

Regional Studies Association - A Leading and Impactful Community

PUSHING REGIONS BEYOND THEIR BORDERS

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PLENARY ABSTRACTS

TAKING BACK CONTROL? THE MYTH OF TERRITORIAL SOVEREIGNTY AND THE BREXIT FIASCO

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The UK referendum on leaving the European Union (EU) in 2016 was based around the issue of regaining a control or sovereignty that had been lost with membership in that supranational organization. Irrespective of the fact that many people seemed to vote in the referendum on the basis of attitudes towards questions not directly related to EU membership such as immigration from countries outside the EU, the negotiations over leaving focused on how to go about disentangling the UK from the rules and regulatory authority of the EU. These turned out to be far from easy. Much of this reflects the fact that sovereignty itself is invariably contingent. Only in few historical cases, usually associated with autarkic regimes exercising control over large territorial empires, has any sort of absolute territorial sovereignty even approached possibility. The purpose of this lecture is to use the case of Brexit to examine three aspects of the contingency of sovereignty: 1 The major ways in which sovereignty has been organized historically, 2 The character and role of the language of sovereignty in the Brexit “debate”, and 3 Why the focus on territorial sovereignty and its recapture should be so persuasive to so many people notwithstanding its geographical complexities.

I COME TO BURY GROWTH, NOT TO PRAISE IT

Rachel Franklin, Newcastle University, UK

The economist Kenneth Boulding reportedly noted that, “Anyone who believes that exponential growth can go on forever in a finite world is either a madman or an economist.” Accepting limitations on growth is, however, quite different from accepting the inverse of growth: shrinkage, decline, or contraction—and this tends to be true whether we speak of economies, populations, household incomes, or firm sizes. As regional researchers, we recognize, moreover, the importance of place, context, and interaction in any investigation of growth/decline in one particular location. In this talk, I reflect on regional perspectives on a postgrowth world, taking the case of population loss as my example. I show how our conceptualization of the causes and impacts of depopulation—particularly at a subnational level—has been shaped by implicit growth bias. Building on our existing knowledge, I highlight other aspects of loss that bear further study and discuss the need for new methods, models, and data for understanding a world of less, not more.

PARALLEL SESSION ABSTRACTS

ECONOMIC GEOGRAPHY, IDENTITY, AND ELECTORAL PREFERENCES: THE CASE OF THE WELSH BREXIT VOTE

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A wave of recent electoral shocks has highlighted the presence of significant regional disparities in electoral outcomes. Few are as remarkable as the result of the UK’s EU referendum in Wales, given the nation’s very significant share of EU structural funds, and the reliance of its economy on trade with the rest of the EU. Several studies of the EU referendum vote have identified the importance of local economic context, demographic composition, and economic and cultural shocks, in explaining the result. An interesting and as yet unresolved question is the extent to which the vote can be explained

by the interaction between different identities (Welsh, English, and European), and the local context. We analyse this interaction using British Election Survey data collected in June/July 2016, and a semi-parametric matching estimator. Our results show that after controlling for economic context and shocks, individuals with strong Welsh or English identities were significantly more likely to vote Leave, while those with less strongly defined national identities, and those with a Welsh identity linked specifically to the Welsh Language, were more likely to vote Remain. We also find that individuals with strong English identities residing in Wales were as likely to vote Leave as those remaining in England, while individuals with strong English identities resident in Scotland were significantly less likely to vote Leave.

COWORKING SPACES: PLACES THAT STIMULATE SOCIAL CAPITAL?

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Many studies in the field of entrepreneurship have acknowledged the value of social networks. In order to have access to social networks, many entrepreneurs (in this paper self-employed workers, start-ups, and small-sized firms) go to coworking spaces because of their network-enhancing characteristics. However, current bodies of literature do not specify how coworking spaces facilitate the creation of social networks and how this favors the entrepreneurs who use such spaces. We have distinguished three coworking means which are commonly deployed by the management of coworking spaces that aim stimulating interaction and facilitating social network development, i.e. design of the physical space, facilitative tools, and community management. In this paper we take a social capital perspective and we examine if these means stimulate the creation of bridging and/or bonding social capital and whether the business phase of the firm (conception and development vs. commercialization vs. growth) acts as a moderating factor. We examine three cases in Amsterdam that provided empirical material enabling to develop a number of propositions.

FAMILY-MANAGED FIRMS AND LOCAL EXPORT SPILLOVER: EVIDENCE FROM SPANISH MANUFACTURING FIRMS

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The literature on international trade focusing on the determinant of firm's export decision suggests the geographical concentration of exporters gives rise to location-specific external economies consisting of a reduction of entry costs for nearby domestic firms. At the basis of these agglomeration advantages resides a spatially bounded flow of information about the practice of exporting and the features of foreign markets generally known as "local export spillover". Even though the relevance of local export spillovers for the comprehension of firm's export behaviour their benefits are not uniform across firms, depending on the ownership and management structure of the firms. The aim of this article is to explore whether and in to what extent the family status of firm accounts for explaining advantage in benefit from local export spillovers. In particular, we argue that as compared to non-family peers, family-managed firms are in a better position to access information and knowledge related to export decision because of their social capital.

The present contribution relies on a large micro-level dataset of Spanish manufacturing firms. Our findings reveal the probability to export increases when firms are located in regions with a high density of exporter in the same industry. However, when the family status of the firm is considered, we found the export propensity is higher for family-managed firms than non-family counterparts. This result

suggests that family-managed, take more extensively advantage from being located in regions characterized by a strong presence of exporters. Moreover, local export spillovers appear more important for small family-managed firms and, contrary to our expectations, for those operating in low-tech industries. Because of their rich social capital family firms are in a better position to identify and capitalize on the source of export knowledge resulting in a higher probability to export. Relevant policy implications are discussed. In fact, any policy initiative intended to foster both firm's foreign participation and consequently the international competitiveness of the regions cannot neglect the role played by of family firms as peculiar regional actors.

PROBLEM OF COLLABORATION AMONG LOCAL GOVERNMENTS IN JAPAN COMPARED TO DEVOLUTION IN ENGLAND

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Japan's Local government system is two-layer system, which is formed by prefecture and municipality (city, town and village).

Recent declining of population has deprived economic, social and cultural power of municipalities which have less size, therefore, collaboration between core-city and small sized neighborhood municipalities becomes more important.

Last decade, several systems of collaboration among municipalities in Japan have been established, one of which is Collaborative Core City-Region (CCCR). In CCCR, large core-city and neighborhood municipalities achieve economic development, and higher level of city function and quality of life through compactifying a core-city and connecting between it and neighborhoods by traffic network.

In England, recently, with based on the "localism", devolution from the central government to the region is proceeding. The "Combined Authorities(CA)" that is making cooperation between local governments is the main player of this devolution.

The CA is a legal organization established by two or more municipalities in cooperation and is currently set in nine regional areas. As an organization with the election of the Mayor and unique taxation rights, the CA negotiates with the government on behalf of the area and makes various "Deals".

ince Deals were agreed according to the circumstances of each region, the policy area which regions receive in terms with devolution is also different. For example, "education & skill" and "transportation" are all or most of the areas are transferred, but there are few areas where "business support" and "housing & public assets" are tackled.

The aim of this research is exploring whether the way of decentralization and regional collaboration in England can be applied to Japan.

TRANSNATIONAL FEMINISM, SOLIDARITY, AND METHODOLOGIES OF WORKING BEYOND REGIONAL BORDERS

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This paper will present the preliminary findings an ongoing research project Spaces of Resistance: A Study of Gender and Sexualities in Times of Transformation at the University of Gothenburg. This is a collaborative multi-sited ethnography on the gendered and sexual identities, variegated feminist and LGBTQ activisms, and transnational solidarities in and across Russia, Scandinavia and Turkey. Working beyond national and regional borders, our research aims to challenge mainstream geopolitics and methodological nationalisms and it seeks to reconsider the notion of 'politics' beyond state-centered approach where political is considered through ideas of liberal citizenship. This presentation will reflect on the methodological challenges of working beyond national and regional borders in order to examine the gendered and feminist responses to the current context of rising violence and authoritarianisms across these three contexts. It will discuss the usefulness of shifting perspectives for developing an understanding of multifaceted social dynamics in the making of the political, as we move beyond the boundaries of nation states and normative regional borders through the use of a transnational and multi-scalar approach.

TOWARDS A COMPREHENSIVE INSTITUTIONAL FRAMEWORK FOR THE ENTREPRENEURSHIP ECOSYSTEM THEORY; WITHIN THE CONTEXT OF EMERGING NATIONS, THE CASE OF EGYPT?

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There is a gap in the literature towards addressing entrepreneurship ecosystems from the perspective of the institutional theory within the context of emerging nations. Entrepreneurship ecosystem (EE) is a set of interdependent elements co-ordinated in a way which enables productive entrepreneurship, while institutions are deep aspects of social structures guiding human behavior.

In the institution literature, North (1990), Scott (1995) and Williamson (2005) are three main theorists espousing concurrent formal and informal components of an institution. The formal institutional aspect includes written economic rules governing human behavior, while the informal institutional aspect represents the set of values and beliefs prevalent in society.

However, upon navigating the literature, we concluded that there is a well-founded stream of thought suggesting a prime association between formal institutions and entrepreneurship development, compared to the under-studied literature on the role of informal institutional reformations in emerging nations.

Therefore, this paper addresses this gap by reflecting on Egyptian entrepreneurship reforms in 2017 which lacked having a holistic institutional model. This is attributed to the fact that measurements underlying the supply of entrepreneurship, in terms of addressing culture, social capital, education or media, are still overlooked from the public policy perspective. For example, the GEM report (2016) revealed the fact that Egypt is performing below the average GEM score; in its cultural norms favoring entrepreneurship, as well as, in its entrepreneurship education programs pre-school and at school levels, with as low as, (1.7/3.0) and (3.7/4.4) respectively. Also, Michelle Henry, concluded that entrepreneurs in Egypt are still considered 'corrupt', while the faculty of commerce which teaches business is considered 'a faculty for under-achievers'.

On the other hand, after addressing fiscal, market and economic-formal institutional reformations, the World Bank (WB) and the International Finance Corporation (IFC) applauded the Egyptian reformations for: 1) creating one-stop shop, 2) removing the requirement to obtain a bank certificate, and, 3) extending value-added tax cash refund.

Therefore, in the light of such an overlooked imbalance, this paper offers a comprehensive framework towards promoting entrepreneurship ecosystem in Egypt, so that policy advisors are to craft mechanisms addressing informal institutional reformations to attain reformation credibility and not to jeopardize any attempts towards increasing entrepreneurship activities in the formal component of the institutional framework.

POWER AND URBAN HIERARCHY IN AN EXTRACTIVE GPN: PLANNING ENCLAVES AND SACRIFICE ZONES THROUGH POWER ASYMMETRIES IN CHILE

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The position in the urban hierarchy strongly determines the roles and the kind of strategic coupling that cities achieve within Global Production Networks (GPN). Most studies related to the urban effects of the global geographies have focused on World and Gateways Cities, where opportunities of a virtuous type of strategic coupling is more likely to happen. This contrasts with the – still scarce – research on the so-called “dark side” of GPNs, especially regarding to the apparition of new forms of enclave economies. Furthermore, since strategic coupling relies on intentional decisions by actors participating in a GPN, it is plausible to consider that enclaves are planned as sacrifice zones, where both lead firms and national states use their power to limit the possibility of strategic coupling in peripheral territories.

We study the differences among the main mining cities of the Chilean urban system to enrich the concept of enclave economy within the GPN framework and explain how power relationships affect the forms of strategic coupling in these territories. Our analysis of mining cities is based on an unusually rich micro-level dataset of almost 3,500 mining services suppliers and on primary information gathered from 50 interviews made between 2012 and 2016 in London, Santiago, Antofagasta and Calama, the cities that represent close to 55% of the Chilean mining output, to understand how the Chilean State and mining companies use their strength in the successive bargains taking place in each node. Results show that the concept of enclave can be extended at least in two in two ways: first, mining enclaves can take different forms and degrees; second, mining enclaves are not just the result of structural characteristics related to the position in the urban hierarchy but also the consequence of active strategies by GPN actors and can be, therefore, considered as sacrifice zones.

THE QUALITY OF GOVERNMENT AND THE ADMINISTRATIVE PERFORMANCE OF COHESION POLICY ACROSS EU REGIONS

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This paper examines the question of the impact of quality of government have on administrative performance. It provides the first analysis of the relationship between the quality of government and administrative performance in Cohesion policy across EU regions. Using primary data on government quality collected by the Gothenburg Institute of Quality of Government combined with EU

administrative data on ERDF administrative performance in 2007-2013, regression analysis is undertaken for 173 European regions. The results of the analysis confirm the importance of government quality as a key determinant of administrative performance in terms of financial compliance, timely spending and achievement of outcome targets. The paper then explores which administrative factors are most important for the management of Cohesion policy. Drawing on a survey of national and regional managing authorities across the EU, it assesses the relative importance of internal factors (leadership, human resources etc) and external factors (regulatory quality, beneficiary capacity etc), comparing their influence in both 'old' and 'new' Member States and in less-developed and more-developed regions.

AN EXAMINATION OF REGIONAL ENVIRONMENT EFFECTS TOWARDS LOCATIONAL CHOICE AND START-UPS MIGRATION: THE CASE OF UK UNIVERSITY SPIN-OFFS

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Innovation ecosystem or Mode 3 explains the contribution and collaboration between government, university, industry and non-governmental bodies to combine and incorporate different knowledge via co-evolution, co-specialisation, and co-opetition (Caryannis and Campbell 2009). As outlined by Pellikka and Ali-Vehmas (2016), well-defined and executed regional innovation ecosystem strategies can facilitate new markets and business opportunities as well as growth for firms.

University spin offs (USOs) is one example of the important categories of technology transfer residing in the regional innovation ecosystem. The spin-off activities involve commercial exploitation of technologies by academic entrepreneurs (from universities) through the setting up of a company (Perkman, and Walsh, 2007). With unique and hybrid characteristics, USOs are regarded as an economically compelling subcategory of high-tech start-up firms (Shane, 2005). The study by Conceicao et al. (2017) have highlighted that both universities and agglomeration economies effects are important to explain USOs prevalence across cities but noted that the agglomeration economies may have a stronger impact. As also emphasized by Iacobucci and Micozzi (2015), local economy's characteristics have an effect towards USOs' economic and innovation contributions.

Most of the studies assume that USOs will remain in the region due to path dependency (strong ties with the university). Though, a recent phenomenon of USOs and start-ups migration out of their original inception regions has been observed (Hillier, 2018). In this study, we investigated the migration patterns of UK academic start-ups (USOs) as well as examine the different effects of regional factors (such as human capital, social capital, innovation intensity and large market) towards locational choice (Calcagni et al., 2016).

THE INTERNAL ENERGY IMBALANCE IN SPAIN: ANALYSIS FOCUSED ON THE HYDROELECTRIC POWER IN THE REGION OF GALICIA

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Nowadays, in a context in which issues such as pollution and climate change are some of the major concerns of the global society, discussion about issues related to energy are becoming crucial. Energy

generation has traditionally led to significant economic and territorial implications, but also serious environmental consequences.

In Spain, the production of energy is territorially unbalanced. Some regions generate much more power energy than others do, and this does not correlate with the consumption needs at the internal scale. This is explained because of a population model with more people living in urban spaces, which are traditionally massive consumption centers. On the other hand, this trend towards urbanization is associated with the depopulation of most of the territory, where the production is scattered.

The Galician region, located in northwestern Spain, is a relevant study case of this territorial energy imbalance. In this region, rates of energy power generation are much higher related to consumption. In addition, production related to renewable sources acquires great significance. Indeed, hydroelectric power plants are one of the main power generation sources. In this study, we will analyze the importance of this energy model and the spatial distribution within this region.

THE POLITICAL ECONOMY OF PREFERENTIAL TAX TREATMENT. AN EMPIRICAL ANALYSIS OF POLISH MUNICIPALITIES

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Fiscal federalism literature indicates that own revenues should constitute the meaningful source of financing local government activities (e.g., Oates, 2008). The principal foundation of this normative claim is that own revenues enhance the responsibility and accountability of local authorities to voters. Despite these virtues, non-benevolent politicians are still able to exploit local taxation for their own benefit (Hettich and Winer, 1984, 1988; Winer and Hettich, 1991; Pettersson-Lidbom, 2003; Veiga and Veiga, 2007; Foremny and Riedel, 2014).

Sub-central governments in many countries enjoy considerable autonomy in tax setting (Blöchliger and Nettley, 2015). Notwithstanding, the vast majority of existing empirical studies on political motivations in local taxation ignores the fact that local taxation powers are often not limited to setting tax rates and municipalities are also allowed to implement tax base reductions (e.g., grant tax reliefs, tax allowances, tax exemptions, tax deferrals). We aim to close this research gap by utilizing panel data encompassing overall preferential tax treatment granted by Polish municipalities.

The main research question in our paper is whether the scope of preferential tax treatment depends on the political strength of incumbent mayor. For this purpose, we use a unique panel dataset on real estate taxes in Polish municipalities in the years 2005-2017.

The empirical study consistently shows that more tax revenues are foregone in municipalities governed by politically weak mayors, albeit the uncovered relationship has a limited economic significance. We also investigate the components of tax reductions. There is robust evidence that less popular local authorities offer higher preferential tax measures towards natural persons and in the form of tax rate reductions.

THE SPATIAL OKUN'S LAW FOR THE SPANISH REGIONS: NEW EVIDENCE WITH ALTERNATIVE SPATIAL MEASURES

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In this paper we empirically test the Okun Law for the Spanish regions, augmenting the standard model that relates output and unemployment gaps allowing for regional spatial dependence. We build several spatial weighting matrices, combining both geographical and economic information, and test for spatial dependence in the Okun Law. Our results show substantial regional heterogeneity as regards the Okun coefficient, and the existence of a clear spatial pattern. However, the latter is better modeled in terms of a rather complex spatial dependence indicator instead of the usual geographical spatial weighting matrices.

INFLUENCE OF RAPIDLY SPREADING SPARSELY POPULATED AREAS ON THE EMERGENCE OF SPATIAL EXCLUSION: THE CASE OF LITHUANIA

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Recently, the network of sparsely populated areas (hereinafter SPA) is expanding not only in Lithuania but also in other countries of the world, especially in the Nordic countries. For many years, majority of Northern European countries have successfully implemented specific regional development policy programs, strategies for resolving SPA problems (Jauhainen, 2000, Gloersen, 2009). However, in Lithuania, the lack of regional policy measures implemented by the SPA, researchers of social geography perform research (Daugirdas, Baubinas, 2003, 2007, 2008; Daugirdas ir kt., 2013; Barauskienė, Daugirdas, 2017).

In Lithuania, SPA (the rural population density of 12.5 inhabitants per square kilometer used in the study) is a rapid spread of the network, which comprises entire regions of the North-East and South of Lithuania, and already covers about 50% of the country's territory. Analyzing the 2001-2018 the number of sparsely populated municipalities (LAU1) has increased from 7 to 23 in the period, and in the wards (LAU2) - from 109 to 204. Such territories can be categorized as problematic, where the population is rapidly disappearing, not only due to emigration to the largest three cities of Lithuania - Vilnius, Kaunas and Klaipėda, which are not only the main national centers but also compete globally (Burneika et al., 2017), but also abroad; the population is aging, settlements are emptying, the network of public institutions disappears and territories become unattractive for investment. The SPA population is increasingly undermined by the accessibility and quality of public services, and therefore faced with spatial exclusion, becoming peripheral populations, further adversely affecting demographic, social and economic processes. Therefore, there should be deliberate regional policy in such areas.

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CONNECTIVITY AND ECONOMIC GROWTH: A PANEL STUDY FOR EUROPEAN REGIONS

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The aim of this paper is to study the way the local creative economy and the connected economy affect regional economic growth in Europe. The paper builds upon a specific literature on creative and connected economies and shows that in many regions they appear as the main engine of growth.

Eurostat data from the period that goes from 2006 to 2013 is used to build a panel data econometric analysis in order to test the relation between creative economies and the growth of GDP per capita for the 226 European Regions at a NUTS 2 level. Tools of spatial econometrics allow us to correct the spatial autocorrelation biases. This work also delivers evidence that the regional disparities in the stock of the creative industries depend upon the position of each region in the European regional hierarchy.

