped by and shaping itself the transformation of regional governance by providing support and guidance in the form of financial resources, legislative framework, guidelines and recommendations, as well as know-how and networking. By assessing the different roles of the federal, provincial and municipal level, we identify key drivers for transformation.

MANCHESTER TRANSFORMED: CITY REGION DEVELOPMENT SINCE THE 1980S

Karel Williams, Alliance Manchester Business School, United Kingdom

Peter Folkman, Alliance Manchester Business School, United Kingdom

Julie Froud, Alliance Manchester Business School, United Kingdom

Sukhdev Johal, Queen Mary, University of London, United Kingdom

John Tomaney, University College London, United Kingdom

After Mrs Thatcher abolished Greater Manchester city region government in 1986, inner city councillors got things built by giving planning permissions. Property developers transformed Manchester City and Salford by creating a private new town of office blocks with 50,000 new work spaces and adjacent 1 and 2 bed rented flats in which a young in migrant work force lives. Since 2011, the new GM combined authority has adopted generic city region policies of bringing people to jobs by upskilling workers and adding public transport links to the deprived Northern and Eastern Boroughs. Such policies do not engage with how Greater Manchester has through property development been physically formatted for exclusive growth. The private new town in the centre has very limited connections with the rest of the city and is in itself something of a Potemkin village of buy to lets: Southern English investors have the first lien on the incomes of the young city centre workforce. None of this has been registered by GM Policy makers whose new Spatial Framework for 2015-35 is a charter for developers. This raises awkward questions about whether the political accommodations of the 1990s have become a growth coalition in the 2010s with the political classes closer to property developers than to their citizens.

REFUGEE MIGRATION FROM FORMER YUGOSLAVIA IN THE 1990IES. LONG-TERM EXPERIENCES WITH INTEGRATION AND LABOUR MARKET IMPACT IN SWEDISH AND GERMAN REGIONS COMPARED

Rüdiger Wink, HTWK Leipzig, Germany

Discussions on more recent experiences with refugee immigration, particularly from Syria, and challenges to successfully integrate refugees in regional labour markets often ignore former experiences with refugee migration. During the 1990ies, wars in Yugoslavia forced many people from different ethnic groups to migrate – at least temporarily – to West European countries. The proposed paper looks at long-term experiences in two selected regions (one in Sweden, one in Germany, as these countries had been important countries of destination) to investigate the specificities of refugee migration compared to other forms of migration, the role of ethnic networks during the integration processes, preconditions for successful transition into labour markets in the countries of destination and the observable impact on regional labour markets along two decades. The investigation – as a part of the RSA Membership Grant – is based on quantitative data about labour market developments and qualitative results from interviews with representatives from ethnic groups, regional labour market agency and regional authorities. The theoretical framework is embedded into the theoretical

discussion on regional economic resilience from the perspective of complex adaptive systems, as short-term refugee immigration caused external shocks to regional labour markets. The paper and presentation conclude with some insights for current integration policies in Sweden and Germany.

LEADERSHIP AND SUSTAINABLE URBAN TRANSPORT: A MATTER OF INSTITUTIONAL CHANGE

Kirsten Wittig, Rijksuniversiteit Groningen, The Netherlands

With the rapid urbanization, the pressure on the urban transportation systems increases and leadership is often mentioned as a requirement for the development of new transport project. In this research, the role of local political leaders in the development of sustainable urban transport (SUT) systems is explored in the cases of Bandung (Indonesia) and Medellin (Colombia). In this research an analysis of how the institutional context in transport planning changes and through which change mechanisms this change occurs explores how this relates to the leadership styles. By means of semi-structured interviews, policy analysis and document analysis a comparative case study is conducted between the two cities. It was found that the leadership styles between in the two cities differ. Ridwan Kamil in Bandung was found to be a City-Boss whereby Sergio Fajardo's leadership style is a dynamic mix of a Visionary and City-Boss. This relates also to the difference of institutional change. In Bandung, the institutional change was especially taking place in the governance and formal institutions, whereby in Medellin changing governance is the result of changed informal institutions. While in Bandung the change mechanism in the change process was found to be rather top-down, in Medellin a bottom-up approach through knowledge transfer and learning was identified.

REGIONAL AND LOCAL CONVERGENCE OF EDUCATIONAL ACHIEVEMENTS IN POLAND

Piotr Wójcik, Centre for European Regional and Local Studies (EUROREG), University of Warsaw, Poland

In recent years Polish secondary schools pupils achieved impressive progress in educational achievements confirmed by international comparisons (PISA). Between 2003 and 2012 in mathematics literacy test they climbed from 25. place into 13., in the reading test from 25. place to 10. and in the science test from 22. place to 9. We expect that the above mentioned progress does not spread out proportionally on all regions and that regional and local convergence of educational achievements is not observed.