TERRITORIAL POLITICS AND SMALL CITIES IN GALICIA: FROM PROMISED IN INEFFICIENCY

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The urban system is a key element in public policies with an impact on the territory. Whether at the level of education, health, transport and infrastructure or economic activities, small cities as the lowest step of the urban system and as a link between the urban and rural world play a decisive role in ensuring territorial development balanced, cohesion and the provision of basic services to the entire population.

Galicia is characterized by a great difference between coastal areas and inland areas. In the coastal areas are the main urban areas of the region, as well as other densely populated spaces. There is a greater demographic dynamism, which is reflected in a lower degree of aging, higher birth rates and a positive demographic evolution or with moderate losses. It also concentrates a large part of economic activities, especially tertiary and industrial, as well as important areas of intensive agriculture, and a good part of the equipment and infrastructure. On the other hand, the interior rural spaces are characterized by a deep demographic crisis with large population losses, emigration of the younger population, very low birth rates and very high rates of aging and life expectancy, some areas with maximum worldwide. The abandonment of rural areas is also seen at an economic level, in spaces where agriculture continues to play an important role with insufficient market orientation and innovation as well as an absence of complementary tertiary and industrial activities. The provision of services and equipment, both public and private, is low, motivated by the decreasing importance in demographic and economic terms, together with the impact of the crisis and the implementation of neoliberal measures that have meant a reduction and a worsening of the tertiary sector.

Within these interior rural spaces there are exceptions. The small cities, known in Galicia as "vilas", register and concentrate the limited dynamism of these rural areas, although you can also find cities belonging to this lower echelon of the urban system in the coastal areas of the region. The concept of a small city in Galicia is very much conditioned by the existence of a gap between a small group of cities with more than 70,000 inhabitants and a large group of population centers with less than 20,000 inhabitants. Below this population established generally as upper limit there are notable differences between them. From small cities with a clearly urban demographic, economic, functional or morphological characteristics to small population centers that, due to their size and their intense relationship with the rural space, are difficult to define as urban spaces but whose intermediation function has led them to be considered in this study. These settlements concentrate tertiary activities for the attention of the demands generated in the region that they organize besides being centers for the social relation and the daily life of the inhabitants of their area of influence.

Both the basic strategic and territorial planning in Galicia and the sectoral policies and public policies that derive from the first ones give special attention to small cities. The deficiencies in its elaboration, its non-binding character, the lack of coherence among them, the lack of coordination with other scales of governments, the scarce political commitment, the lack of concordance between the proposed measures and the actions carried out or the vision short-term, among other problems, are

some of the causes of its limited success and unwanted territorial impact. In these documents, the role of small cities as a link between the rural and urban world is essential to guarantee a balanced territorial development.

The hypothesis of this study is that the deficiencies identified in public policies and territorial planning in Galicia instead of achieving the objectives set have favored a series of small cities that have seen how the differences between rural and urban spaces became larger. and how its importance increased comparatively. The main objective is to know the impact of policies in small cities and the causes that explain them. Other objectives are to know the lack of concordance between basic planning and public policies and the actions carried out and how the role given to small cities in planning differs from that given in reality.

The methodology proposed for the study begins with a bibliographic review in which the role of public policies will be analyzed from a general perspective to a specific one applied to the Galician case. After this, an analysis will be made of those planning documents and public policies with a direct impact on the territory. At this point it is intended to know, on the one hand, the strategic vision and the territorial model that are included in the Strategic Plan of Galicia and in the Territorial Planning Guidelines, and, on the other hand, the characteristics of the sectoral planning and its territorial impact. Within this sectoral planning, educational, health, business land, demographic, transport and infrastructure documents will be analyzed. In the next point, an analysis of the territorial reality linked to the policies studied will be carried out and finally a comparison will be made between the policies carried out and the territorial reality and between the strategic planning and the sectoral policies in Galicia to understand how its impact on small cities.

FAMILY-MANAGED FIRMS AND OPEN INNOVATION. A FIRM- AND REGIONAL-FAMILINESS APPROACH

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Innovation is generally regarded as a highly interactive activity, where firms absorb, generate and apply knowledge by relying on both internal and external sources. While internal sources rely mostly on the knowledge developed within the boundaries of the firm, the external sources of information and knowledge are shared outside the organization. How firms contribute, manage, and materialize intentional (firm level) and unintentional (industrial, local, and regional level) external sources of knowledge is important for innovation behaviour. Even though abundant evidence shows the importance of some firm-specific characteristics in leveraging external knowledge, the family status of the firm has been neglected.

In terms of intentional knowledge spillover, we hypothesize that because of firm familiness specificities, family firms create a positive environment for R&D cooperation (intentional source of knowledge) increasing the probability to have process and product innovations. On the other hand, based on regional familiness arguments we hypothesize that firms, in general, increase their probability to have process or product innovation as result of by being placed in context where family firms act as catalyst of knowledge and information at local, industrial and regional level.

We use a large panel dataset of Spanish manufacturing firms covering the period 2000-2017. Our results reveal that the probability of engage in both product and process innovations is higher for family-managed firms involved in technological collaboration. Hence, does emerge a particular ability of family firms to leverage external source of knowledge at the foundation of higher innovation propensity. Additionally, our findings provide support for the so called “regional familiness”

arguments. As a result of their strong embeddedness in the social and economic structure, family firms contribute to the creation of a favourable regional environment for the innovation activity of all firms. In fact, our estimations show the higher family firm density spending in R&D in a particular region, is associated with greater product and process innovation propensity for firms located in that region. Theoretical and policy implications are discussed.

THE EFFECT OF THE EURO ON EXPORTERS' PRODUCTIVITY. DOES FAMILY MANAGEMENT MATTER?

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The adoption of the single currency for 19 of the 28 European Union member states had a unique and specific impact on exporters. The rule of the game changed for firms located in and exporting among those countries that embraced the Euro as a sole currency. There was a shift from flexible to fixed exchange rate regime diluting the uncertainty. This is not trivial since this political decision, the creation of the Monetary Union, had not only the aim to reduce the cost of the exchange but also to reduce uncertainty which ultimately may consolidate the competitiveness of exporters. The aim of this article is to evaluate the impact of the Monetary Union for exporters. More specifically, to evaluate how this political decision impacted on family and non-family exporter productivity. We develop our investigation in Spain by using a broad sample of Spanish firms that have been operating in the manufacturing sector over a twenty-five-year period (1990-2014). Our results reveal that there is a positive effect for family firms after the adoption of the common currency. By using Markov Chain, we show that the Euro affected those exporters with low productivity and high productivity.

PRODUCTIVITY AND EARNINGS AT FIRMS' LOCAL UNIT LEVEL: THE CASE OF LOMBARDY URBAN AND NON-URBAN AGGLOMERATIONS

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The dynamics of productivity is fundamental to realise the evolution of an economy's potential output and ultimately its future living standards. The impact of technological change on productivity has long been debated in particular concerning the somewhat controversial effects of information and communication technologies. Additionally, a significant part of the literature has focused on the distribution of productivity among sectors and areas, highlighting the differences between services and manufacturing or urban and rural (non-urban) areas. This investigation is also relevant because it underlines significant geographical discrepancies in the future path to the sustainable growth of per capita income.

We propose three different geographical classifications of the Lombardy region in Italy, which are focused on urban, non-urban characteristics, industrial specialisation and population mobility respectively.

The analysis is based on a unique data set that uses establishment data of the universe of Italian firms in the industrial and services sectors. The database integrates information from the statistical register of active businesses (ASIA archive) which encompasses information on local unit firm-level employment, and the Structural Business Statistics database (FRAME-SBS), that provides information on production and cost structure at the local level. From the original database, we selected a sample of almost 850,000 establishments localised in the Lombardy Region.

We present a decomposition of labour productivity according to the suggested classifications and, in addition, we complement this analysis with a breakdown of earnings ratio. This additional investigation is crucial as it enables us to verify whether the productivity gain that urban areas experience compared with non-urban areas are matched – and to what extent – with a simultaneous gain in earnings. We, therefore, verify whether existing agglomeration costs do not permit to exploit entirely urban areas’ efficiency thus mitigating the positive effect of productivity on earnings.

URBAN GROWTH STRATEGIES IN RURAL REGIONS: BUILDING THE NORTH WALES GROWTH DEAL

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Martin Jones, Staffordshire University, UK

Alex Plows, Bangor University, UK

This paper discusses the creation of a ‘Growth Deal for North Wales’ (GDNW)—primarily a rural region, within the UK, without a core-city or large metropolitan centre. Growth Deals to date, have largely been used as a policy tool for trying to engender economic growth in urban city regions. The paper examines how this urban dynamic, fostered around a pushing of the agglomerative growth model out of the city region, is being transferred largely across rural space and place in terms of how growth is envisioned and how policy is implemented. It reports on dialogue and engagement with local actors in North Wales, who are actively seeking a growth deal from the UK Government alongside two City Deals in South Wales, within the broader devolved nation state of Wales. The paper raises the tensions and challenges with regards to the use of growth deals within the asymmetrical framework of devolution in the UK and local government reorganisation within Wales itself. In doing so, we offer new knowledge on the potential implications of this urban agglomeration growth model for peripheral and rural regions such as Wales, when policy-squeezed into a city-first accumulation strategy.

SYSTEM-BASED UNIVERSITIES AND THE CONTRIBUTION THEY BRING TO LOCAL DEVELOPMENT

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The present paper proposes a framework that helps both the empirical identification of universities converging to system-based entrepreneurial and civic approaches, and the evaluation of the impacts on the development of places in which they embed. It is widely acknowledged that universities have undergone relevant institutional changes in the past decades, which have brought them to increase their engagement with territorial stakeholders (Breznitz & Feldman, 2009; Goddard et al., 2016; Arocena & Sutz, 2018). The Civic University (Goddard et al., 2016) and the University Research Centric District (Patton & Kenney, 2009) models encompass different aspects of this change. Drawing on these two system-based models, we focus on universities that aim at supporting local development. In particular, they are analysed with respect to the presence of three possible drivers: i) a certain degree of synergy between the three missions of university (i.e. teaching, research and knowledge transfer); ii) a good level of alignment between the knowledge produced by the university and the local productive and territorial systems; iii) the capacity to carry out multidisciplinary projects.

We apply such framework to the empirical analysis of the Social Reports of 15 Italian Universities. Such reports are tools increasingly adopted in Italy to communicate university commitment towards third mission to external stakeholders. By performing a text mining analysis of such reports, we assess the presence of the drivers of system-based university approaches and the possible outcomes in terms of support to local development.

URBAN GROWTH POLE POLICY AND REGIONAL DEVELOPMENT: OLD WINE IN NEW BOTTLES?

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Stefana Varvari, Universitatea Babeş-Bolyai, Romania

Cristian Marius Litan, Universitatea Babeş-Bolyai, Romania

Our aim is to evaluate the outcome of the establishing the urban growth poles as key elements of the new regional policy in Romania. The main finding is that disparities among cities and counties reduced during the programming period, but it started to increase again as soon as the program ended.

PROMOTING COMPETITION IN REGIONAL DEVELOPMENT: FROM INDUSTRIAL ECONOMICS TO SMART SPECIALIZATION

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Christian Reiner, Lauder Business School, Austria

The relationship between competition and structural policies has been the subject of a long-standing debate. In particular, traditional "picking winners" approaches have become out of fashion notably because of their protectionist stance. Instead, newer generations of structural policies focus on systemic interventions designed at facilitating processes of self-discovery, and are thus meant to be more consistent with the competitive structure of market economies. Recent approaches in regional development such as cluster promotion and the smart specialisation concept reflect this change in attitude and focus to a large degree on cooperation among agents to facilitate self-discovery and enable catalytic policy interventions. In theory, cooperation under these policy approaches should complement competition, but in policy implementation the competitive aspect of these approaches is often neglected. Based on a review of arguments from industrial and regional economics, this article proposes a framework to understand the role of competition in regional development, and surveys a selection of smart specialisation strategies across the EU according to the framework. The findings suggest that policy interventions to support competition in regional economies could significantly enhance the effectiveness of these strategies, and can inform the revision of update of smart specialisation strategies in regions across the European Union for the post-2020 era of cohesion policy.

APPLYING THE METHOD OF REFLECTIONS TO INTERLOCKING FIRM NETWORKS OF THE KNOWLEDGE ECONOMY IN GERMANY

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Hidalgo and Hausman (2009) introduced the method of reflections that helps to reveal income gaps between countries. This suggests that complexity of division of labour form a basic root of economic development. The method of reflections uses a bipartite network with countries and products as nodes. Imports and exports of goods display the relations between countries and these products. As countries are diversified they have access to a large number of different products. If these countries offer exclusive products at the same time these countries experience competitive advantage. Regional approaches to complexity are not available as relational data and trading data do not exist below the country level. While using a unique data set of regionalized intrafirm networks of multi-branch, multi-location firms of the knowledge economy, this paper applies the method of reflections on the level of regional labour markets in Germany. This data was collected for 480 firms that operate in Germany for the years 2009 and 2018 according to interlocking network model by Taylor (2004). Interlocking firm networks represent a proxy for hypothetical information flows between each firm location and subsequently between those cities where this firms are located. This network represents analogies to the original approach of Hidalgo and Hausman (2009). We assume that applying the method of reflections to interlocking firm networks on a regional level provides further explanatory power to the

differences in regional productivity and growth. More specifically, regions that host a diversified firm portfolio and exclusive firms at the same time may have higher competitive advantage than other regions.

BREAK FREE THE DYNAMICS OF ENTREPRENEURIAL ECOSYSTEMS. THE CASE OF THE IOT VALLEY

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Entrepreneurial ecosystems are said to be an engine of economic development in regions, nations and globally (Acs et al. 2018). Although several works show the role of ecosystems in the development of the local entrepreneurial process (Mason and Brown 2014, Sorenson 2017) and others have studied how geography impacts on entrepreneurship (Stam 2015, Sorenson 2018), the structuration of these ecosystems through time and through scales remains underexplored. In particular, when emerging industries or technological domains are involved.

This paper contributes to fill this gap by monitoring the birth of an entrepreneurial ecosystem in time, across geographical boundaries (local, regional, global) and institutional scales (Harrington 2016, Alvedalen and Boschma 2017, Malecki 2017, Mack and Mayer 2015).

The paper analyzes the emergence of an entrepreneurial ecosystem around the Internet of Things (IoT) industry in Toulouse with a timeframe of 20 years (2000 to 2020), from an institutional and multi-scalar perspective through an original "historical monography", resulting from both a documented work based on desk research, and semi-directed interviews. From this study, we draw some theoretical implications about entrepreneurial ecosystem configuration.

Finally, the output of this work is twofold. First, it provides a conceptual framework to understand how multi-scalar entrepreneurial ecosystem evolve a structure over time. Second, it proposes various measures of entrepreneurial ecosystems, since they are complex adaptive systems characterized by their many elements, their interdependencies, their feedback loops and as being in a state of constant evolution.

SOCIO-POLITICAL IMPACT OF TRANSDISCIPLINARY RESEARCH PROJECTS

Benjamin Best, Wuppertal Institut, Germany

The real-world laboratory DoNaPart (Dortmund, Nachhaltigkeit, Partizipation) empowers citizen in the City of Dortmund to actively take part in energy transition processes. A trans-disciplinary research team co-created participatory sustainability actions. An energy efficiency competition among households was conducted, we started a sustainable bike-repair café and created an open Wi-Fi network called Freifunk.

DoNaPart is currently evaluated on two levels: firstly on its contribution to individual & community empowerment and secondly on its impact on sustainability and quality of life in the city quarter. The research team asks its collaborators in organizations and the policy sphere as well as the broader public if they experienced changes in the realms of knowledge, attitude and environmental behaviour. The research design includes qualitative interviews and a pre/post representative psychological survey with a control group.

My presentation will highlight some results of this evaluation. With regard to governance, the project DoNaPart has the aim to foster socio-institutional capacity for urban climate governance. Political actors and the administration were actively involved in the project. But were they also able to profit from it? Did networks of interaction and new projects evolve during this project? Has it changed the way the policy sphere tackles challenges of urban climate protection? A first analysis shows that the project has had difficulties to reach out to political and administrative experts, despite its very good reputation and successful activities on the local level.

DoNaPart intensively interacted with local organizations and citizens and created room for practical action. But how can these projects and networks be scaled-up and sustained? How did these projects influence the community empowerment and environmental behaviour? I will also deduct good and bad practices from this project, e.g. experiences in 'performative participation', mobilization and activation of citizens as well as difficulties to balance the aspects of research and activism in a real-world laboratory.

RECURSIVE TERRITORIAL ORDERING AND SPATIAL EXTERNALITIES

Arnab Bhattacharjee, Heriot-Watt University, UK

Paulo Batista, University of Aveiro, Portugal

A large body of literature has developed in the past decade that attempts to estimate spatial externalities directly, rather than estimated direct and indirect spatial effects based on spatial weights matrices assumed known a priori. Known weights matrices typically get three aspects wrong: (a) negative spatial externalities; (b) inaccurate and underestimated spatial general equilibrium effects; and (c) explanation for only a small fraction of overall spatial dependence. Further, spatial heterogeneity is inaccurately measured, in terms of spatial fixed effects (the value of distinct places) and spatially varying slopes (shadow prices). However, the spatial weights matrix is not fully identified from reduced form regressions, except under strong assumptions on spatial structure or of the covariate effects. Three kinds of spatial structural assumptions have been popular in the literature: (a) symmetric spatial weights (Bhattacharjee and Jensen-Butler, 2013); (b) nested star structure (Bhattacharjee and Holly, 2013); and sparse weights matrices (Ahrens and Bhattacharjee, 2015; Bailey, Holly and Pesaran, 2016). A fourth structural assumption, recursive ordering, has been recently proposed by Basak, Bhattacharjee and Das (2018) in the context of asset market trading and prices. We argue that recursive territorial ordering provides a rich framework with many potential applications to regional science. In the context of regional housing markets, for example, they can be used to model the phenomenon of ripple effects typically observed in the UK and other centralised regional hierarchies. Within intra-urban settings, they can capture book building activity by real estate agents and traders. One important outcome of recursive structure is the ease of computing direct and indirect effects, even at a detailed spatial scale. We provide examples and Monte Carlo evidence of inferences on the estimated structure, together with two motivating examples. The first is from regional housing markets in the UK, and the second from within the city of Aveiro in Portugal.

UNDERSTANDING PRODUCTIVITY AND PROSPERITY: REGIONAL SKILLS MISMATCHES AND INCLUSIVE GROWTH FOR THE WEST MIDLANDS

Chloe Ashton Billing, University of Birmingham, UK

Anne Green, City-REDI, UK

Simon Collinson, City-REDI, UK

Magda Cepeda Zorrilla, City-REDI, UK

The UK lags behind most OECD countries in terms of average productivity and productivity growth rates. Particular regions of the UK are behind this average because of a combination of factors, including shortage of skills, local industry structures, levels of investment and management practices. The central aim of the paper is to identify local factors that underlie and explain regional differences in productivity, with a focus on mismatches between the supply of and demand for specific skills. It will theoretically explore how skills and regional labour markets act as productivity constraints at the firm level, across different functions and different industry sectors. We will also consider key trade-offs between productivity improvement and inclusive growth goals, as there is a clear relationship between employment growth and lower productivity (Lee, 2018; Lupton et al., 2016; Green et al., 2017). These research priorities are shaped by prior research which identifies: lags in productivity performance at the national and regional levels (ONS, 2017); the importance of firm-level management as an explanatory factor (Bloom et al., 2016); and the significance of internal skills gaps and external skills shortages (Green, 2017; Vivian et al., 2016; Asnar et al., 2015). The paper is the outcome of the first-phase of a 3-year project on productivity and inclusive growth in the West Midlands region. It provides a critical foundation for our empirical research, which will provide a 'deep dive' in four sectors (business and professional services, advanced manufacturing, retail and hospitality) to better-explain the constraints on productivity improvements at the local level.

THE ECONOMIC PERFORMANCE OF GPN SUPPLIERS DURING THE PERIOD OF GROWTH AND CRISIS ACCORDING TO THEIR TIER: THE CASE OF CZECH AIRCRAFT INDUSTRY

Jiri Blazek, Charles University in Prague, Czech Republic

Zuzana Petrickova, Charles University in Prague, Czech Republic

This presentation aims to contribute to GPN/GVC research via a detailed investigation of economic performance of suppliers in aircraft industry with a special attention being paid to the role of business cycle (period of growth/crisis) in relation to their tier. Conceptually, the paper is based upon GPN/GVC framework and in particular upon value creation and value capture notions. Empirically, the presentation offers a detailed examination of economic performance of Czech suppliers according to tiers and according to type of assemblers (i.e. assemblers of large planes – Airbus, Boeing versus regional assemblers of small planes). The study investigates the performance of about 100 aircraft suppliers localized in Czechia over the period 2005-2017 in order to examine the performance of these companies during the global economic crisis as well as during the period of recovery and growth. The study yielded both foreseen and surprising findings.

THE ROLE OF GLOBAL SUPPLY CHAINS IN THE TRANSMISSION OF WEATHER INDUCED PRODUCTION SHOCKS

Stefan Borsky, University of Graz, Wegener Center for Global and Climate Change, Austria

Martin Jury, University of Graz, Austria

Economies today are organized in fine interweaved networks of production units - each commonly receiving input flows from their suppliers to produce products, which are then often used as inputs in other production units (Carvalho 2014). Idiosyncratic shocks, which are triggered for example by

natural disasters, and affect only a specific production unit, can be widely dispersed in the economy through industry linkages. Based on this setting this paper analyzes the direct and indirect effects - transmitted via production networks - of extreme weather impacts on European economies. Based on input-output data, provided by the Eora global supply chain database, we determine the production network for 190 countries and 14 sectors from 1990-2015. This gives us a yearly matrix of weights of each sectoral input-output-linkage depending on intensity of transmission. In a second step, we combine the data on inter-sectoral linkage with a yearly matrix of geo-referenced extreme weather events to create an index measuring the supply chain vulnerability to extreme weather events for each sector and country. This index is then used in a gravity model of intersectoral trade, which is estimated using the Poisson pseudo-maximum-likelihood estimator, as proposed by Santos-Silva and Tenreyo (2006), to determine the impact of supply chain vulnerability of extreme weather impacts on international trade activity per sector and country. Our results suggest that a higher supply chain vulnerability to extreme weather events significantly reduces exports. We also find that the negative effect on a country's exports depend on the sectors as well as on the type of natural disasters. Knowledge on the role of input-output linkages in the propagation of extreme weather shocks is important, to design more resilient supply chains in future.

CONCEPTUALISING RURAL INNOVATION: OPPORTUNITIES AND CHALLENGES FOR POLICY DEVELOPMENT

Gary Bosworth, University of Lincoln, UK
David Charles, Northumbria University, UK
Maria Salomaa, Lincoln university, UK

Whilst innovation is increasingly recognised as a key tool in the development of rural areas, the diversity of rural businesses and their potential to engage with innovation is not fully understood in policy efforts to support rural innovation. For example, rural enterprises that depend on local markets and are more locally embedded face very different challenges and opportunities to those exporting beyond the local region, and for whom the rural location choice may be one of convenience or lifestyle preference. Moreover, as traditional rural sectors face increasing pressures for production efficiency and cost savings, their financial ability to invest in innovation is limited even though innovation is required to help them adapt to market demand. By contrast, growing numbers of creative, digital and technological enterprises in rural regions may have greater capacity for innovation, but have only loose connections with their locality.

So what kind of innovation policy should a rural area pursue? National policy in many countries recently has tended to focus on cities as engines of growth and hence innovation policy tends to be urban focused. What should rural areas do? More particularly should rural areas seek to develop place-based strategies for smart specialisation or should they seek alternative approaches by aligning themselves with adjoining urban areas?

Innovation models indicate the importance of intra- and inter-regional flows of knowledge, goods, people and firms (Fratesi, 2015) and present the innovation journey as one with multiple pathways that do not necessarily have a predictable endpoint (Van de Ven, 1999). In this paper, the different needs of firms in rural areas are explored within their rural socio-economic, cultural and policy contexts are reviewed to better understand how rural innovation can be more effectively conceptualised and supported. A typology of types of rural innovation and respective policy requirements is developed. The role of funding mechanisms and supporting organisations, including universities, as part of the innovation infrastructure and their rural coverage are also examined. The paper concludes by exploring whether rural smart specialisation strategies can be developed that link between innovation that delivers social outcomes (e.g. LEADER, Big Lottery and community

enterprise initiatives) and innovation that delivers economic growth (e.g ERDF; Innovate UK). With the socio-cultural fabric of rural areas shaped by local businesses and with many rural businesses dependent upon their local environment for key inputs (e.g. natural resources, human and social capital, landscape assets), we call for a new approach that conceives rural innovation in a more progressive and holistic light.

THE SNOWBALL EFFECT OF KNOWLEDGE SPILLOVER IN REGIONS

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Valerie Brett, Waterford Institute of Technology, Ireland

Bill O'Gorman, Waterford Institute of Technology, Ireland

This paper examines the process of Knowledge Spillover (KS) at the regional level by focusing on five critical channels of KS. KS is understood as an unintended transmission of knowledge (Fallah and Ibrahim, 2004), is a key component for regional innovation because it contributes to firms to acquire the necessary inputs to innovate (Stuetzer et al., 2018; McCann and Ortega-Argilés, 2016). KS is geographically constrained, thus firms with little or no R&D that are concentrated in a region can obtain knowledge inputs from the region (Audretsch, 1998). The relevance of exploring the process of KS is that, as firms benefit from KS and become innovative, they are likely to spur KS to other firms, much like a snowball effect that leads to regional development. This study is based on a mixed methods approach. The first part of which consisted of a survey administered to ICT and manufacturing firms in four regions, namely South East Ireland, North East Brazil, Bucharest-Ifov, Romania and Castilla-La Mancha Spain. The second part comprised of interviews with regional stakeholders and experts on KS and innovation. Findings suggest that there are five channels of KS that are actually critical for KS propagation. The major contribution of this study to existing research is that it provides new insights on KS by explaining how it happens and how it can be propagated at the regional level. This research has also a considerable implications for policy makers, enterprise support agencies and practitioners because it posits that, by focusing on five specific channels of KS, KS can effectively be propagated at the regional level leading to the enhancement of regional innovation capabilities and capacities.

TRANSLOCAL SOCIAL CAPITAL AS A RESOURCE FOR ADAPTATION TO COASTAL HAZARDS ON NORTH JAVA, INDONESIA

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Boris Braun, Institute of Geography, University of Cologne, Germany

Social capital is a key asset in the adaptation processes of communities. Especially in the Global South, people are able to respond to natural hazards based on their self-organization abilities and social networks. In a globalized world, social capital is increasingly organized across boundaries. Despite this fact, most of the existing studies in the field of hazard research have a local or regional focus and tend to underestimate the manifold social ties that extend over larger geographical scales. This study aims to overcome this limited view of social capital in hazard research by conceptualizing social capital as a translocal phenomenon. We argue that, translocally anchored social capital enables long-term and innovative adaptation. Through processes of migration and trans-local networking, people establish social fields that stretch far beyond local borders. This study uses evidence from communities under treat of sea-water inundation on Java (namely Jakarta, Semarang and adjacent rural areas) to decipher the relations between translocally organized social capital and adaptation. Using focus-group discussions and a standardized household survey (n = 950), we analyse how the social capital of coastal communities is developed and how it enables people to adapt to coastal hazards. We found that translocal networks have a positive influence on proactive responses. However, in contrast to local

social capital which often works as a substitute for a lack of other capitals, our data indicates that translocal one correlates with economic and human capital. This result means that long-term responses are more likely to be accessible for better off households. Poor households are more likely to be excluded from these networks and have to rely on local social capital, which enable them to response on a more short-term basis. The study concludes that interventions in poor communities designed to enhance translocal social capital may offer solutions to this problem.

PARTNERSHIPS BETWEEN TOURISM STAKEHOLDERS FOR THE IMPLEMENTATION OF SUSTAINABILITY: THE CASE OF ALGERIA

Soufiane Boulassel, Eötvös Loránd University, Hungary

The existence of partnerships between tourism stakeholders is a prerequisite for successful sustainable tourism projects. Partnerships between private and public actors enable the financing of quality infrastructures, which is necessary environmentally, economically and socio-culturally inclusive tourism development, it also promotes the exchange of experiences and know-how between international actors.

This paper aims to reveal the reasons for the mismatch between the supply and demand for sustainable tourism products. Besides, it is also the goal of the presentation to identify some opportunities to establish participative collaboration between the different actors of tourism related to Algiers, the capital city of Algeria.

Indeed, I have found that among the factors that can lead to the failure of any form of sustainable tourism, the lack of studies in advance of tourism demand in line with what tourism stakeholders can offer as a sustainable offer. A temporal conflict between the logic of public actors and private tourism organizations was mentioned by several stakeholders. Moreover, there is a strong need for establishing a partnership charter between tourism stakeholders, which is a pillar of sustainability in the sector.

THE IMPACT OF TERRITORIAL WIDE AREA COOPERATION IN THE ADRIATIC-IONIAN REGION: THE MULTILEVEL GOVERNANCE CHALLENGE

Alberto Bramanti, Bocconi University, Italy

Paolo Rosso, OECD - Trento, Italy

In this paper, we want to discuss the future of wide area cooperation looking at the proposal of a strategic meta-idea to be articulated throughout a discussion process and translated into concrete and tangible actions and solutions. Secondly, we will focus on the method to be adopted to bring to a positive end a complex process in which multi-level governance represents a true challenge.

Three key open questions will guide the debate in terms of strategy and new framing ideas:

What are the key phenomena and challenges for which the macro-regional level emerges as the most appropriate and effective scale of intervention?

Which solutions and collaboration models can be proposed to respond to the identified phenomena and challenges of the Adriatic and Ionian Region?

Which dynamics and trends will be determinant for the future development and growth of the cooperation area in the medium-long term?

The elaboration of an overall dynamic and long-term vision for the future of the macro region is an essential step to orient present and future decision-making and mobilise joint actions at the transnational level throughout the cooperation area.

This makes the existence of appropriate governance models fundamental. The ideal governance structure is inclusive, allowing for the engagement of a wide range of stakeholders; dynamic, fostering experimentations and the development of innovation projects; and focused, preventing the capture by specific interest groups or lobbies. In practice, the huge challenge lies in guaranteeing the needed degree of openness, participation and ownership of the process by stimulating the active participation of all the relevant public and private stakeholder while at the same time guaranteeing its effectiveness in terms of capacity to select and take decisions around policy priorities and actions.

The paper will finally present the methodological preconditions and some operative solutions to guarantee the success of the next programming cycle in the area.

POST-DISASTER HOUSING MARKET AND STATE INTERVENTION, AN URBAN-RURAL STORY. COUNTERFACTUAL ANALYSIS FOR ITALY 2009

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There are several ways to recover from a disaster as an earthquake. Land is not shaking everywhere with the same effects and the seismic destruction can affect differently urban and rural settlement. Housing is one of the most affected market and its recovery is a good signal for the overall regional development. One of the less adopted and studied policy method is the massive State investment for private housing reconstruction. Using an Italian case as quasi-laboratory, L'Aquila earthquake in 2009, this paper adopts a difference-in-differences methodology with different control groups. The scope is to define the combined impact in the medium run of the earthquake damages and State driven reconstruction process for the affected housing markets. Results shows a clear differentiated path of recovery between urban and rural municipalities, where the latter perform even better than their counterfactual while the urban settlements are still depressed. Part of these outcomes are explained by the effective use of public expenditure for reconstruction.

KEY-ACTORS IN RURAL DEVELOPMENT PROCESSES: WHO THEY ARE AND WHY THEY GET INVOLVED

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Rural areas have become a growing matter of funding during the last years in Germany. One initiative called "Rural Upturn" (Land(auf)Schwung) has started in 2015 with the aim to foster innovative strategies tackling economic and/ or demographic shrinkage. 13 regions have been provided with a regional budget on their own responsibility. One crucial requirement, set by the funding ministry, was the building of partnerships with local actors, realised through existing networks as well as the involvement of new actors. It was envisaged to generate new impulses in tandem with new strategies of activating entrepreneurial people.

These place-based, participative approaches are related to theoretical debates about the benefits of participation and the functionality of social innovations. One important aspect for understanding the performance of such processes is the role of single actors, referred to as "key actors". Related literature emphasises the high value of these actors for the success of such partnerships. However,

hitherto there are only few insights about the practical benefits of such actors in partnerships for rural development. Against this background we raise three questions:

1. Who are key actors in these partnerships for rural development and what are their characteristics?
2. Which resources (critical thinking, power relations, networking capacities) do the actors contribute?
3. What are the actors' motivations for participation?

For answering the research questions, we are going to conduct a quantitative online survey among all partnership members in all 13 regions. We expect a response between 80 and 150 questionnaires. The (preliminary) results will reveal insights about the implementation of funding requirements by the regions and which actors contribute to the functioning of such rural development processes.

DIGITAL PERIPHERY? A COMMUNITY CASE STUDY OF DIGITALIZATION IN THE SWISS ALPS

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The potential of digitalization in peripheral Alpine regions is widely discussed. Although Switzerland has one of the highest national coverage of broadband in the world, there is a lack of knowledge regarding the socioeconomic transformation of local communities as a result of the adoption of digital technologies. Even more surprising is the fact that potential negative impacts remain unquestioned. This study contributes to debates on broadband development and adoption of digital technologies in the periphery. We show that digital connectivity offers chances but also entails crucial limitations as urban-rural linkages can be created, yet spatial divides still exist. The paper presents results from 46 qualitative interviews with a large variety of actors in the peripheral region Engiadina Bassa/Val Müstair. We followed a community case study approach (see Salemink et al. 2017) in order to combine research on connectivity and inclusion. Our interview data show that digitalization has a high potential in terms of innovation for larger enterprises, larger hotels, schools and health service providers. In contrast, being connected with broadband does not create more innovation per se, but can advance it. Furthermore, particularly smaller businesses struggle with the high costs of becoming digital and their owners tend to become more cautious and stressed. Many interviewees noted that a connection to broadband is not necessary for all kinds of activities. In terms of spatial aspects, we argue that digitalization reduces cognitive distance between core and periphery while developing new markets and generating new customers. Our study contributes to a more nuanced understanding of the community impact and local transformations resulting from digitalization. The study connects with the session's focus on social and economic transformations and use of broadband in peripheral regions, and is related to the topic of contested spatial aspects of broadband roll-out in terms of urban-rural linkages.

REFLECTIONS ON THE IMPACT OF THE ADVANCED MOBILITY IN THE EURO-REGION GALICIA-NORTH OF PORTUGAL – IS IT POSSIBLE TO ADVANCE IN THE AUTOMOTIVE GLOBAL VALUE CHAIN?

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The emergence of advanced mobility, understood as the mobility associated with autonomous, shared, electric and connected vehicles, is shaking the pillars of traditional industry and the global value chain of the automotive industry (GVC). The circumstances associated to advanced mobility denote threats in the industry worldwide, but also certain opportunities for companies or regions to

progress from peripheral or semi-peripheral positions towards the core in the GVC. This exploratory study aims at reflecting on the impact these changes can have on the Euro-region Galicia and the North of Portugal. This region is characterized by a strong implementation of the automotive industry, as well as other mobility-related industries, such as ICT, Aero-space or logistics, although to a lesser extent than the automotive industry. Particularly, this paper analyses the competences that exist in the Euro-region to face these new circumstances from a perspective called Emerging Network Competences (CER). This perspective implies a multidimensional approach, which must consider the absorption and transformation capacity of regional agents (companies, institutions and society), the capacity to build individual and collective values, and the integration and connection of multiple realities and multiple perspectives. Given this panorama, the growing intersection between fields of activity not traditionally connected, such as ICT, aerospace, automotive and hyper-longevity, plays a fundamental role and can open business opportunities linked to advanced mobility. Hypothetically, it can favour an evolution in the global chain of value for the industry associated and an upgrading in the regional development.

THE RELATIONSHIP BETWEEN THIRD PLACES AND ECONOMIC DEVELOPMENT: AN EMPIRICAL ANALYSIS FROM CAMBRIDGESHIRE, UK

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In the early to mid-twentieth century, many rural parishes and villages in England housed a variety of services such as primary schools, butchers, bakeries, post offices, shops, pubs, GP practices, and bank branches. Although many rural parishes and villages today still retain one or two of these services, there has been a sharp decline in the numbers of small retailers starting from the 1980s, as documented by many academic papers and research reports.

Generally, services and small retailers serving rural villages and other dispersed hamlets, or 'village services' are valued by individuals and local residents as incubators for wider relationships and activities, either formal or informal, outside of their private domains and workplaces. In this context, village services are perceived as institutions which serve as 'third places', thus social surroundings alternative to other social environments such as homes and workplaces, identified as 'first places' and 'second places' respectively (Oldenburg 1989). Third places provide ideal settings for the origination and definition of societal orders, and delineate frameworks and boundaries for individuals and groups (Mount and Cabras, 2015).

Frequently, village services help to accumulate and shape social capital within the communities they serve, with social capital being the degree of social interaction, cohesiveness and networking (Putnam, 2000). In this respect, higher levels of social capital can help to facilitate the flow of knowledge and information, which lead to positive impacts on community togetherness and engagement (Granovetter, 1985), facilitating dialogues between and within groups, fostering cohesion and exchange of ideas, increasing local knowledge and, ultimately, fostering economic development (Cabras, 2011).

The study presented in this paper explores the relationship between the presence of third places and socio-economic development in rural areas of Britain. To develop the study, the author focuses on a group of local authorities in Cambridgeshire, developing a unique dataset comprising longitudinal information about facilities and services available the selected areas between 2000 and 2016. Data are reported at a parish level, allowing for a granular analysis of the changes occurred in the selected parishes. Empirical results obtained from the analysis provide factual evidence that the decline of rural services has a considerable impact on residents in peripheral and remote areas, corroborating findings gathered from previous studies on the significant relationship particularly between local small

retailers and social and economic development in rural communities. Findings from the analysis are discussed in the light of policies and strategies which could help preserving the positive impact that local services and facilities have on the English countryside.

MOBILIZING PLANNING CULTURE TO CONCEPTUALIZE CROSS-BORDER SPATIAL PLANNING

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Spatial planning traditionally stops at national administrative boundaries. European financial (e.g. INTERREG) and legal incentives (e.g. European Groupings of Territorial Cooperation) have encouraged cross-border cooperation. Several cross-border planning strategies are currently under discussion in several areas (i.e. German-Polish border, Greater Region). Cross-border spatial planning remains however largely a challenge, posing unique questions. As demonstrated by Jacobs (2016), the challenge lies in the capacity to organise a “balancing act between two planning systems” steering the organization of the borderland. We consider the concept of planning cultures promising to advance our understanding of cross-border spatial planning insofar as the concept emphasizes the role of societal and planning environments in planning practice.

This mostly conceptual paper investigates how the concept of planning cultures can be applied to capture the specificities of planning in a cross-border context. The paper firstly undertakes a literature review of the concept of planning cultures developed over the last 50 years (as defined by Friedmann 1967, Sanyal 2005, Knieling and Othengrafen 2009, Jacobs 2016, Pallagst forthcoming among others). After having reviewed the latest publications dedicated to planning cultures and planning theory in cross-border areas, it then develops a theoretical framework for applying the planning culture concept to border areas. Thirdly, the paper suggests methods to test the robustness of this conceptualization and to observe what practice entails and how planning practice can unfold in a cross-border context. The paper draws upon a solid understanding of cross-border governance and European planning systems acquired through diverse research projects.

THE IMPACT OF THE EU COHESION POLICY ACROSS REGIONS: EVIDENCE OF HETEROGENEOUS EFFECTS

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The Cohesion Policy (CP) represents the main territorial policy of the European Union (EU), aiming to reduce disparities among regions. To better address this aim, the largest majority of the funds are devoted to poorest regions, called “Objective 1” regions.

During the last years, in response to the debate on the effectiveness of the CP, a broad empirical literature on the impact evaluation of the EU funds has flourished. In the debate, some consensus on the effectiveness of the EU transfers emerges, but with many additional distinctions. For instance, various researches focus on the heterogeneity of the effect of CP funds across European regions. Among them, Becker et al. (2013) suggest for a systematic heterogeneity of the effect of the funds across Objective 1 regions, depending on regional characteristics, whereas Cerqua and Pellegrini (2018) investigate how the variability of the impact derives from the heterogeneity of regional transfer intensity.

The present study intends to provide a further contribution to this strand of literature by estimating the different quantiles of the effect of EU funds on regions, rather than the average effect, as already investigated in previous researches. More specifically, the impact of the CP on the regional per capita GDP growth is analysed through the method proposed by Chernozukov et al. (2013). The applied methodology allows to estimate the counterfactual distribution of the regional GDP growth, that is the distribution of the growth's levels that Objective 1 regions had if they would have not received the funds. By comparing this estimated distribution with the observed one, it is possible to obtain the whole distribution of the treatment effect, and not only its average value.