The purpose of the research is to analyze the dynamics of the distribution of educational achievements on a regional and local level in Poland in the period 2003-2013 and its relationship with PISA results of Polish pupils. PISA results are not representative on a regional level. Therefore educational achievements will be measured by the median results of lower-secondary school leaving exams, which applies to secondary school pupils on a similar educational stage as in case of PISA tests. These exams provide detailed, standardized and comparable data on educational achievements of Polish secondary schools pupils on all regional levels year-by-year since 2002.

The analysis is applied on regional and local levels (from LAU2/NUTS5 to NUTS2).

The research hypothesis assumes that in Poland one does not observe absolute convergence process of educational achievements neither on local nor on regional level. Instead, convergence of clubs takes place.

Methodology includes transition matrices and conditional kernel density estimates, which allow to monitor the whole distribution of a variable of interest and its dynamics in time.

THE CHALLENGES OF REALISING EMBEDDEDNESS IN ONLINE FASHION RETAIL TNCs

Steve Wood, University of Surrey, United Kingdom

Iain Watson, Surrey Business School, University of Surrey, United Kingdom

Christoph Teller, Surrey Business School, University of Surrey, United Kingdom

Transnational retailing is widely recognised as a key service sector activity of significant global importance. Economic geographers have framed the challenge of retail TNC expansion through the inter-related concepts of territorial, network and societal embeddedness. Recent research has unpacked these theories and applied them to spaces within and beyond the confines of the firm. Nevertheless, there has been less consideration of how embeddedness might be realised within 'virtual' online fashion retail firms seeking expansion overseas. In this paper we undertake extensive case study research within three leading online fashion retailers involving interviews with overseas buyers, merchandisers tasked with managing stock and price, and other senior executives (n=51) to conceptualise how embeddedness might manifest itself. We find evidence which questions whether embeddedness is considered a realistic objective for online fashion retailers in the early and intermediate stages of international expansion given the primacy of the home market for revenues and the relative ease of profitable online expansion largely controlled 'at-a-distance'. We uncover the limitations of any conception of an 'anchorless' digital retail operation with considerable challenges emerging regarding pricing and ranging that are unadjusted to local cultures of consumption. How this model morphs with 'critical mass' remains unclear, yet there is recognition that a limited physical presence in overseas markets is necessary to identify and influence media 'buzz' and consumer trends. We frame the reluctance to significantly invest in embeddedness in terms of the avoidance of 'set up' sunk costs and the opportunity cost of capital and wider human resources.

HOW DO NEW INSTITUTIONS ARISE? EXAMINING THE ROLE OF MULTINATIONAL ENTERPRISES, UNIVERSITIES AND DOMESTIC FIRMS IN LOCAL INSTITUTION-BUILDING PROCESSES

Jöran Bosse Wrana, Geographical Institute, University of Cologne, Germany

Javier Revilla Diez, Institute of Geography, University of Cologne, Germany

It is widely recognized that institutions belong to the main determinants for a positive regional development. Recently, some studies have examined how actors can actively influence processes of institutional change. For instance, some multinational enterprises (MNEs) in Vietnam's Red River Delta try to overcome skill mismatch problems on regional labor markets, by promoting their home countries' training systems and business practices. By doing so, they select Vietnamese universities as partner for such pilot projects which show a high spatial, cognitive, institutional and social proximity to the respective MNEs.

However, it still remains unclear under which circumstances domestic firms adapt new institutions introduced by MNEs or may develop alternative rules based on their ideas and interests as a respond to MNEs' efforts to change institutions. Therefore, the goal of this paper is to examine the processes and the role of proximity between MNEs, universities and Vietnamese firms which enable the rise and diffusion of new institutions.

Based on 25 interviews with firm managers in Vietnam's Red River Delta, the authors make the following contributions. First, they develop a new typology of institution-building processes, differentiated by the degree of combining local with global institutions. Secondly, the authors use the proximity approach in order to examine under which circumstances new institutions arise and diffuse within the regional economy.

CORE AND PERIPHERY: AN ANALYSIS OF THE SPATIAL PATTERNS OF INTERNATIONAL TRADE

Purva Yadav, Jawaharlal Nehru University, India

The core periphery structure on global scale has persisted over the years. The structure of the relation rests upon the interaction between core economies primarily centred at the developed North, and the peripheral countries constituting the underdeveloped South. The country is believed to be the foci of the world economy if it is actively involved in international trade. Such foci are primarily advanced industrialised market oriented economies. On the other hand, peripheral countries are broadly characterised by the subsistence economy and have passive role in the world trade. Also these peripheral economies heavily rely on the centres as the source and destination of their imports and exports respectively. In this backdrop, the paper attempts regionalisation of trade flows from 1990 till 2015. A preliminary attempt is made through this paper to see if spatial structure of interaction via international trade flows conforms to core periphery structure over time. The nature of commodities traded between cores and their respective peripheries is also studied to understand the dynamics of interdependencies. Data for the present analysis has been extracted from Direction of trade statistics (DOTS Trade matrix) and WITS database. Factor analysis has been used to understand the dominant origin and destination of export and import flow pattern. The analysis broadly reveals (i) the existence of core-periphery structure in the context of international trade flows, and (ii) the functional regionalisation of international trade flows reveals primacy of North in the global economy. However, developing economies, such as, China did emerge among other dominant global traders.