The results, related to the programming period 2007-2013, confirm the heterogeneous impact of CP on regional economic growth, with a larger impact on less performing regions.

DAM DISASTERS IN BRAZIL AN THE REGIONAL LOGIC BEHIND DAMAGE VALUATION: THE CASE OF MARIANA (MINAS GERAIS-BRAZIL)

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Technological disasters have become a constant recurrence in Brazil. Three years ago, the Fundão dam in Mariana, Minas Gerais, collapsed, leaving a trail of severe economic, environmental, and health impacts over the communities along the Doce river basin. Early this year, the Corrego do Feijão dam in Brumadinho, Minas Gerais, also collapsed, causing more than three hundred deaths and yet unmeasured effects. Since then, public opinion has been significantly raised and other mining dams in Minas Gerais are under scrutiny, in some cases prompting the removal of local populations from immediate vicinities of dams. In common, one can say that these two disasters are both coming from the mining activity in the State which is poorly regulated, leaving mining companies free to reduce security monitoring and avoid costs with improvements in new waste technologies. The purpose of this paper is to discuss the process of damage valuation for the case of Mariana and analyze important local features that must be accounted for when computing indemnity for the impacted. After a disaster such as the one in Mariana, a vicious cycle of underdevelopment (Myrdal, 1957) usually follows, leaving a very marked process for the affected local communities. This is a regional trace that must be accounted for when damage valuation is carried out.

In terms of economic valuation, the impacts range from difficulties in job reallocation at the local labor markets to extreme difficulties in reestablishing small businesses. In the case of health issues, the impacted usually develop diverse physical and mental diseases that last for many years, reducing not only their quality of life but also making it more difficult to resume their labor and leisure activities. Moreover, environment damages have a larger impact in small communities, as the latter are usually more dependent on environment services, as access to water and land. Finally, in terms of cultural effects, it is straightforward that communal bonds, local values and heritage ties are disrupted, affecting local identities which are fundamental for local development. In the presence of long-lasting underdevelopment, it is also urgent to define socioeconomic fostering plans, including territory reconversion, which ultimately depends on local and regional capacities that, in some cases, were completely shattered.

Despite being fundamental, the recognition of local features for damage evaluation purposes has not been considered, by the mining companies, for practical purposes. The evaluation and valuation of the damages in the Doce river basin is taking into consideration a homogeneous treatment of the

impacted, and effects are being analyzed from a general perspective, prompting resolutions that are far from being locally oriented. Moreover, reconversion plans are not being discussed in any level, leaving affected communities without any long-run plan for support.

On that note, this paper offers a more regionally encompassing view over the valuation process, taking the experience of Mariana as a study case. The valuation method adopted by the research team will be presented, emphasizing its local features in four main areas: economic, health, environment, and culture. The main point of discussion accrues to the limits imposed by the conventional damage valuation methods in economics, which is a constraint in any attempt to incorporate local features, usually separating the individual from a collective analysis, making local reparations and recovery virtually impossible.

IMPACT ASSESSMENT OF FOOD ACQUISITION PROGRAM - INCENTIVE MODALITY FOR MILK PRODUCTION IN THE NORTH REGION OF MINAS GERAIS (BRAZIL)

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The objective of this article is to analyze the possible regional impacts of the food acquisition program, especially milk in one of the poorest regions of Minas Gerais State - the north of the state. For this, it uses a unique and practically unexplored database that refers to the database of the producers of the program in the north of Minas Gerais. A characterization of the program of food acquisition, its evolution in budget terms and its different modalities. The second part of the article presents a brief characterization of the northern region of Minas Gerais highlighting the characteristics that make this region one of the poorest in the country. The third section presents the characteristics of the production and evolution of the milk acquisition program in the north of Minas Gerais, discussing the characteristics of the producers. The fourth section presents the two econometric models that were constructed to achieve this purpose. The first seeks to measure which variables explain the permanence of the milk producer as supplier of the program. The second econometric model performs a panel whose objective was to evaluate which are the most important variables for the milk delivery by the producers. Be used in the analysis and finally the main results.

A NON-COMPENSATORY DEPRIVATION INDEX AT MUNICIPALITY LEVEL FOR ITALY

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Composite indicators are useful tools to synthesize complex and multidimensional phenomena. In recent years, the use of GDP as a single indicator of prosperity has been considered reductive (Stiglitz et al. 2009). In terms of spotting local disparities, a practical alternative is represented by a deprivation index which allows for individuating critical situation at a very refined spatial scale and capture the complex geography of deprivation (Noble et al. 2006). Generally, this measure is built as a socio-economic synthetic indicator including several dimensions, as health, income, employment, and disability. In this paper, the aim is to build an areal deprivation index for Italian municipalities exploiting both census data and interpolation techniques. In fact, census data are often adopted to derive composite indicators of deprivation. However, it leads not to consider income as a relevant dimension of material deprivation due to the lack of data at a very local level. In the current study, Bayesian Interpolation Method (Panzera et al. 2016) allows us to disaggregate GDP per capita at

municipality level and improve representativeness of the underlying phenomenon. Material and social components are further investigated separately and then considered as an area socio-economic deprivation composite indicator. Lastly, in order to avoid full substitutability among the components, the index is derived according to the MPI technique (Mazziotta and Pareto, 2016). The results seem to offer a wider picture of socio-economic deprivation useful for policy makers at regional level to target critical situations.

SMART CITIES: URBAN NEXUS OF AMBIVALENT DIGITAL AND SUSTAINABILITY TRANSITIONS

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Smart Cities epitomize increasingly instituted public-private narratives and innovation strategies that highlight a convergence of two aspired, or prophesied, historical societal transformations. On the one hand, the one around sustainability grand challenges, which requires a fundamental change in established modes of production, consumption and living. On the other, a digital transformation in which new technologies and business models are seen to disrupt established ways of being, doing and creating wealth that will engender radically new economies and societies. Cities are considered as crucial contexts to incubate, organise, provide meaning and scale-up these contemporary transformations. How do smart city policies and initiatives try to achieve this convergence in place? Which are the rationales and values that are used to justify, articulate and drive, in place, a transition to the other?

This contribution argues that the contemporary concept of Smart City encounters two different orders of value. The first originates from sustainability considerations and emphasises the primary need to be responsible, frugal, inclusive and protect common resources. The second originates from digital modus operandi and primarily values knowledge and data sharing, democratized participation, digital commons and open access to resources. But do Smart Cities actually operate a digital transition to achieve wider sustainability goals or do they seek a sustainability transition in which digital should be adjusted? Illustrating these issues through the comparison of city data-related Smart City initiatives in Helsinki and Amsterdam, this paper shows that different orders of value coexist but are settled down in different ways from a place to another. The paper also argues that the concept of Smart City should be seen as an opportunity not only to develop place-based solutions fitting both digital and sustainable purposes but also to experiment and co-construct across spaces the controversial values of such transitions.

FROM STRATEGIC SPATIAL PLANNING TO SOFT PLANNING: SO WHAT'S NEW?

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In the last decade, the concept of soft planning has become widely popular within the planning literature. Since G. Haugton and P. Allmendinger have used the concept of soft spaces in 2007 to frame the planning experience run in Thames Gateway that crossed traditional administrative boundaries and introduced new governance processes between formal structures and institutions, soft planning has been broadly adopted to embrace a number of planning practices that occur at the margins of the statutory system.

However, the proliferation of literature making use of the concept and the dispersion of approaches and planning practices that it seems to cover, lead us to question the limits of the concept and its opportunity. On the one hand, soft spaces and soft planning seem to be used interchangeably lacking from a clear-cut distinction and definition. On the other hand, there is still no systematized scrutiny of what soft planning is bringing anew to spatial planning. What exactly distinguish soft planning from strategic spatial planning which, in opposition to a regulatory land-use planning style, had already called for “working across boundaries” based on strategic spatial development-oriented thinking and territorial governance. Is it only a matter of informality? Is it a way of dealing with territorial rescaling and the emergence of new planning scales? Does it intent to grasp undercover devolution or decentralization? In a word, why do we need soft planning?

PARTICULARITIES OF COOPERATION IN TOURISM IN PERIPHERAL AREAS. EMPIRICAL EVIDENCE FROM VATRA DORNEI, ROMANIA

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The cooperation between all the stakeholders involved in tourism is more and more regarded as being an essential tool for attaining the sustainable development of lagging regions, such as the rural, mountainous and peripheral areas. Although the importance of cooperation is widely acknowledged, questions remain about how cooperation manifests in a tourist destination and about what is its real impact on the sustainable development of a territory. These questions are approached through a case study on Vatra Dornei, Romania, a city that highly corresponds to the profile of the areas that regard tourism as a means of ensuring their development from an economic and social point of view. Thirty interviews with local stakeholders involved in tourism have been conducted in order to capture and analyze the dimensions of cooperation in this tourist destination. Each of the stakeholders was asked about the cooperation relationships they developed at various geographical scales and for various purposes related to tourism. Approximately 300 relationships developed in the last two years among tourism stakeholders have been identified through snowball sampling. This implied that the initial 10 main stakeholders indicated further relevant institutions and firms for the development of tourism in Vatra Dornei, who were subsequently interviewed. The information gathered was processed through Social Network Analysis, aiming at quantifying the characteristics of cooperation relationships, as a preliminary study on the subject of tourism networks’ impact. The results indicate different behaviors of cooperation among the public and private local stakeholders, and emphasize a growing predisposition and interest of the destination’s representatives towards cooperating at a regional level, one of the main purposes being that of developing an integrated tourism product centered on the concept of sustainability.

QUANTIFICATION OF THE ‘AIRBNB EFFECT’ IN THE CITY OF MADRID

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The main purpose of our paper is to present a quantitative analysis of the evolution of the impact of the Airbnb business across the city of Madrid during 2014 to 2018, in order to detect micro-markets or hot spots with different –and even opposite– outcomes. In effect, since 2014 the number of Airbnb lodgings has been multiplied by 3.5 in this city. The city council has announced a ‘shock plan’ to control and regulate this business throughout the city. However, we wonder to what extent this regulation should affect equally to all its neighborhoods due to the different balance that the contributions of Airbnb have to a local economy, depending on certain locations and circumstances. To this aim, we will apply spatial panel data modelling to a hedonic housing price model to estimate the willingness

to pay for less Airbnb lodgings in the city of Madrid. We will use the information freely available from the Internet in two web pages, 'Airbnb Data Collection' and 'Inside Airbnb', which provide databases for Madrid in different time periods from 2014 to 2019. We apply a quantile conditionally parametric model (CPAR) that allow one to quantify the heterogeneity of these willingness to pay values across quantiles of the conditional distributions of housing prices and their spatial heterogeneity across the whole study area. The results show that implicit prices for less Airbnb activity differ substantially across the housing markets, depending on different covariates. In particular, in some areas, households seem to make a trade-off between improvements in communication and some extra Airbnb apartments.

STUDY ON EXCESS COMMUTING AND JOB-HOUSING SPATIAL MISMATCH BASED ON MULTI-SOURCE TRAVEL DATA

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This study applies the theory of excess commuting to analyze the extent and tendency of Job-housing spatial mismatch in the urban area. Multi-source of travel data such as Smart Card data on Metro and bus, bike-sharing system data and travel survey data are utilized in this study in order to reveal multi-dimensional and more accurate job-housing spatial relationship and hopefully can provide more applicable implication for policy makers.

WHEN THE NOVELTY FADES. SOCIO-TECHNICAL, SPATIAL AND TEMPORAL DYNAMICS OF REGIONAL ENERGY TRANSITIONS

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Regional energy transitions are complex processes that are determined by manifold dynamics. Three core dimensions of regional energy transitions are identified, the socio-technical, the spatial, and the temporal dimension, and integrated in a comprehensive framework.

We conceptualise the overall transition as consecutive sequences of s-curves, each unfolding in phases. The first three phases, 'initiation', 'expansion' and 'consolidation' are well established in the literature, and we add a particular focus on the social dynamics that constitute them. We also add a fourth phase, a period of 'fragile new order'. In this phase, socio-technical constellations seem to be well established and the novelty fades. This induces the danger of complacency which decreases transition dynamics, and results in a tipping point from which the transition may or may not proceed depending on the institutional arrangements and on how the regional agents cope with them.

Drawing upon an in-depth case study of the Oldenburg region, we illustrate the social dynamics of each phase and show how agents cope with the fragile new order. The observed adaptation processes include moving back to informal constellations as well as multiple exit strategies.

MODES OF BIOGAS PLANTS DEVELOPMENTS IN ENERGY TRANSITION COUNTRIES

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Energy transition belongs to processes that have recently significantly influenced changes in rural areas in Central European countries. Technological advancements in generation, processing and utilization of biogas energy caused huge spreading of biogas stations as technology innovation that importantly affected the structure of agriculture. We know that measures and settings of supportive schemes for biogas energy vary in individual countries. Such variety eventually resulted in different socio-spatial patterns and location of biogas station in studied countries (Czech Republic, Poland, Slovakia). We also know that planning, location, the structure of input material, operation and ways of usage of final products of anaerobic digestion importantly influence ways how biogas stations are operated. This research presents two different modes of operating biogas plants and refers to the concept of embeddedness of enterprises in the local context. In the first mode, biogas plants operate as an integral parts of agricultural farms (biogas on-farm model); in the second mode they operate as independent companies resulting from investments by external entrepreneurs (biogas off-farm model). The aim of our research is to assess the differences caused by i) various law regulation, ii) funding (incentives) for biogas stations. The success of biogas projects and the entire energy transformation process depends, on the one hand, on the synergy of activities at the central, national level and, on the other hand, on taking into account the specific socio-economic features that characterise the location of the biogas plant. Their possible success or failure are primarily related to the perception of biogas plants by local communities and their functioning in the local environment.

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THE MISSING ROLE OF REGIONAL PLANNING. HOW SPATIAL AND SECTORAL PLANS IN GALICIA DISREGARD THE EUCALYPTUS CONTROVERSY

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Eucalyptus plantations represent today an enduring but still emerging social conflict in Galicia (NW Iberian Peninsula). Their expansion, from 27,639 ha in 1973 to 287,983 ha in 2009, at the expense of livestock decline and land abandonment is commonly linked by vast sectors of population to diverse environmental crises. In theory, these kind of scenes have discursively led decision-makers prioritize integrated spatial planning over sectoral policies in order to broaden stakeholders' framework and equilibrate their interests. With the purpose to replicate this paradigm, this research focuses on the legal relevance validated to Eucalyptus management in Galician spatial planning policy (2009-2019). By means of documentary analysis, we analyze the Galicia Spatial Plan, the Coastal Plan, the Landscape Catalogue, and the Natura Network 2000. We firstly find out that Eucalyptus plantations are barely mentioned and systematically presented in sectoral terms. This leads to an extended omission of potential cross-sectoral conflicts inherent to their management. Consequently, spatial planning rarely introduces restrictions that could transcend the only and dissociated sectoral plan in force with competences: the Forest Plan. We conclude that the omission of cross-sectoral conflicts in regional planning perpetuates controversy and represents today one of the biggest missing opportunities for conflict resolution in spatial planning.

MAKING SENSE OF CHANGING INNOVATION LANDSCAPE IN EUROPE THROUGH MULTIPLE CRITICAL JUNCTURES (1982-2018)

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There has recently been an increased recognition that the nature of innovation has been changing, particularly in Europe. While many scholars have pointed out to process dimensions of innovation, others have stressed upon the arrival of new actors and emergence of related public policies. Although such arguments indicate that the innovation landscape today is different than what it was decades ago, characteristics of this particular change as well as the social, political and economic developments that have impacted it remains unexplored. This paper therefore aims at delving into specificities of the current innovation landscape in Europe through multiple critical junctures since 1980s. It does so through content analysis of documents gathered from the European Commission and the European Union online databases. Preliminary findings indicate that there are some patterns on how the innovation landscape has been changing, namely: i) geography of innovation has been enlarging, ii) there has been a heightened emphasis on digitalisation, social innovation, eco-innovation and open innovation, iii) there has been greater recognition of the role of culture and art in innovation, and iv) local governments and municipalities are now expected to assume bigger roles. Consequently, this paper argues that all these developments affect our perception of the concept of innovation, leading to its evolution over time.

THE URBAN TECHNOLOGY PROJECT: SELLING SMART CITIES AS THE NEW COMPETITIVE ADVANTAGE

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Many cities leverage megaevents or large-scale urban regeneration projects to advance ambitious urban policies that would otherwise fail to gain traction, in terms of funding or citizen support, without the novelty, scale, and timeline of the intervention. Cities frequently use their role as host of The World Cup or The Olympics to cast projects and programs as required and thus circumvent basic policy analysis and evaluation (Flowers 2017). More importantly, the asserted necessity of these interventions obviates the need to develop a robust analysis of viable alternatives (McCann and Ward 2011). Given the timeline and scale of the intervention, the policies are clear. There is no alternative. The urban technology project pursues “projectification” by positioning itself as necessary; an inevitable investment for the future competitiveness of cities (Clark 2019). Without these smart cities projects, cities cannot develop the data, objects, systems, and platforms required to build and operate a technologically-competitive city in the global economy. Cities who are receptive to technology are platforms for economic growth. In a world of interjurisdictional competition, the city without a commitment to the smart cities project is a uncompetitive as a city that just lost its football franchise to Los Angeles. The smart cities project aligns its rhetoric with the urban entrepreneurialism of festival marketplaces and uneven development (Harvey 1989; Fainstein 2001; Smith 1984).

This paper highlights examples of how the urban technology project has used this discourse to facilitate the implementation of marquee projects such as the Sidewalk Labs project in Toronto, the Amazon H2 competition, the Brooklyn and Philadelphia Navy Yards redevelopments, and the Ponce City Market and Chelsea Market projects.

Although the urban technology project maintains a discourse about disruption and large scale changes in the built environment, actual smart cities interventions are often incremental, and episodic (frequently temporary and experimental). This paper unpacks paradox in the broader context of how and why the smart cities project co-opted “projectification” and the implications of the urban technology project for city governance.

SUSTAINABLE ENTREPRENEURSHIP AND ELECTRIC VEHICLES: OPPORTUNITIES AND CHALLENGES

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Small firms involved in sustainable entrepreneurship initiatives face many challenges, particularly when promoting innovative products and ones which require cooperation from larger firms. This study discusses two firms, BVB Innovate from Germany and EP Tender from France, seeking to develop and diffuse the concepts of auxiliary range extenders for electric vehicles. Range extenders seek to solve the problem of 'range anxiety' in electric vehicles through making available for rental power units that can be attached to electric vehicles as a trailer during longer journeys.

Through interviews with both firms, and other industry actors, the study finds that while both firms have received significant financial support from the EU, they have also been influenced by the different regional and national contexts in which they work. While ultimately competitors the case also reveals interesting cooperation between the two firms in promoting the range extender concept. Fundamental to future success, however, is the need for large car manufacturers to work in partnership with them. While the sustainable entrepreneurship literature suggests that small firms can often positively influence larger ones towards sustainability goals, this study finds that this influence is limited, depending ultimately on the complex organisational motivations and frameworks within which large car manufacturers operate.

PULLING EFFECTS IN MIGRANT ENTREPRENEURSHIP: DOES GENDER MATTER?

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Valentina Meliciani, LUISS University, Italy

Mariacristina Rossi, University of Turin, Italy

In this paper, we examine whether the existing stock of migrant firms induces more new firms of the same co-ethnic group in the same sector and province, which we call "pulling effect". We do so by analyzing the number of new firms created each year by country of origin, sector, and province, drawing on administrative data of the population of individual firms observed over the period 2002-2013. We build on the concepts of "role models" and "mixed embeddedness" and focus on gender differences and their drivers in pulling effects. To our knowledge, this paper is the first to link the literature on the determinants of immigrant entrepreneurship with studies on gender differences in the exploitation of social networks. We find strong and robust evidence that the existing stock of migrant firms induces more new firms of the same co-ethnic group in the same sector and province and that this effect is stronger for men than for women. We also find that gender differences are higher for migrants coming from countries with low levels of gender equality. Finally, the characteristics of the country of origin of migrants matter more than those of the province of destination in determining gender differences in the clustering effect.

UNIVERSITY'S SPIN-OFFS AND REGIONAL INNOVATION ECOSYSTEM. CASE STUDY

Tatiana Corejova, University of Zilina, Slovakia

Maria Rostasova, University of Zilina, Slovakia

Andrea Corejova, University of Zilina, Slovakia

The universities have an important role to play in promoting the economic growth of regions through research, creating tacit and codified knowledge, and developing highly qualified staff, in the transfer of knowledge, technology transfer, within the framework of regional innovation ecosystems. It is the fulfilment of their third mission after education and scientific research. The ecosystem includes

different institutional forms from the agreements through the spin-offs firms based on the knowledge transfer, cooperation with regional and local government institutions on the innovation policy and cooperation with professional and employers' associations in the identification of trends and with students organisation in promoting the study programmes and employability of graduates. The case study presents the way, barriers, challenges and results of spin-offs of the University of Zilina, the survival rate and their roles as well as the impacts on the regional innovation ecosystem of Zilina region in The Slovak Republic. Universities in Slovakia are bound by legislative norms that limit freedom of action in some areas. This is mainly due to the funding way of universities.

RELATEDNESS, PATH DEPENDENCY AND THE DYNAMICS OF NEW FIRM CREATION IN THE UK

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In this paper we explore the relationship between dynamics of firm creation and both vertical and horizontal dimensions of knowledge recombination processes at the regional level. In particular, we complement previous studies looking at the role of relatedness on firm entry, which we define as the horizontal dimension, with the analysis of a vertical dimension shaped by localised path dependency in the evolution of regional industries. Controlling for region-industry heterogeneity across a longitudinal dataset of almost 700 SIC 5-digit level industries across 174 NUTS3 regions in the UK for a period of 15 years, we test the relative importance of both path dependency and different measures of knowledge relatedness defining the sectoral structure of regions on firm entry as well as entry in new industries. Our results point to a strong positive relationship of path dependency and relatedness on firm entry, suggesting the importance of cognitive proximity in the recombination of information and knowledge. These effects are found to be negative with respect to the emergence of firms in new industries, pointing to the role of diversification for more radical combinatorial opportunities. Interactions between the horizontal and vertical dimensions are also identified and discussed.

PERSISTENCE IN ENTREPRENEURSHIP: AN ANALYSIS OF THE DETERMINANTS OF THE START-UP RATE ACROSS ITALIAN PROVINCES

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Valentina Meliciani, University Luiss Guido Carli, Italy

Marco Pini, Unioncamere, Italy

Many studies have found that the regional level of new business formation tends to be rather constant over long periods of time. A first possible explanation is that regional determinants of new business formation tend to remain fairly constant over time (Fritsch & Falck 2007); a second explanation is the presence of an entrepreneurial culture, that can be thought of as an informal institution that is 'in the air' and changes only over long periods of time (North 1994; Nunn 2009; Williamson 2000). The relevance of regional cultures may be investigated by analysing cases that are characterized by disruptive shocks of framework conditions. Italy may be an interesting case study. Between 1927 and today, the country experienced the 1929 world economic crisis, the World War II, the introduction of a new constitutional base, and the reconstruction of the economy. Moreover, during the forty years following the end of the war, Italian government implemented an intense subsidization programme in favour of Southern provinces aimed at fostering the emergence of firms in the less developed regions. Notwithstanding this programme Italy is still characterized by a huge development gap between North and South. Putnam, Leonardi and Nanetti's famous work in 1993 found that Italian regions' lack of social capital is an important cultural and social structural factor affecting economic growth. Based on data provided by a comprehensive survey conducted in 1927 by the Italian National Statistical Institute (ISTAT, Censimento Industriale e Commerciale, 1928), we analyse the persistence

of regional entrepreneurship. In particular, we regress the start-up rates in Italian provinces (NUTS3) for the years 2000–2016 on the self-employment rate in 1927. We find a different effect for male and female self employment and for innovating industries. Furthermore, we investigate the post crisis “resiliency effect”. We find a significant reduction of the average start up rate in all Italian provinces after the crisis (between the period 2000-08 and the period 2009-16) that may be explained also by a regional culture of entrepreneurship rooted in the history.

SOFT PLANNING PROCESSES AND THE IMPLEMENTATION OF THE COHESION POLICY: THE LISBON METROPOLITAN AREA

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The paper analyses how spatial planning is taking place in the Lisbon Metropolitan Area’s (LMA), enhancing how it corresponds to the implementation of the European Union Cohesion Policies a local level. As such, it observes how are the statutory land use planning dealing with the instruments of spatial planning that are encouraged by EU-led initiatives and regulations, supported by European Structural Funds.

A particular emphasis will be put in the current programming cycle 2014-2020, analyzing the coordination between the LMA Spatial Plan (2002), which establish the main territorial orientation for the municipal land use plans; and with the 2015’s Integrated Strategy for the LMA Territorial Development, which, not being formally a spatial plan, coordinates the application of the 2014-2020 European founding, being closer to the content of the 2014’s new National Spatial Planning Law.

The paper will argue that, although different approaches occur through time, statutory planning ended up always by not being the key strategic element to support the main metropolitan investment decisions. As a result, a question arises: do the unsuccessful metropolitan planning effective results represent a continuous learning process of planning itself? Or did it anticipate that spatial development is not adjusted to rigid statutory instruments, having soft planning forms being the answer “in practice”?

THE NESTED STRUCTURE OF URBAN BUSINESS CLUSTERS

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Although the cluster literature is bountiful in economics and regional science, there is still a lack of understanding on how the geographical scales of analysis (neighbourhood, city, region) relate to one another, how they impact on the observed phenomenon and to which extent the clusters are industrially bound or geographically consistent. In this paper we explore clustering of economic activity through the construction of a measure of relatedness based on the joint probability of proximity and industrial similarity. Different forms for the function are considered, and we discuss the limitations of some of these, arguing that the right way to integrate multiple measures is through the construction of a joint probability function, which can be derived from a copula. This measure serves as the threshold used to perform a percolation on the network, which gives rise to a multiscalar organisation of the space.

In detail, we apply this methodology to the case study of Greater London focusing on two years: before and after the financial crisis of 2008. To guarantee the most exhaustive and precise information

possible, we turned to a longitudinal micro dataset recording all business organisations which are VAT trader and Pay As You Earn employers in the UK, as well as their different establishment if they are based in multiple sites. This is the Business Structure Database1 (BSD), which is provided by the Office for National Statistics (ONS) for free, although under secure access to protect anonymity and non-disclosure. This means that the information needs to be aggregated over at least 10 enterprises or local establishments, so that no individual enterprise can be identified. However, a significant advantage of this database compared to any other free-access source which allows singling out individual enterprises (such as Company House for example) is that this dataset is longitudinal, allowing us to look at changes over time. In detail, we apply this methodology to the case study of Greater London focusing on two years: before and after the financial crisis of 2008. To guarantee the most exhaustive and precise information possible, we turned to a longitudinal micro dataset recording all business organisations which are VAT trader and Pay As You Earn employers in the UK, as well as their different establishment if they are based in multiple sites. This is the Business Structure Database1 (BSD), which is provided by the Office for National Statistics (ONS) for free, although under secure access to protect anonymity and non-disclosure. This means that the information needs to be aggregated over at least 10 enterprises or local establishments, so that no individual enterprise can be identified. However, a significant advantage of this database compared to any other free-access source which allows singling out individual enterprises (such as Company House for example) is that this dataset is longitudinal, allowing us to look at changes over time.

VALUE CREATION AND SPACE IN THE SEX INDUSTRY: FROM THE CONCRETE TO THE DIGITAL FORM

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For the last five years, the livecam sex industry develops rapidly and is progressively taking the market of the dying porno film industry.

This development can be explained by looking at two scales.

First, the organization of the industry at the international and regional scales allows the connection of spaces with relatively low production costs – typically Romania and Columbia - with rather rich northern markets without any mobility nor of the performer, nor of the client. This makes a difference and allows lower production costs than concrete sex work, either the traditional sex work, which mobilizes migrant workers, or sexual tourism. This territorial system can be describe as a variant of the Global production network concept, a Global experiential digital network. The main differences with traditional manufacturing GPNs, consist in the strong engagement of clients in value creation processes and in its experiential dimension. This results from the improvement in ICT, namely video conference and payment technologies as well as from platforms business models.

Second, the creation value take a different form of traditional sex industries, given the absence of “fluid exchanges”. Linking a performer and a client in a private digital space for a show, the livecam constitutes a digital “experience”. It includes value creation resulting from the engagement of the client and of the performer, who both spend time, attention, and create the show. Contrarily to traditional sex industries, the livecam allows avoiding any public space and is therefore largely tolerated both in production and consumption countries. Specific value is also created by platform and technology companies, who insist on “empowerment” and “entrepreneurship” values by performers, as well as by the differences with traditional stigmatized prostitution activities.

UNIVERSITY – CREATIVE INDUSTRY KNOWLEDGE EXCHANGE IN THE UK

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The creative industries are a major component of the UK economy contributing £87.4bn GVA in 2015 (DCMS). Despite modest direct research funding towards the sector (£50 million in 2015) it is clear that universities are important catalysts in the development of the creative industries. Nevertheless, our understanding of these relationships is limited by poor quality data. Mechanisms for capturing and understanding the value and return on investment across the creative industries are weak.

This study explores in some depth the alignment between investment in arts and humanities projects that seek impact in cultural industries. The research uses 15 universities from the UK University Alliance as a sample group to understand the broad reach of knowledge exchange into the creative industries, examining both publicly-available and institutional datasets on the funding for creative industry research and knowledge exchange.

We find that the publicly available data from large public funders represents only 28% of awards by number and 62% by value of the awards recorded by the universities themselves. There are also insufficient means for compiling ‘bodies of work’ or capturing the longitudinal and systematic impact of research, which both makes it difficult to understand the fundamental and often unpredictable relationship between research output and impact and leads to the disaggregation and dilution of its reporting at a national level.

Commentators and funders now recognise that there are significant benefits to the co-location of particular kinds of creative enterprise. In parallel, as regional arts funding has declined, universities have stepped into the breach. They increasingly provide the social and economic infrastructures for the creative Industries. Universities regularly play a major role in leading and curating the creative networks in cities and their regions. This active brokerage has proved as important as specific subject expertise in stimulating and fuelling ideas, sharing knowledge and collaborating on research. In this study we dig below the surface of co-location to understand the quality and the pattern of the relationships that constitute and operate between such networks, and the roles that universities play in their development. We identify a broad association between the development of complex partnering activities and higher level of funding awards as these collaborative relationships mature and refine.

Successful universities have a combination of project clusters and co-publishing partnerships together with a diversity of projects that foster individual and collaborative creative action. The research finds that these clusters tend to exhibit relatively low degrees of strategic connectivity and are often reliant on Principal Investigators (PIs) as the linking node, making such networks vulnerable to changes in personnel. This suggests there is a need to build greater resilience into the projects and partnerships. One approach might be to invest in the development of more creative leaders including mid-career and collaborators, learning from existing successful behaviours and networks.

BORDERLESS ECONOMIC DEVELOPMENT: EUROPEAN UNION’S PRE-ACCESSION AID TO PORTUGAL

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The European Union (EU) is either known to be a “Europe without borders” or a “fortress Europe”, depending on the perspective we take. EU enlargement policy, on the other hand, is at the core of an

inclusive membership for all countries in the European continent (article 237.^o of the Treaty of Rome). Thus the concept of border (free of) has been at the centre of the debate in the EU since its conception. Despite the fact that Portugal is not divided into regions (except for the two autonomous regions of Azores and Madeira) the country may be considered as a single “region” from a European perspective. Thus, even before Portugal had joined the EU in 1986, the EU granted it, for the first time in its history, pre-accession aid to promote Portuguese economic development and to facilitate its future integration into the EU.

In a historical context where the concept of a pre-accession strategy did not officially exist as such, the EU was already establishing the basis for the future Instrument for Pre-Accession Assistance which similarly aimed at preparing candidates to fulfil their obligations as member states. This paper, thus, aims to chart the implementation of this financial aid in the country, in order to determine whether they had a positive impact and pushed the country beyond its borders of economic development and placed it nearer the Community’ averages.

OVERCOMING GOVERNANCE CHALLENGES TO ENACT TRANSITIONS FOR A CIRCULAR ECONOMY IN THE AMSTERDAM AND NAPLES URBAN REGIONS

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Circular economy, that is a system in which resources circulate in ‘closed loops’ and waste generation is minimised, emerged as new sustainability paradigm, challenging the existing economic models and sustainable development practices. Transition towards circular economy was placed high on the agenda of the EU as well as on those of central, regional and local governments across Europe and beyond. Operationalising this transition in specific territories, however, calls for coordinating a range of policy areas, from waste management, mobility, land use, to agriculture and innovation support, thus calling for collaboration across policy sectors and stakeholder groups. It also requires working across geographical scales and levels of government, as the flows of materials are seldom contained within the borders of a municipality and taking into consideration the spatial, socio-cultural or institutional characteristics of the territories in question. Finally, it requires the engagement of a vast array of economic actors, who need to embrace new circular business cases, have access to knowledge on those, and be incentivised through adequate regulatory environment. That said, regulation, for instance those on spatial planning, building standards, or reuse of food and organic waste, tend to lag behind the upcoming innovations to use waste as a resource, develop products or build in a circular way. Hence, new strategies, policies and platforms are needed to nurture the experimentation needed to enact the transition towards circular economy. This paper explores and classifies the governance challenges and barriers that need to be overcome to support circular economy transitions. It does so by drawing on and comparing two extremely contrasted urban regions: the Amsterdam Metropolitan Area and the Metropolitan Area of Naples.

GOVERNANCE THROUGH DIFFERENCE: THE CASE OF DISPLACED SYRIANS IN ANTAKYA NEAR TURKEY’S BORDER WITH SYRIA

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Since the start of the Syrian war in 2011, over 3 million Syrians have sought protection in Turkey, making it the world’s top refugee hosting country without granting refugee status to any of its asylum applicants. As the conflict persisted, Turkish authorities developed longer-term models of border

control and asylum beyond the emergency needs of Syrians. This paper examines the contradictions that emerge from the increasing state involvement in the deployment of these models in Antakya near Turkey's border with Syria. Turkey's "Temporary Protection Regime" provides Syrians with differential inclusion in the form of legal access to health, education, and employment, and through a formal discourse of religious kinship and hospitality. Such inclusion, however, works to obscure the Syrians' removal from the conventional modern state apparatus as non-citizens, and disrupts their day-to-day relations with the locals upon whom they depend for social and economic survival. In Antakya where the largest proportion of Arab citizens of Turkey have resided since the province's annexation from Syria in 1939, these contradictions are thrown into sharper relief and articulated through state-induced sectarian (Alawi-Sunni) divisions as the Turkish state moves from an open border policy to the construction of a wall along its border with Syria. Through an interpretative analysis of these divisions and their transgressions, I call for a rethinking of state governance of borders and border-crossers beyond the bureaucratic procedures of status determination in institutional settings. Such governance, I argue, requires attention to the socially configured processes of power and differentiation that situate the governed within everyday relations of hospitality, kinship, and religion at the local level.

RURAL REGIONS AND GLOBAL AGRI-FOOD VALUE CHAINS

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This research was funded by the Our Land and Water (OLW) National Science Challenge in New Zealand. The OLW Vision is that "New Zealand is world-renowned for integrated and successful land-based primary production systems, supported by healthy land and water and capable people" (www.ourlandandwater.nz/the-challenge/). The paper's research tested the hypothesis that the "world-renowned" reputation will allow New Zealand producers and processors (who tend to be based in rural regions) to capture higher returns for their agri-food exports. The research involved five case studies of successful global agri-food value chains sourced from New Zealand. The paper synthesises key results from the case studies, paying particular attention to the governance of value chains.

THE ROLE OF SUPRANATIONAL BLOCS IN THE GLOBAL COMPETITION FOR R&D INVESTMENTS

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The internationalization of highly knowledge-intensive (K-I) activities of multinational enterprises (MNEs) has triggered competition at multiple, interrelated geographical levels. Not merely countries, but urban areas within countries, and regional integration blocs compete to attract activities such as research, development, design and testing.

This study focuses on the joint role of urban areas' characteristics, nations and supranational integration blocs on MNEs' choice about where to locate of K-I foreign direct investments (FDI). In particular, it assesses the role of supranational integration blocs, which has been overlooked to date with respect to FDI location choices. In order to better understand the complex nature of competition, we compiled socio-economic information for 225 comparable functional urban areas – cities and their agglomeration, with a population of at least half a million – located in 25 countries in Europe and North America, and estimated nested logit models with different nesting structures.

The findings indicate that the role of local and national factors is significant in both North American and European countries. North American urban areas similarly compete with urban areas of other North-American countries as European ones, suggesting that the membership to the NAFTA is not relevant for MNEs choice of where to locate K-I FDI. The picture is more nuanced for Europe. While European MNEs perceive the European Union (EU) as a more homogeneous bloc than North-America, belonging to the EU does not matter in the choice made by non-European MNEs.

The findings support a positive role of EU policy instruments aimed at creating an integrated research and innovation area in Europe, but limited to internal investors. To the extent that the ultimate goal of such policies is to show EU Member States as belonging to an integrated bloc to the eyes of overseas investors, further coordination and promotion strategies are required.

GREEN SHOOTS OR CHIMERA? EMERGING EVIDENCE OF A DEMOGRAPHIC TURNAROUND IN THE SCOTTISH ISLANDS AND AUSTRIAN ALPS

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Andrew Copus, Social, Economic and Geographical Sciences Group, James Hutton Institute, UK

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Mountain areas and remote islands, particularly in Eastern Europe and in the Mediterranean, have in the twentieth century experienced many decades of selective out-migration, leading to large spaces of population decline and demographic structures which are not sustainable. The only way that such areas can avoid or overcome a downward spiral of socio-economic decline and abandonment is through in-migration of younger, economically active people. This is a familiar narrative, and one which has often featured as a rationale for various policy approaches, which either compensate for disadvantage or seek to stimulate endogenous development. However, in recent years some evidence has emerged, in particular contexts, of more positive signs of revival, driven by the arrival or return of young families. Enclaves within the mountain regions of Austria and the Scottish islands provide interesting examples of local development processes that capitalise a wide range of the natural amenities, human and social capital, and other place-specific assets available in such remote places. Conventional demographic and migration data sources are often poorly equipped, due to spatial aggregation or time lags in monitoring, to pick up these developments, though local communities may be aware of them. This paper reviews the (secondary and anecdotal) evidence for population turnaround in selected mountain and island contexts of these two countries, considers the likely drivers, in terms of both technological change, and migrant motivation, and draws conclusions regarding potential implications for renewed local strategies, inspiring initiatives and revised policy, and their likely relevance to the broader contexts of Eastern Europe and the Mediterranean.

FLANDERS AND THE COORDINATION OF INTERNATIONAL SOCIOECONOMIC POLICIES

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Over the last decades, the Regions and Communities in Belgium have gained gradually more competences in multidisciplinary settings. Indeed, 6 state reforms over nearly 40 years' time have created a strong and quasi-independent state sub-layer; more, for many competences, this sub-layer has the exclusive state power.

Today, Regions and Communities in Belgium are broadly recognised as confident state partners, especially when it comes to their power 'beyond their borders'. At date, treaties, bi- and multilateral

cooperation agreements and covenants are widely used by the Flemish Government, in order to enforce and enhance cooperation with partners. Indeed, following the state principle of “in foro interno, in foro externo”, since 1993, both Regions and Communities of Belgium have state power to conclude exclusive partnerships with external partners, like States and / or their sub-layers, European and International Organisations, and so on.

This abstract will therefore focus on the efforts the Flemish Region have undertaken – and still do - to use exclusive and semi-exclusive - competencies ‘beyond its borders’; it will specifically focus on the relations between Flanders on one side, and the European Union (EU) and multilateral / intergovernmental Organisations (OECD, IMF, UN) on the other. In particular, this practise oriented contribution gives an insight in the tasks of the Center of Government, situated within the Chancellery and Governance Department of the Government of Flanders, with regard to the coordination and governance of international socio-economic policies, such as the European Semester (EU), Country Reports (OECD, IMF) and sustainable development (EU, OECD, UN). Particular emphasis is put on the use of intra and extra state channels by Flanders.

These specific case studies will explain how relationships between Flanders and some – abovementioned - Organisations have been developed over the years, and in which way cross-productivity have been developed in favour of all players and professional relationship enforced and consolidated, putting Flanders on the European and even international map. It will show that going ‘beyond the border’ does not happen suddenly, it requires some indispensable features, namely, professionalism and expertise, mutual trust and networking, result-oriented attitude and the optimal use of intra- and extra state channels.