FACTORS OF ENTREPRENEURIAL ACTIVITY IN RUSSIA: INSTITUTIONS OR LOCATION

Stepan Zemtsov, Russian Academy for National Economy and Public administration, Russia

Vera Barinova, The Russian Presidential Academy of National Economy and Public Administration, Russia

Julia Tsareva, The Russian Presidential Academy of National Economy and Public Administration, Russia

The purpose of our work was to determine the main factors of entrepreneurial activity in the Russian regions. We hypothesized that in large developing countries geographical position of a region (e.g., proximity to major markets) may be more or equally important for entrepreneurship than its institutional development.

We have chosen the number of small businesses per labour force as a dependent variable. Our database contains institutional indicators, characteristics of geographical position and availability and quality of human capital.

The period was divided into two sub-periods 1998-2007 and 2008-2014 due to changes in statistics. In both periods, business activity was higher in those regions, which had higher activity previously as a form of path dependency. Entrepreneurial activity in the neighbouring regions had a positive impact on small enterprises' development; it can be associated with entrepreneurial knowledge spillovers.

Investment risks and availability of human capital played the most important role during the period of economic growth (1998-2007). In the second period, when the economy was in stagnation, the risks became interregional rather than regional (sanctions, economic downturn), and regional conditions equalized. In the second period, the unemployment rate became a negative factor as an indicator of the declining purchasing power. And market accessibility and access to banks became important. It can be concluded that institutional conditions are much more important than geographical position, but in the period of economic stagnation, geographical factors can be as important as institutional.

GREEN INFRASTRUCTURE FOR CHINA'S NEW URBANISATION: A CASE STUDY OF GREENWAY DEVELOPMENT IN MAANSHAN

Fangzhu Zhang, University College London, United Kingdom
Calvin King Lam Chung, University College London, United Kingdom
Zihan Yin, University College London, United Kingdom

In order to come to terms with the growing centrality of environmental issues in urban development, many municipal governments in China have recently placed their bet on the creation of extensive systems of greenways. Empirical assessments of the implications of these new green infrastructures become necessary to clarify their contribution to the needs of Chinese cities to green themselves both symbolically and materially. Based on a questionnaire survey with local residents and on-site observations in the city of Maanshan, China, this paper reveals differentiated performances of greenways in three environment-related realms towards for new "human-based" urbanisation. The provision of greenways helps promote public perception in urban liveability and encourage active travel, however, some fragmented routes and poor publicity undermine the capacity of greenways to promote the development of local tourism based upon local environmental amenities.

BRIDGING THE GAP IN CREATIVE ECONOMY AND ICT RESEARCH: A REGIONAL ANALYSIS

Kai Zhao, Xi'an JiaoTong University, China
Mary O'Mahony, King's College London, United Kingdom
Amir Qamar, University of Birmingham, United Kingdom

Since the publication of Florida's seminal work on the 'creative class', there has been an outburst of interest to determine whether or not creativity, as an input, is important for regional growth. Answering this requires developing a production framework that can distinguish creativity from other inputs. With this in mind, this paper integrates the concept of information and communications technology (ICT) and the creative class into a theoretical production function, where estimates are presented by not only using a growth accounting model, but also econometric estimations. Findings revealed an interactive relationship between creative workers and ICT, which arguably positively impacts economic performance within a range of European nations.

THE ROLE OF INNOVATION IN POSTINDUSTRIAL TRANSFORMATIONS

Austin Zwick, University of Toronto, Canada

Over the last 30 years, American Rust Belt cities have had mixed results making postindustrial transformations. During this time, 'knowledge spillovers' have become a focal point of the economic geography literature. Agglomeration, people locating in close proximity to others, facilitates

interaction and the exchange of information which can lead to innovation and economic growth. Pittsburgh, PA has become the classic comeback city of the region, while Cleveland, OH - less than a 2-hour drive away – continues to be an exemplification of urban decline. By examining USPTO Patent data, this paper uses these two case study cities to investigate regional patterns of innovation and industrial change within and between their regions. Results show that Pittsburgh's rebound is correlated with it becoming a regional hub for medical and computer innovation, while Cleveland continues to lag behind its own suburbs in patents and has yet to develop a research specialization. This paper maps out these changes on a geographical and technological space.

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