INTELLECTUAL CAPITAL OF HIGHER EDUCATION INSTITUTIONS AND REGIONS’ PERFORMANCE

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HEIs are of decisive importance for developing its influence regions. In turn, the regions' performance is linked to its regional development, which is intrinsically related to competitiveness, economic and social cohesion, environmental quality and the quality of life (QoL) of the resident population. Considering that there are few studies in the literature that refer to the importance of HEIs in determining the regions’ performance, through economic growth, regional development and QoL together, and because this is an innovative topic, in the present study, the relations between the intellectual capital and the performance of the regions of influence of the higher education institutions (HEIs) are analysed, taking into account three dimensions of analysis: economic growth; regional development; and the quality of life of their populations. Using multinomial logistic regression, the evidences now obtained reveal that these performance dimensions are largely influenced by the human capital and the structural capital of HEIs. In addition, human capital stands out as the most important and most influential factor. However, relative to relational capital, there was no significant evidence of its influence on any of the performance dimensions, suggesting that there may be other factors that are not being considered, which could have positive implications in determining the performance of the influence HEIs regions. The implications of this study are essentially related to the third mission of HEIs involving the generation, use, application and exploitation of knowledge and other skills related to HEIs outside academic environments. However, for the purposes of this third IES mission, governments and local authorities must be in line with the design and subsequent implementation of converging strategies.

INFRASTRUCTURE DEVELOPMENTS ORDERING YUNNAN'S BORDERLANDS

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The paper will focus on dynamic infrastructural developments at Yunnan's fast transforming but volatile borderlands with Myanmar and Laos. It will focus on designated economic development zones under China's Belt and Road Initiative (BRI) that are planned or recently started at the border areas still embroiled in classical struggle over territoriality, further complicated by an array of competing interests over resources ranging from logging, land and minerals to illicit drugs. Accounting the multiple bordering processes in action, the paper will argue that infrastructure is emerging as the key technology/device of bordering across such contested borderland spaces. For this, the paper will examine the socio-political and material-economic arrangements defining the effectiveness and ordering capacity, or potential, of infrastructure and compare this across the selected cases and in relation to the bordering function of the international boundary.

WHERE DO THEY BULLY? A COMPREHENSIVE DISTRICT-LEVEL ANALYSIS OF SPATIAL SOCIOECONOMIC FACTORS INFLUENCING BULLYING VICTIMIZATION IN ENGLAND

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By building a unique dataset merging individual data on bullying victimization among 15-years-old with administrative data on the socioeconomic outlook of the 150 English upper-tier local authorities, this paper analyzes the salience and the influence of the place of residence on school violence, controlling for individual characteristics. Results from a two-level hierarchical logit model and a generalized estimating equation logit highlight: (i) robust influence of place of residency on school violence; (ii) robust effect of local sociotropic transformations triggered by sudden and sizeable migration, even when controlling for endogeneity of immigrants' location choice; (iii) local economic inequality as risk factor for school bullying, whereas local economic deprivation is not. Overall, findings support place-based policy versus place-neutral policy targeting bullying prevention, at the same time showing that place-based policy should target the local socioeconomic outlook in terms of sociotropic changes and inequality.

IS IT POSSIBLE TO MATCH GLOBAL VALUE CHAINS AND THE CIRCULAR ECONOMY?: CLOSING THE LOOP VS. CLOSE PROXIMITY

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The dominant strand in the Circular Economy (CE) literature is focusing by now on the micro level analysis and cases studies. Efforts have concentrated on analysing the role of new technologies and eco-innovation, in particular, eco-design in products and processes and new business models as direct and immediate enablers of the Circular Economy. However, less attention has been paid to other relevant challenges for the transition towards a CE, e.g., the macro-systemic dimensions and their spatiality, dealing with its specific requirements and consequences at different geographic aggregation levels. In fact, from the literature overview emerges the idea that the shift towards Circular Economy requires a systemic thinking, especially noting the importance of synergies, cooperation and rebound effects. But, strikingly, the spatial/regional dimension of flows, synergies and cooperation is almost absent both in the applying and academic approaches. The increasing long-distance transport flows (maritime, aerial and terrestrial) associated to the increasing complexity of global value chains have increasing environmental impacts (energy, CO₂, materials, logistic spaces, etc.) is threatening sustainability. Can a CE strategy be compatible with the overwhelming importance of Global value chains? Could be satisfactory to closing the loop in the GVC or have we to include some "close proximity" principles?

The idea I want to develop here is that the general purpose of CE is almost contradictory with the overwhelming straitjacket of global value chains and that the principle of “closing the loop” needs a spatial specification. The principle of “closing the loop” has to be complemented with the principle of “close proximity”, if we want to target a deep shift towards the CE. To say better, we could coin the concept of “EC subsidiarity” principle: the closer the better.

DIFFUSION OF LOCAL ECONOMIC SHOCKS IN SOCIAL NETWORKS: EVIDENCE FROM THE US FRACKING BOOM

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The aim of this paper is to study how localised economic shocks can propagate across a country through interaction of people on social networks. In particular, the paper looks at income and employment shocks associated to the ‘fracking revolution’ in the US, taking place since the early 2000s. Thanks to hydraulic fracturing and horizontal drilling, domestic production of oil and gas has been increasing steadily in the US. In 2017, crude oil production exceeded 1972 levels, and natural gas production reached a new record-high (EIA, 2018). As a result, employment in the extraction of oil and gas and support operations grew by more than 60% between 2000 and 2017 according to the US Bureau of Labor Statistics (BLS). There is abundant literature on the regional economic effects of natural resources and the spillovers of local shocks to the economy more in general, many of which focus on the US. Some scholars argue that the discovery of natural riches can harm local economies, in line with the resource curse literature, for instance by crowding out employment from other sectors (Black, McKinnish, & Sanders, 2005; Corden & Neary, 1982; Jacobsen & Parker, 2016). By contrast, several papers highlight the benefits that can accrue to regional economies (Allcott & Keniston, 2017; Fetzer, 2014; Michaels, 2011; Weber, 2014). Recently, Feyrer, Mansur, & Sacerdote (2017) look at the dispersion of fracking-determined income shocks, finding evidence of persistent spillovers across space and industries. Taken together, these results suggest that the effects from local shocks can propagate to the wider economy of a country. While the majority of extant literature has focused on geographic spillovers, however, the role of networks in this process is relatively understudied (Amarasinghe, Hodler, Raschky, & Zenou, 2018). This paper investigates the relevance of social networks, or better, the social connectedness of places arising from the interaction of people across the entire US geography. The theoretical framework of reference draws largely on the work of Calvó-Armengol & Jackson (2004), who develop a network model in which workers rely on their social relationships to obtain information about employment opportunities. The paper uses data by Feyrer et al. (2017) on yearly production of oil and gas from new wells in US counties between 2004 and 2014. These data are combined with information on county-level social connectedness that relies on aggregate counts of Facebook friendships for the universe of US-based accounts (Bailey, Cao, Kuchler, Stroebel, & Wong, 2018). Income and employment outcomes by year and industry are obtained from the BLS. The objective is to estimate how localised exogenous shocks from new oil and gas production diffuse via social connectedness across the entire US geography, over time and industries. Further, it aims to use these findings to compute measures of key player centrality for US counties. To the best of my knowledge, no previous research has specifically looked at these questions for the US.

THE GEOGRAPHY OF EU DISCONTENT

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Over the last decade, political parties opposed to EU integration have almost doubled their votes. The general opinion of the EU has also deteriorated, revealing a growing number of people who distrust

the Union. To understand this development, this paper focuses on the geography of EU discontent. For the first time, it maps the vote against EU integration in the last national elections across more than 63 000 electoral districts in each of the 28 EU Member States. It assesses whether a range of factors considered to have fostered the surge in populism have had an impact on anti-EU voting. Research into populism often relies on the individual characteristics of anti-system voters: older, working-class, male voters on low incomes and with few qualifications to cope with the challenges of a modern economy. The results show that economic and industrial decline are driving the anti-EU vote. Areas with lower employment rates or with a less-educated workforce are also more likely to vote anti-EU. Once these factors have been taken into account, many of the purported causes of the geography of discontent either matter much less than expected or their impact varies depending on the strength of opposition to the European project.

NETWORK APPROACH TO STUDYING BORDERLANDS: TRANSBORDER CO-OPERATION RELATIONS ON THE EXAMPLE OF POLAND

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Due to its complex character, the subject of transborder co-operation and the development of borderlands constitutes an interesting and extensive, interdisciplinary research field. One of the challenges for researchers is connected, above all, with the necessity of examining the shaping of networks of relations with areas on the other side of the border as it seems vital for exploring the possibilities of integrating borderland areas. In scientific research from the field of transborder co-operation the shortage of network approaches is observed, particularly among empirical studies using Social Network Analysis (SNA) tools. Network analysis may provide new information on the structure of connections between the network actors, which makes it useful in the process of shaping i.a. co-operation systems (Provan et al. 2005). As Van Houtum (1999) points out, one of the main objectives of transborder co-operation programmes within the Interreg programme was the development of networks, hence the use of SNA to study relations within these co-operation programs seems fully justified.

The main objective of the paper is to identify regularities in the shaping of transborder cooperation networks on the example of Poland's borderlands. The basis of the analysis was a comprehensive research of over 1400 institutions that realized over 800 transborder projects under the European Territorial Cooperation and European Neighbourhood and Partnership programs implemented on the Polish borders (on both sides) in 2007-2013. The use of network analysis (SNA) in the comparative study of transborder co-operation networks along all Polish borders allowed to examine discrepancies in transborder co-operation networks as well as to indicate models of the formation of a cross-border cooperation networks. To this end Polish borderlands seems highly adequate. Each of them are characterized by very individual, specific co-operation conditions (at the moment in Poland one can find external EU borders and internal ones, land borders and river borders, borderlands with ethnic minorities and with homogeneous structure, etc.). However, institutional system of co-operation co-financed from the EU funds, was generally uniform. For this reason, an analysis of shaping transborder co-operation network under these conditions in all Polish borderlands allowed to identify a number of regularities significant for the functioning of borderlands.

Analysis of the transborder cooperation networks using the SNA (including its indicators) allowed to determine the nature of network connections on the Polish borderlands. It also enabled the identification of centralized and decentralized network models. Additionally, taking into account the geographical location of cooperating institutions and links between them allowed to indicate possible schemes for shaping a transborder cooperation networks in a spatial context.

EMPOWERMENT VIA DELEGATION? IMPLEMENTING SUSTAINABLE URBAN DEVELOPMENT POLICIES IN VENETO AND SCOTLAND

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The 2013 CPR strengthens the relevance of urban development and the role of urban authorities within the ESI Funds. Both are set to become even more relevant in the next programming period. Sustainable Urban Development Strategies (SUDSs) have the primary objective of achieving the development of European towns and cities through bottom-up, cross-sectoral, integrated strategies. As part of this core objective, they also aim to raise the levels of institutional and administrative capacities of urban authorities. However, how effectively they do so has not yet been analysed in any systematic fashion.

The regulations leave considerable room for manoeuvre to Member State authorities in relation to the types and scopes of responsibilities that can be assigned to urban authorities. This has resulted in a varied constellation of strategic and operational choices, both across and within countries. Following the logic of rational choice institutionalism - according to which 'delegation is an attractive option' insofar as 'it lowers transaction costs' (De Francesco, Peters and Tosun 2019) - our paper investigates the extent to which different delegation approaches lead to differing results in terms of policy performance and capacity building outcomes.

Through a mixed method research design comprising comparative case studies on the urban authorities of Veneto and Scotland, we test the key hypothesis that 'narrower' delegation models tend to incentivise a compliance approach, which results in limited institutional and administrative capacity improvements. By contrast, more extensive delegation models are likely to provide more room for experimentation and learning, encouraging cross-sectoral integration and spillovers on domestic systems.

SMART SPECIALISATION STRATEGIES AND SUSTAINABLE DEVELOPMENT GOALS (SDGS)

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This study brings original evidence on the relationships between the sustainable development goals (SDGs) and smart specialisation as an innovation policy approach. Adopted in 2015, the 17 SDGs and 169 targets set the global vision for the world's development with the horizon 2030. SDGs are transformative, integrated and indivisible; they embed consensus-building and universality principles and advocate innovative solutions for development through localized actions (place-based) and partnerships. Smart specialisation strategies are knowledge-driven and innovation-led economic transformation agendas, which aim at fostering economic and innovation opportunities through better matching territorial potentials with business and societal needs. A main research question is thus, to what extent smart specialisation can contribute to or inspire localized SDG(s) implementation models, while stimulating greater international partnerships in the EU and beyond?

We adopt a dual methodological approach. First, we compare and contrast the key principles of the SDGs with the design and implementation principles of smart specialisation – evidence-based, innovation-led, stakeholder mobilization for selecting priority innovation domains through entrepreneurial discovery, identification of place-specific needs and resources, monitoring and evaluation schemes-. Second, we illustrate the practical perspectives on SDGs through the case studies

of three regional smart specialisation strategies: Catalonia (Spain), Lombardy (Italy) and Northern Netherlands. Common to the SDGs and smart specialisation conceptual policy frameworks are the driving and transversal role of innovation, the requirement of evidence-based diagnostic and local ownership and accountability.

Early insights from the case studies confirm that all three regional strategies do refer to the three dimensions of SDGs - economic, environmental, societal - but from an implementation perspective, very different policy tools are employed in order to enhance socio-economic opportunities through fostering territorial innovation potential, thus often initially aligning with SDG9 and SDG8 targets. Further investigations reveal hierarchical regional SDGs couplings, which can inspire the identification of localized approaches to global challenges.

MORE THAN BUREAUCRATS, CAPITAL REGIONS ARE SMARTER! AN ANALYSIS OF R&D ACTIVITIES AND PUBLIC SECTORS IN EUROPEAN 'CAPITAL' REGIONS

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André Spithoven, Universiteit Gent, Belgium
Pieter Teirlinck, KU Leuven, Belgium

Common sense argues that the location of the capital city in a region (the so-called “capital region”) implies a higher concentration of the public sectors, while R&D-intensive sectors can be everywhere. The implication of this spatial sectoral distribution affects regional development since a higher concentration of R&D-intensive activities is expected to boost regional productivity, while the public sector not necessarily. In this framework, the EU smart specialisation strategy (S3) initiative aims to promote synergies between regional and R&I policies.

This paper aims to challenge this common sense showing that Capital Regions differ from the others because of a higher concentration of R&D-intensive sectors, while the public sectors are more evenly distributed. Based on a shift-share analysis of R&D and public sectors (in terms of GVA and employment) in the EU member states from 2005 to 2015, the paper shows that the recent crisis has further reinforced this disparity. Capital regions are becoming even more central regarding R&D sectors against the rest of their countries, while the public sectors do not seem to differ significantly. The ‘revealed competitive advantage’ is then calculated to substantiate this trend even further. The process of growing inter-regional disparities regarding R&D-intensive sectors is discussed referring to the S3 initiative.

In the current programming period (as well as in the future one, actually under negotiation), the EU aims to reduce the “innovation gap” across European regions. However, our findings show an opposite trend, suggesting the need for more radical interventions supporting R&D-intensive sectors in lagging regions to counteract the process of concentration in capital regions. Theoretically, the paper sheds light on the differences between capital regions and their countries showing that their centrality is mainly due to the R&D-intensive sectors rather than the public ones, and that each sector has different dynamics of regional convergence or divergence.

GOVERNANCE AND ENERGY TRADE IN THE MEXICO – U.S. BORDER

Adrian Duhalt, Rice University's Baker Institute for Public Policy, USA

After more than two decades since the North American Free Trade Agreement came into force, the Mexico – U.S. border reveals two unbalanced economic and social realities as well as the growing degree of interdependency and integration the two countries have forged during this period. More

recently, the extent of cross-border interdependency and integration has been deepened by crucial developments in the realm of energy. The U.S. production of hydrocarbons has soared considerably due to the so-called shale revolution, which has led to a boom of exports of natural gas and refined products to its southern neighbor. Meanwhile, in 2013 Mexico approved constitutional amendments to allow for greater participation of private firms in energy activities, process that has coincided with a sharp increase in imports of energy commodities from the U.S. as response to a fall in domestic production and robust demand. As energy markets in both countries have established much closer linkages against the backdrop of this evolving landscape, the binational border is viewed as a strategic geographical space in many respects, from investment and the cross-national flow of energy commodities to issues of energy security and access to export markets. While trade, security and migration have habitually permeated the Mexico – U.S. agenda, the context described above illustrates that energy is a feature that policy makers must now ponder in terms of border governance - argument that is exemplified by the fact that numerous stakeholders have boosted their role to participate in, regulate, foster and even oppose energy activities like production, trade and investment. This paper sheds light on how legal considerations, institutional arrangements, and the quality of information shape governance of energy activities along and across the binational border.

NATURAL GAS SUPPLY IN MEXICO AND LOCAL SPATIAL DYNAMICS

Adrian Duhalt, Rice University's Baker Institute for Public Policy, USA

Mexico's energy sector is undergoing a profound transformation. The energy reforms introduced in 2013/2014 terminated more than seven decades of state control and now encourage private participation in every step of the value chain. New regulations are leading to develop domestic energy markets, being natural gas a case in point. In the past few years, Mexico has made significant inroads in constructing a natural gas market, attracting billions of dollars in investment to expand transport capabilities (pipelines) and enhance the supply of natural gas to different regions.

A more adequate supply of natural gas in Mexico carries a geographical dimension in the sense that regions may now seek to develop/strengthen productive capabilities. The automobile and fertilizer industry offer rich empirical evidence as to how Mexico's new energy landscape may impact regional economies and value chain development.

As for the automobile industry, the poor domestic supply of plastic resins, which are byproducts of natural gas and used in different car components, hinders competitiveness. With demand for plastic resins set to grow in tandem with automobile production in Mexico, natural gas is central to strength the car making value chain in the country. The argument could be similar for the (nitrogen) fertilizer chain. The current production of ammonia, which is the core raw material and at the same time requires natural gas, is limited and that affects the feasibility to produce fertilizers domestically. The supply of natural gas to existing ammonia facilities may impact production of fertilizers.

This presentation argues that policies pertaining the construction of a natural gas market must go beyond enhancing supply. The development of value chains ought to be part of the policy goals as well.

NEED FOR SPEED?

Daniel Durrant, UCL, UK

Marco Dean, UCL, UK

Shivani Raghav, University of Toronto, Canada

Shoshanna Saxe, University of Toronto, Canada

Matti Siemiatycki, University of Toronto, Canada

This paper discusses the findings of research into the temporality of transport infrastructure in two cities, London and Toronto. The research responds to global (McKinsey, 2016), national (Arcadis, 2016) and city level discourses on the need for infrastructure and the framing of planning and regulation as an unjustified constraint (Marshall and Cowell, 2016). Through the creation of a series of 'time maps' (Gell, 1992; Bear 2014) of major transport infrastructure in both cities we show that planning does not consume more time than other phases on the journey from inception to realisation. Indeed, in many cases the greatest lag is between inception, taken as the point at which discussion of the project as a possible solution enters the public realm, and the commencement of the formal stages of the project. This time is not insignificant. On the one hand it may allow the resolution of issues, the building of consensus and the realisation of opportunities to both mitigate the negative impact of transport infrastructure and expand the positive impact. On the other it may represent unfulfilled, possibly cynical commitments, prevarication by interested parties and ultimately unjust delays in realising the benefits of the proposed project. In order to interpret the ethical implications of the allocation of time in the production of transport infrastructure we overlay the distinction between short and long-term actions with Gell's conception of an expansive versus a procedural conceptualisation of time. The former more 'open' (Smith and Stirling, 2007) and the latter more 'closed' in which the performance (Weber, 2016) of temporal stages is required in order to attain a desired future state.

KNOWLEDGE SOURCING AND CLUSTER LIFE CYCLE: A COMPARATIVE STUDY OF FURNITURE CLUSTERS IN ITALY AND POLAND

Wojciech Dyba, Adam Mickiewicz University, Poland

Tadeusz Strykiewicz, Adam Mickiewicz University, Poznań, Poland

Clusters are known as specific places that facilitate knowledge sharing and dissemination among firms and institutions working in functionally-related fields. The forms of knowledge sourcing and knowledge flows are key elements determining competitive advantage of a cluster. They strongly depend on cluster's maturity. Structural changes that take place within clusters over time influence, among other things, knowledge-related processes and require new approaches towards external knowledge sourcing. In our paper we identify and analyse knowledge sources that firms use at different stages of a cluster life cycle. The empirical research comprises investigation of two furniture clusters (industrial districts) in Italy and Poland: the first one can be classified as a mature cluster, the second one – as growing. The analysis evidences that in mature clusters firms use more diverse and professional external knowledge sources, such as: (1) consulting, expert's reports and trainings offered by specialised firms; (2) collaboration with universities and research centres; (3) trainings and actions organised by public institutions, (4) employing knowledge agents – experienced managers, specialists in selected fields. These forms of acquiring knowledge may be explained on the one hand by more homogeneous and well-established knowledge pools at later stages of a cluster life cycle, and on the other hand – by a greater competition between firms offering similar products. The paper concludes with the recommendations for knowledge sourcing strategies and policies.

INNOVATION IN THE PERIPHERY: COMPENSATION AND EXPLOITATION STRATEGIES

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Recent work has begun to challenge the urban bias in economic geography and innovation studies, showing that novelty generation also takes place in peripheral regions. So far, however, analyses focus on how firms innovate besides their unfavourable location and little is said about innovation benefits of peripheral areas. Hence, this article identifies different compensation and exploitation strategies adopted by firms to overcome regional innovation constraints and to reap innovation benefits found in the periphery. Drawing on empirical evidence from Austria, our qualitative analysis reveals that innovation in peripheral regions is the outcome of a combination of compensation and exploitation practices.

DOES RELATED VARIETY AFFECT NEW VENTURE SURVIVAL?

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Daniel Örtqvist, Luleå University of Technology, Sweden

There is ample evidence supporting that the likelihood of venture survival tends to increase along with the age of the firm. Previous studies have suggested that some of the heterogeneity in new venture survival can be ascribed to agglomeration externalities due to industrial compositions such as specialization and diversification. In this study we set out to test the hypothesis that a more recent concept - related variety, influences new venture survival. The notion of related variety has proved to be a significant contribution to the literature on knowledge externalities in different industry structures. Related variety provides a disentangled view of diversification based on the technological and cognitive proximity of different industries. There is growing empirical support that related variety fosters innovation and employment growth. We add to this literature by examining the role of related variety in a population of new ventures registered in Sweden during 2010. We employ a multi-level logistic regression model to examine the relationship between related variety at a functional analysis region-level and new venture survival in a longitudinal dataset. Our findings indicate that related variety shapes new venture survival during the first years subsequent to entry. A potential implication from this study is the awareness that industrial structure not only creates externalities forming existing companies but also contributes to the formation and survival of new ventures. We believe that our findings should be of interest not only to the academic community but also to policy makers involved in designing policies to promote regional entrepreneurial entry.

COMPETING FOR INNOVATION FUNDING: IN SEARCH OF SCORING SPILLOVERS WITHIN INNOVATION CONTESTS

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Dries Faema, WHU Otto Beisheim School of Management, Germany

In this paper, we explore the existence of negative scoring spillovers in innovation contests. Relying on performance feedback theory, we expect that the presence a high/low quality proposal can trigger a substantial increase/decrease in the aspiration levels of expert panels, which subsequently negatively/positively influence the scores of other proposals in the same innovation contest. To test the existence of negative scoring spillovers, we rely a sample 544 proposals in 53 innovation contests, launched within the scope of 4 regional innovation programs within the Netherlands. Using social interaction models, an innovative methodological approach that has been developed by spatial econometrists, we provide evidence for the existence of negative scoring spillovers. Our findings enrich our theoretical understanding of evaluation biases in the setting of innovation contests.

Moreover, it provides specific managerial recommendations on how to organize innovation contests. Finally, we provide a new methodological alternative to measure spillover effects in a wide variety of managerial and strategic settings.

SMART AND RESILIENT REGIONS: TWIN PEAKS OR POLICY CHIMERA?

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Adrian Healy, Cardiff University, UK

The concept of smart-specialisation forms a central element of the Europe 2020 strategy (European Commission, 2010) and is fundamental to the EU's cohesion instruments, most notably the ERDF. Smart Specialization is a place-based approach characterized by the identification of strategic areas for intervention based both on the analysis of the strengths and potential of the economy and on an Entrepreneurial Discovery Process. The performance of entrepreneurs and firms in experimenting with and discovering potential domains for future specialization is shaped by how external networks of connections with universities, laboratories, suppliers and users are built and maintained. Consequently, one of the main challenge of the smart specialization strategy is to facilitate the design of inter-organisational connections and coordination of efforts in the sphere of experimentation and discovery (David and Metcalfe, 2007 and Aghion et al., 2009). Whilst the objective of smart specialization strategies is to improve regional competitiveness. (Foray et al, 2012), regional policy makers are also grappling with a desire to promote the resilience of their economies to economic shocks. Here, resilience is not just a measure of the regions' ability to deal with shocks but implies a regions' ability to reconfigure its socio-economic and institutional structures to develop new growth paths (Boshma, 2014). Similarly, Bristow and Healy (2014) note that strengthening resilience can be supported by public, social and commercial actors working together, and by utilizing available resources. Therefore, the structure of how social agents are linked through networks, which form the regional social structures can impact on regional resilience. As such, there are strong potential similarities between policy concepts for smart specialization and for resilience. Yet, the economic geography literature has remained largely quiet on the connections between these two domains of research activity. In the following paper we explore the complementarities, tensions and potential trade-offs between smart specialisation approaches and resilience agendas. In doing so we seek to provide pointers to policy-makers in seeking to develop robust policy approaches for the long-term prosperity of their economies.

SMART SPECIALIZATION AND THE OCCUPATION SPACE

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Emelie Hane-Weijman, Umeå University, Sweden

David Rigby, UCLA, USA

Smart specialization has gathered considerable interest in both policy and academic circles, and aims at addressing regional diversification strategies by building on the capabilities already present in the region. While previous studies have addressed this in relation to the knowledge space of regions, we focus on occupations since they are based on the work people carry out and the skills, education and training needed to perform the work. Hence addressing the potential of regions to successfully reallocate workers to new economic activities. To do this, a mapping of the occupational space is needed to measure the 'distance' a worker has to move between different employments within a region, and hence address the frictions and potential costs that certain mobilities entails. These changes over time are in addition associated with a 'direction', that reveals the potential costs and benefits of new occupational specializations. By means of longitudinal data on all workers and occupations in Sweden 2002-2016, an occupational space is constructed using a revealed relatedness

matrix of regional occupational co-occurrences. We then model this in relation to economic performance to analyse how strategies of smart specialisation can open up for productive trajectories for both the region and the workers.

THE ROLE OF FICTIONAL EXPECTATIONS IN THE RESILIENCE OF A CRISIS-RIDDEN TOURISM REGION: EVIDENCE FROM ANTALYA

Hilal Erkuş Öztürk, Akdeniz University, Turkey

Pieter Terhorst, University of Amsterdam, The Netherlands

This paper is about role of new firms in the resilience of the tourism city of Antalya to the global economic crisis of 2008–2009 and the (geo)political crisis after 2015. Resilience means, in short, how resistant national and regional economies are to shocks, and how fast, and in what way they recover from them. A high entrance rate during and after a regional shock obviously makes regions less resilient to shocks. Most studies explain the regional variety of resilience on the basis of regional differences of place-based characteristics but hardly pay attention to the conditions of radical uncertainty (in the sense of Knight) individual entrepreneurs face when making an investment decision or start a new firm during and after a shock. Radical uncertainty makes the mainstream economic theories of rational choice and expected utility useless to understand investment decisions of entrepreneurs. Their decisions, we argue, are based on so-called fictional expectations on the future profitability of investments. These fictional expectations, however, are not only individually but also collectively created at the regional scale, i.e. they are the result of a collective narrative told by entrepreneurs, financial specialists, consultants, policy makers, and media. In this paper we try to explore empirically how these actors collectively create fictional expectations that reduce the uncertainty of starters in the tourism city of Antalya.

FACTORS BEHIND URBAN SHRINKAGE IN POST-SOCIALIST COUNTRIES: A STATE-OF-THE-ART AND A CASE STUDY ON ROMANIAN CITIES (1992-2018)

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Alexandru Banica, Alexandru Ioan Cuza University of Iasi, Romania

Alexandra Cehan, Alexandru Ioan Cuza University of Iasi, Romania

EU post-socialist countries still suffer from declining population, triggered both by low fertility and by negative net migration rates. A significant proportion of the cities within these countries (have been or) are still suffering from urban shrinkage. At present, peripheral, small and medium sized-cities are among the hardest affected. A more thorough understanding of the factors behind urban shrinkage is important for better defining urban policies and regional operation programs within the framework of the post-2020 Cohesion Policy. The objective of the presentation is twofold: 1) to deliver a state-of-the art of the research in the field for nine EU post-socialist countries and 2) to determine the drivers behind urban shrinkage in Romania. Main factors behind urban shrinkage in EU post-socialist countries have been extracted and synthetised from 40 mainstream research papers. In the second part, OLS regressions have been employed to highlight the determinants of urban shrinkage in Romania. Urban shrinkage has been assessed as changes in urban population over time. A large array of factors has been considered, grouped into four categories: demographical (initial size of the city), economic (economic performance, employment, structural changes) and geographical (geographical location, proximity to other urban centres of various sizes, spatial accessibility to EU markets and spatial accessibility to regional labour markets). Results pinpoint the fact that the factors act differently in different temporal and geographical contexts. Empirical results for the Romanian case pinpoint the fact that place-neutral policies could not be a solution for mitigating urban shrinkage as far as factors behind urban shrinkage are place-dependent.

CHALLENGES AND OPPORTUNITIES OF MULTI-LEVEL GOVERNANCE IN CROSS-BORDER COOPERATION IN CENTRAL AND EASTERN EUROPE

Zsuzsanna Fejes, National University of Public Service, Hungary

The aim of the presentation is to identify the regulatory-administrative frameworks, obstacles and problems of cross-border co-operations and to examine those as the legal-administrative models of multi-level cross-border governance. Cross-border co-operation has an important role in revitalizing the relations between formerly united territorial units, thus realigning border areas and involving them in the European processes. However, cross-border entities can only operate successfully and be capable of long-term survival to fulfil their real role if there exists a constitutional and administrative environment suitable for harmonizing the different legal structures and competencies. The research topic has relevance on both international and European levels as the problem of subnational level border area governance has gained even more importance in recent years in both EU policies and regional research.

During the last years, several initiatives have been taken in Europe with a view to diminishing or even eliminating the legal-administrative barriers still existing among the European countries. In this respect the major project was the Cross-Border Review implemented by DG Regio in 2015-2016. The project ended with a Communication of the European Commission (titled: Boosting Growth and Cohesion in EU Border Region) published in September 2017 which gave a new impetus to the efforts in this field, where good examples exist at regional level, too.

The aim of the presentation is to examine the institution-building process of cross-border territorial cooperation processes in Central and Eastern Europe and in Hungary. First, I will focus how the Council of Europe (CoE) and European Union (EU) can support establishing preconditions with a sensitive and differentiating approach to regional and territorial policies and instruments. Second, I analyse the Regulation 1082/2006 (revised in 2013) on European grouping of territorial cooperation (EGTC), which have become a response to the lack of legal and institutional instruments of cross-border co-operations and ensured competencies for subnational authorities.

Finally, the presentation summarizes how to respond to new alternatives in order to increase efficiency, legitimacy and transparency of cross-border territorial cooperation.

THE ROLE OF CLLD-PROJECTS IN THE GOVERNANCE OF HUNGARIAN BIG CITIES

Dávid Fekete, Széchenyi István University, Hungary

New tools of European Union's regional policy are encouraging cities to find new ways of multilevel urban governance. The paper focuses on the big cities (cities with more than 100.000 inhabitants) of Hungary and shows the urban governance in practice. Nowadays, one of the most important tools of multilevel urban governance in Hungary is Community-Led Local Development (CLLD). This method is able to gather representatives from different spheres, such as governmental institutions, civil organizations, universities, cultural institutions etc. The paper tries to show the most important characteristics, similarities and differences of Hungarian CLLD-projects, analysing the operation of the local action groups.

After showing the most important characteristics of Hungarian CLLD-projects, the paper presents a concrete Hungarian case study: the targets, foundation process, operation and best practices of the Győr Local Action Group (Győr LAG). The paper deals with the following research questions:

- What are the most important targets of the Győr LAG?

- Is the project able to encourage urban-rural cooperation?
- Is the project able to develop local communities?
- How can local communities benefit from the project?
- What are the main characteristics of the decision making process?
- Is the Győr LAG able to develop the multilevel urban governance in the city?
- What are the best practices of the Győr LAG?

THE GEOGRAPHY OF URBAN MANUFACTURING SMES IN LONDON

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Nicolas Palominos, Bartlett Centre for Advanced Spatial Analysis, UCL, UK

Sam Griffiths, Bartlett School of Architecture, UK

Francesca Froy, Bartlett School of Architecture, UK

There is currently little published research on the geography of small and medium sized manufacturing businesses in urban areas, or the complex relationship between urban manufacturers and their locales. This is contributing to a lack of understanding of the impacts of displacement of such businesses through redevelopment, which is a particular issue in London where intense development pressures have resulted in the loss of industrial land at almost three times the annual target identified in the London Plan over the past five years.

This paper is the first output of an ongoing multi-disciplinary collaboration between colleagues in the Bartlett Schools of Planning and Architecture (Space Syntax Lab) and the Centre for Advanced Spatial Analysis (CASA) at University College London. We present a new interactive online profiling tool, which maps concentrations of manufacturing businesses in the Greater London area, and layers this on top of street network features using space syntax measures. This allows us to both visualise the spatiality of manufacturing in London and identify different urban typologies with concentrations of manufacturing, allowing us to either support or challenge commonly held assumptions about where manufacturing is taking place.

A number of different maps have been produced to facilitate comparison and analysis. First, we join data on business addresses and Standard Industrial Categories (SIC) to reveal point locations of manufacturing businesses. Second, we map manufacturing employment counts and percentages, revealing places where there are concentrations of manufacturing jobs. Third, we map sites in industrial land use (based on data from the Greater London Authority). All are overlaid on space syntax networks showing street networks and degrees of accessibility and connectivity. The paper also reveals some of the methodological limitations and challenges encountered in producing meaningful and accurate mapping work at the London wide scale, which we present for discussion.

SIMULATING POPULATIONS AT SMALL SCALE BY ENTROPY ECONOMETRICS

Esteban Fernandez Vazquez, REGIOlab, Spain

Alberto Díaz, University of Leon, Spain

Fernando Rubiera, University of Oviedo, Spain

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There is increasing demand within the regional science community for methodologies that produce small area estimates of a range of socio-economic indicators. Identifying this demand, regional scientists and economic geographers have developed a range of approaches to the estimation of economic indicators for small domains (regional or local scales). The basic problem to be solved by these techniques is recovering disaggregated information for sub-national areas about which only

aggregate statistics are available, using as inputs these aggregates plus detailed characteristics of the individuals (or households) surveyed in some sample. One possible way of solving this lack of detailed data is by applying a simulation technique that reweights the set of individuals sampled to make them consistent with the aggregated information. In this paper we propose a methodology that estimates for each unit surveyed in a sample a probability of being in a small area of interest. These probabilities are recovered by minimizing an entropy divergence with respect to our prior beliefs, being simultaneously consistent with the observable aggregates. Its performance is illustrated by estimating household income and poverty rates at a detailed geographical scale for Spain on 2015. These indicators are usually calculated from the information contained in the Statistics on Income and Living Conditions (SILC), which only allows for calculating regional (NUTS2 level) aggregates. The methodology proposed produces synthetic weights that simulate the spatial distribution of the population, which are observable at a local scale. Additionally, an exercise of numerical simulation is conducted in order to evaluate the performance of the technique.

THE IMPACT OF CULTURAL AND SECTORAL DIVERSITY ON REGIONAL RESILIENCE: ITALIAN EVIDENCE

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The notion of resilience is gaining centrality in the lexicon of economic geography (Martin and Sunley, 2014), to indicate the ability of regions to reconfigure their socio-economic and institutional structures and develop new growth paths (Boschma, 2015). Regions differ in their institutional assets, knowledge bases and economic structures and hence cope with economic downturns in different ways (Fratesi and Perucca, 2017). In a growing literature, high skills endowment, the composition of the economic structure, territorial capital and more generally the evolutionary patterns of territorial development emerge as drivers of regional resilience (Boschma, 2015, Lee, 2014; Martin et al., 2016; Fratesi and Perucca, 2017).

While Davies and Tonts (2010) argue that more diverse regional economies are more resilient, the role of regional variety in terms of sectors, technology and cultures is still understudied. Specialization in a limited range of activities will make regions more susceptible to sector-specific shocks, leave fewer opportunities to re-orientate their economies, hence fewer alternative routes to recovery. We therefore expect that related (or unrelated) sectoral variety (Boschma and Frenken, 2006) positively affect regional resilience. Similar considerations apply to technological variety.

Positive effects of cultural diversity are documented for regional and urban productivity (Ottaviano and Peri, 2005), innovation (e.g. Hunt and Gauthier-Loiselle, 2008; Niebuhr, 2010; Lee, 2015) and entrepreneurship (e.g. Audretsch et al. 2010; Bishop, 2012). Drawing on the knowledge spillover and absorptive capacity theories of entrepreneurship (Acs et al, 2009; Qian and Acs, 2013), we argue that cultural variety extends the range of options by which local knowledge spillovers (Audretsch et al., 2010) can be exploited to respond to external shocks and create new growth paths.

In this paper, the role of sectoral, technological and cultural variety for regional resilience is tested on Italian provinces data.

Following Fratesi and Perucca (2017), we adopt a holistic approach to the measurement of resilience (ESPON, 2014) and construct five measures: the “resistance to the initial shock”; “resistance to the gap”; “gap at the end of period”; “recovery from the crisis”; and, finally, “actual growth in the period of crisis”. Regional economies’ performance is measured by province-level GDP and employment.

We use data on total number of registered enterprises owned by foreign-born entrepreneurs by nationality of origin and NACE sector. These are complemented by official data on the stocks of the resident population with foreign citizenship by NUTS3 region and country of citizenship. Technological variety is measured as the entropy in IPC sectors of regional patent applications, and sectoral variety as the entropy in sectors of firms registered for VAT.

The empirical application tests whether sectoral, technological and cultural variety display a significant association with resilience, studying their direct as well as their interaction effect with a binary variable indicating the downturn. Following Halleck Vega and Elhorst (2015), we allow for spatial dependence between provinces through an SLX model.

TERRITORIAL ASPECTS OF THE CZECH BUSINESS ENVIRONMENT

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Recent surveys show improving quality of the business environment in the Czech Republic. Nevertheless, regional differences still prevail. Territorial disparities are even deepening, depending on the involvement of small and medium-sized enterprises in so-called global production networks. This period brings new challenges. The primary task is managing a successful transition from post-industrial stage to a „knowledge-based economy” focused on innovation and high education of the population. The main economic priority should be to support innovation processes and raise the level of human capital, especially through new forms of education. This development is primarily accompanied by an increase in the importance of the tertiary sector, where is the highest demand for non-material service qualities. Regarding spatial contexts, selection of management centers associated with significant impacts on regional development is taking place. These centers represent the most important national concentrations of socio-economic activities, innovation and education. The support of the innovative activities of these centers should be an important prerequisite for the development of the Czech Republic business environment, as it will not only develop the central regions themselves but also provide the subsequent dissemination of innovative activities to peripheral areas, which will positively influence the quality of the whole Czech business environment. On the other hand, higher frequency of industrial firms in the economically less developed regions, act as a counterweight to tertiary services concentrated in metropolitan areas and their targeted support, can significantly help to stimulate the development of rural areas. This paper presents an assessment of territorial differentiation, the difference between the role of small and medium-sized enterprises in rural and urban areas and the existing experience with the support of SMEs in the Czech Republic.

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THE NATURE AND CONSEQUENCES OF ECONOMIC SANCTIONS POLICY

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Two main concepts of the economic sanctions policy are realism and liberalism.

Realism is based on three main assumptions: sovereign states are the dominant actors in the international economic policy; they are the maximisers of power; the state has a priority over the markets.

According to realists, international economic policy, including sanctions policy, is formed primarily as a result of the rational actions of the states in the struggle for power and wealth.

The liberal approach rests on the assumption of the existence of rights and norms for the imposition of sanctions. Norms and law should precede the imposition of sanctions because they work as constitutive rules that determine the practice of legislative coercion (i.e. sanctions).

The specific effects of the introduction of economic sanctions acquire various socio-economic dimensions. A gravity model is used to calculate the impact of sanctions on trade. It takes into account GDP, population of countries, distance and size of sanctions:

$$\ln \text{Trade}_{ijt} = \beta_0 + \beta_1 \ln \text{GDP}_{it} + \beta_2 \ln \text{GDP}_{jt} + \beta_3 \ln \text{POP}_{it} + \beta_4 \ln \text{POP}_{jt} + \beta_5 \ln \text{DIST}_{ij} + \beta_6 \text{SANCTION}_{it} + u_{ijt}.$$

Structural models are based on Leontief's «input-output» theoretical concepts and on extensive econometric tools. They allow assessing of structural changes in the economic, demographic, technological, political and other areas, occurring as a result of the introduction of sanctions policy [Leontief, 2006, p. 116, 122]. Threshold vector autoregressive (VAR) econometric models are used to determine the threshold effects of economic sanctions policy in the context of SWOT analysis (strengths, weaknesses, opportunity, threat, constraints, behaviour of the sanctioned countries, etc.) [Hashimzade, Thornton 2013, p.190, 198].

RANDOM ACTS OF GREENNESS: THE NEED FOR CITIES TO UP THEIR GAME ON CLIMATE CHANGE

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The recent IPCC report reveals that the planet is close to a point of no return. In view of this alarming mandate, we must support the most aggressive climate actions possible. Yet most cities pride themselves on simply plucking the low-hanging fruit—the easy, inexpensive fixes that require little systemic change. The list is long: bike-rental systems, solar waste containers, weak green building requirements, and some recycling efforts. Going after the low-hanging fruit yields benefits, but unless such measures are part of a larger, coherent strategy for altering broad patterns of energy consumption and transportation emissions, these efforts are simply random acts of greenness.

We must be honest about what cities are accomplishing. Evidence suggests that most cities are not reducing emissions any more than their respective nations and that reductions that have occurred may be due more to state and national than city policy. This doesn't mean cities can't lead, but they must greatly accelerate what they are doing and how they are doing it. Focusing on small-bore measures fosters the illusion among elected officials and citizens alike that we're doing enough. Such over-confidence muffles the enormous political will required to take on the climate crisis in a systematic, integrated fashion. We have to call out random acts of greenness for what they are. Rather than celebrating every action a city takes under the banner of "climate change," we must focus on getting more cities on a path to greenovation.

STADIA AND REDEVELOPMENT

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For residents of London, Rio de Janeiro, or any number of cities in Russia or Qatar in the first two decades of the 21st century, the relationship between sport architecture and urban redevelopment (and its attendant promises and pitfalls) is likely inescapable. These are topics of heated debate in the popular press and corner bars, with good reason. According to one study, construction for the six

Summer Olympic Games from Seoul 1988 to Beijing 2008 displaced two million residents.¹ The massive redevelopment of east London after the 2012 Summer Games highlights the impact of these events extends beyond the city and to the region.

Today, large scale urban redevelopment in many countries is likely to be yoked to stadium construction—a trend that has received less critical scrutiny than it merits given the scale and cost of these projects.² This paper looks at the urban construction and destruction associated with stadia. Examples projects highlight the range of urban and regional debates that accompany largescale sporting architecture, including concerns about the appropriateness of public funding, debates about social priorities ignored in favor of sport architecture, the long-term social and economic utility of sport architecture, and the impacts on communities living in the shadows of projects whose long-term impacts are generally not well-understood or easy to predict.

Finally, this paper will highlight how the next-generation of stadia under construction now only exacerbate the tensions that emerged in the past 30 years. Although stadia today are undeniably architecturally richer than they were for much of the 20th century, their complexities and scale of impact are greater than ever before.³ Consider the new NFL stadium underway just southwest of the city of Los Angeles, USA. It is projected to cost \$5 billion and its economic footprint will extend well beyond the boundaries of the metro area in which it is located. For many cities and regions, their futures will be profoundly shaped by these sorts of projects—raising the stakes for a clearer understanding of them now.

INSTITUTIONAL ENTREPRENEURSHIP AS VIOLATION OF REGIONAL CONTINUITY

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The aim of this paper is to contribute towards increased understanding of regional path evolution by scrutinizing the role of institutional entrepreneurship in these matters. Following up this, the article combines insight from literature on the Regional Innovation System (RIS), Entrepreneurial EcoSystems (EES) and related literature on institutional entrepreneurial work. The discussion shows that the RIS- and EES-literature in their exploration of regional innovation and entrepreneurship respectively highlights system and agency. Moreover, until recently, the RIS-literature has been dominating the policy strategies for regional industrial renewal. RIS inspired policy strategies have been focusing on regional conditions and taken little account of institutional entrepreneurship. Currently, this is changing, partly because EES inspired strategies have adjusted this by turning the coin to entrepreneurship, but unfortunately, away from regional conditions and related institutions. Thus, we suggest an approach combining ideas from RIS, EES and the concept of institutional entrepreneurship work i.e. ‘the practices of individual and collective actors aimed at creating, maintaining, and disrupting institutions’ (Lawrence et al. 2011, 52). The paper follows up this theoretical discussion by asking: What role does institutional entrepreneurship play in the evolution of regional industries? We scrutinize this question in an in depth study of the regional practice of what we define as key actors in the innovation systems of the counties of Hordaland and Rogaland in Western Norway. In the empirical part we concentrate on institutional entrepreneurship work in processes of green industrial transformation. We do this by describing the RIS- and institutional entrepreneurial work dynamics in each region. Not surprisingly, and confirmed by the regional variation represented, institutional entrepreneurship work is as well “branded” by regional conditions.

ENTREPRENEURIAL UNIVERSITIES AND REGIONAL INNOVATION: MATCHING SMART SPECIALISATION STRATEGIES TO REGIONAL NEEDS?

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Universities are considered crucial institutions in regional development dynamics associated with smart specialisation strategies (RIS3). They are expected to play a leading role in the strategy process, relying on what is unique in a given region, namely the R&D and innovation domains in which that region can hope to excel (Foray, David, & Hall, 2009). However, there is evidence that a gap between discourse and practice is marking the RIS3-related regional development programmes (e.g., Iacobucci, 2014; Kroll, 2017), which can be extended to the involvement of universities in the process. Universities manage different activities within RIS3 processes, all very much dependant of territorial context, historical legacy (Breznitz & Feldman, 2012) and overall entrepreneurial architecture (Salomaa, 2018). As often is the case of universities in peripheral regions, even entrepreneurial ones, a divergence between the universities activities and the needs of the surrounding local innovation ecosystem (Charles, 2016) can lead to minimal entrepreneurial spillovers (Brown, 2016), with RIS3 processes failing to further them. Accordingly, a mismatch can be speculated between the expectations towards universities' roles in RIS3 implementation and actual practice, and its repercussions on a regional innovation ecosystem.

This paper aims to reflect on an entrepreneurial university's collaboration with a regional government administration in RIS3 implementation. The paper addresses the extent to which the role played by universities in a region's innovation and entrepreneurial practice matches or mismatches the smart specialisation strategic outline. As an in-depth case-study of the University of Aveiro (Portugal), it draws on both quantitative and qualitative data, with an analysis of RIS3 approved projects in the Portuguese NUTS II Centro region, and interviews with key actors within the university and the regional administration. Through this, it weighs the contribution of entrepreneurial universities to the RIS3 goals, drawing lessons for public policy and discussing the future of RIS3.

GLOBAL EMERGENCE OF NEW TECHNOLOGIES: A DYNAMIC ANALYSIS OF TERRITORIAL KNOWLEDGE COMMUNITIES AND RELATIONAL PROXIMITY IN WAVE ENERGY

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The emergence of a new technology is a process that takes place within an existing technological, economic and social context, benefiting from established structures and also contributing to their transformation. Although much research has been conducted on technology emergence, the territorial dynamics behind this process are still underexplored.

The paper investigates the structure and dynamics of the territorial knowledge communities that engage, over time, in the development of a new technology, with a view to understanding how their behaviour shapes the processes of technology emergence. More specifically, the paper addresses the following questions: How changes in the territorial knowledge communities in terms of geographical reach, actor composition and relational dynamics co-evolve with the emergence of a new technology? Which specific spatial and actor configurations contribute the development of new interdependences between existing industries and the emerging technology, promoting its structuration?

The empirical research focuses on wave energy, a technology field that experiences a prolonged emergence process and is still far from commercialisation. It analyses all the wave energy research, development and demonstration projects supported by the European Union (from 1992 to 2018), enabling an assessment of 25 years of technology evolution, including its very early stages. Social network analysis methods support the identification, along different time periods, of the knowledge communities with highest relational proximity, which are territorially localised with the support of GIS tools and further characterised in terms of composition and relational behaviour.

The results show a non-linear process of evolution, but also reveal an increased complexity in the behaviour of territorial knowledge communities, expressed in growing intra and inter-community variety and diversity, both at relational level and in terms of the constellations of actors, with impacts on the pace and directions of technology development.

INVESTIGATING THE SPATIAL PATTERNS OF REGIONAL FISCAL RESIDUALS IN ITALY

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Do regional fiscal residuals truly offer insights for understanding the net effects of interregional fiscal transfers? Shall the discussion on fiscal residuals be combined with more general arguments on regional growth and development to support policymaking effectively? Both questions are relevant and timely for the Italian case, given that even the definition of regional fiscal residuals has been questioned in a fiscal system like the Italian one where public expenditures and revenues are referred to individuals, not geographical areas. This paper has three main objectives, which represent novel contributions to the existing literature. First, from a conceptual point of view, we look at the fiscal residuals within the more general framework of regional development policies. Second, we throw new light on the study of the effects of regional fiscal residuals in Italy for redistribution and risk sharing, by adopting a more efficient estimation strategy that uses information on the short- and long-run components in a single step. In doing this, we provide novel results for the Italian case that are compared with those of the existing studies. Third, we introduce spatial interactions among regions in the study of fiscal residuals, an aspect that has been neglected until now, for investigating the net effects of fiscal residuals on regional economies. Neighbouring effects are modelled through trade linkages in order to capture how the degree of economic interdependency of the Italian regions determines regional disposable income. Some policy suggestions are conclusively proposed.

DOES SUCCESSFUL INNOVATION REQUIRE LARGE CITIES? THE CASE OF GERMANY

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Large cities may have many advantages commonly known as agglomeration economies. Recent literature has particularly stressed the role of large cities for creativity, entrepreneurship, and innovation. Based on arguments about the effectiveness of agglomeration economies it is claimed that cities are 'innovation machines' and that successful innovation requires to be located in a large city. Most of the literature that stresses the advantages of large cities for innovation refers to empirical examples from the US. There are, however, quite a number of countries that provide counterexamples to this popular belief.

This paper challenges the belief that innovation activity deserves large cities. Based on an overview of the geographic concentration of innovation activities in a number of countries we focus on the case

of Germany where we find a rather decentralized spatial structure of innovation activity. Although Germany has some larger cities with high levels of innovative activity, there are also many successfully innovating firms that are located in rather rural and remote places outside of larger innovation centers. One main explanation for the decentralized geographic structure of innovation activities in Germany that we analyze and discuss is the country's federal tradition, particularly the relatively low level of regional political and economic integration that characterized Germany until the late 19th century. This federal tradition of Germany has led to a rather decentralized settlement structure with not dominating large city but many small and medium-sized cities in not too far distances. It may also have contributed to a widespread geographic distribution of universities and other public research institution

We conclude that the popular theories that predict higher productivity of innovation activities in large cities ignore other important factors. As a result of these deficiencies, the policy implications of these theories may be rather misleading. Finally, promising avenues for further research are discussed.

DOES REGIONAL ENVIRONMENT AFFECT THE GROWTH OF TECHNOLOGY-BASED START-UPS AND INCUMBENTS EQUALLY? EVIDENCE FROM CHINA

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Technology-based start-up firms are newly established firms that use state-of-the-art or emerging technology as a key part of their manufacturing and product development. Their growth in a quantitative term, often measured in the number of employees, has been the center of focus in the literature as they serve as the engine of regional growth in modern economies. Yet little attention has been paid to the qualitative growth where they establish unique knowledge competitiveness and build innovative capacity on a sustained basis. Related literature suggests that firm growth performance is grounded in internal routines and competences, on the one hand, and region-specific factors and local environment on the other. But it is still not clear how firms rely on their internal competence and interact with regional environment in start-up period as compared to the mature period. By using a representative sample of Chinese technology-based firms, this study investigates both the intra-firm factors and regional factors that help them to achieve qualitative growth in innovativeness. It further distinguishes the "star firms" that have grown into established innovative firms within its start-up period, and firms that build up innovative capacity when they become mature incumbents. Interestingly, the results show the mechanisms at work, both intra-firm and extra-firm, are very different between the start-up and the post-start-up period. While the technology-based start-ups benefit substantially from the presence of foreign investment and regional knowledge stock, the qualitative growth of the mature incumbent firms is more facilitated by both initial technological competence and potential pool of young skilled labor in the region. However, growth of incumbent firms is handicapped by foreign investment presence and size of the local labor market. It implies that technology-based start-ups are less likely to be influenced by firm routine lock-in and overembeddedness in the regional environment.

PRACTICES AND AGENCY OF INFORMAL E-WASTE SECTOR: THE CASE OF GUIYU, CHINA

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The ongoing debate on diverse economies in economic geography highlights the prominent presence of informal sector in economic landscape, yet such performative ontological project risks dichotomization between the formal and informal practices. This paper begins with the critical reflection on how informal sector respond to and negotiate with the transformation of formal

environmental governance and formal sector development at various spatial scales. Building upon the case of Guiyu, the largest electronics waste site in the world, the paper investigates the new practices and the adapting form of social organization in the informal e-waste sector, after a series of environmental regulation and e-waste management plans have been implemented since 2013. The analysis has shown the highly organized fabrics of informal e-waste recycling, primarily via strong social networks such as clanship and kinship, has been sustained and mutated through both negotiation with local governments and agency towards spatiality strategies. The informal vendors and producers use strategies of requesting the local government to proceed formalization based on kinship and clanship, relocation to township fringes, and establishing extra-regional market linkages to enhance competitiveness towards government-subsidized formal sector. Finally, the paper suggests the ways that informal e-waste practices inform the path of waste governance.

THE LEGACY OF SOCIALISM: WHICH ENDOWMENTS FOSTERED THE TRANSITION OF THE EAST GERMAN REGIONS AFTER 1989?

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This paper investigates the role of the local economic endowment for changes in employment and unemployment in the East German regions during the transition period directly following the dismantling of the German Democratic Republic (GDR) in 1989. The Country was hit by an economic shock that was not clearly predictable and cut through the old production systems and networks, and some regions managed the transition to a market economy better than others. Our central focus is on which kind of regional structure did best in absorbing the initial transition process. We hereby resort to the role of agglomeration economies, economic structure, trade exposure, geographic setting, and labor force composition. Using a regionally consistent and comprehensive data set on establishments and employees, we trace the impact of the economic endowment of GDR times on changes in overall and industry employment and in unemployment between September 1989 and 1993. First results highlight the role of all five groups of variables included in our analysis, albeit with different implications for the outcome variables. As a tendency, urban regions with a high share of larger firms, of the construction sector and of entrepreneurs that are located farther away from West Germany tended to fare better. The composition of the local labor force plays a prominent role for unemployment, with a high share of women additionally driving up the unemployment rate. Overall, the results show that the legacy of Socialism has strongly shaped the East German regions' capability to cope with the immense structural changes after 1989. The shock hit the regions with different intensity, which can be traced back to a certain set of initial endowments that helped to develop local resilience against these changes.

ANALYZING THE FUNCTION OF LOCAL TRADING COMPANIES TO CONNECT RESOURCES FOR DRIVING REGIONAL ECONOMY IN JAPAN

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In Japan, the Abe administration has been pushing a growth strategy to overcome regional population declines and the shrinking regional economy since 2014. To promote it further, the government enforced the Act on the Promotion of Regional Investment for Future in 2017. In this policy, local trading company is emphasized as an economic entity leading the regional economy. Currently, more than 100 local trading companies are established in Japan. Although actual establishment trends are becoming active, research on local trading companies has not been done sufficiently.

In this paper, we clarify the function of local trading company based on field survey. In particular, we surveyed business models and trading networks of local trading companies. Through the survey, we also classified business activities of local trading companies.

As a result, it became clear that local trading companies have been connecting economic entities, different industries, economic resources and non-economic resources (culture, history, environment, etc.) to develop new products and services. We reveal in this paper that the function of connecting various resources is the source of creating new business, earning foreign currency, and promoting economic cycle for regional economies. We show that local trading company's business activities are important for regional economic development.

PROXIMITY AND GOVERNANCE IN THE CITY DEVELOPMENT

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If a city is located in a good place, if it is "near", "close", it will be successful. The capital and well-trained human resource flow there, so the local consumption will rise, the local culture will strengthen. This is the natural process of development: the local economy will align with the good spatial position of the city. But what does the proximity mean? Close to what? Close to the markets, the production factors, the capital or the human resources with fine quality? Or close to the transit corridors, where the economy flows?

And what can a city do to improve its spatial position, its proximity? And if this position will be better, how can the city utilize it? In both questions, the governance of the city has a key role: how tries the city influence the spontaneously processes of the local economy and society. In this paper is created a model, in which the proximity, the governance, and the city development are connected.

CONCEPTUALISING METROPOLITAN REGIONS: HOW INSTITUTIONS, POLICIES, SPATIAL IMAGINARIES, AND PLANNING ARE INFLUENCING METROPOLITAN DEVELOPMENT

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The need for effective metropolitan governance and planning has never been so great. In this paper we argue that despite an inspiring debate on the issues of metropolitan change, planning and governance contributions which develop and operationalise broader frameworks for analysis are relatively scarce. Approaching metropolitan regions and metropolitan questions has typically taken one of two perspectives – the specificities of individual cases or establishing general principles. Here we argue for an alternative approach. Our approach for conceptualising the planning and governance of metropolitan regions is a heuristic perspective which, due to its focus on thematic, temporal, and phronetic dimensions, we refer to as the TTP framework. The aim of the paper is to highlight the value of its tripartite rationale while exploring its potential to facilitate alternative international comparative research across disciplines. The paper concludes by assessing the potential application of the TTP framework beyond planning and governance.

SPATIAL AND NON-SPATIAL PROXIMITY DIMENSIONS OF UNIVERSITY-INDUSTRY COLLABORATION

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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 (Glaeser et al. 1992; Gertler 2003; Storper & Venables 2004). However, geographical proximity should not be considered a sufficient condition to foster interactive learning because. Different dimensions of non-spatial proximity have been put forward, since they can complement, or substitute, geographical proximity (Boschma 2005; Knobben & Oerlemans 2006).

We applied this subject to university-industry collaboration. Previous studies have identified the benefits of geographical proximity for university-industry collaboration (Jaffe, 1989; Audrestch and Feldman, 1996; Mansfield and Lee, 1996; Arundel and Geuna, 2004; Laursen et al., 2011; D'Este and Iammarino, 2010; Garcia et al., 2015). Based on this debate, this paper aims to analyse how spatial and non-spatial dimensions of proximity drives collaboration between university and industry. We perform an empirical analysis based on data of the university-industry collaboration in Brazilian regions. We use data from 2010 of the Brazilian Ministry of Science and Technology (Rapini et al., 2009, Suzigan et al., 2009, Garcia et al., 2011). The main unit of analysis is the region, and the total count of university-industry collaborations is 4,342.

Main results show that both geographic and cognitive distance were negative and significant, which shows that the more distant the firm is, the less it collaborates with university. Regarding the absorption capacity, firms with greater capacity can collaborate with more geographically distant universities. Another result of the empirical analysis shows that the smaller gap in the patent density the more the interest of the company to interact with research groups in a given region. Therefore, the contributions with this study are highlight similarities in a specific database for development country to guide future studies in this topic.

PARTICIPATORY GOVERNANCE, SOCIAL ENTREPRENEURSHIP, AND THE IMPORTANCE OF INNOVATION ROLE MODELS FOR REGIONAL PATH DIVERSIFICATION THE TRIPLE HELIX MODEL IN SMART, GREEN AND INCLUSIVE URBANISM IN BRAINPORT SMART DISTRICT

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Urban innovation policies reintroduce the long neglected role of entrepreneurial individuals (EIs) and civil society into innovation studies with regard to the organization of regional innovation and the emergence of new innovation pathways. We explain the role of entrepreneurial individuals (EI) in regional and urban transformation in networking or cluster constellations. The research approach integrates the concept of regional transformation, participatory governance and innovation models such as the smart city concept and the triple helix model, and sheds new light on the prospects of citizen engagement in multi-scalar arrangements and for a path diversification that effectively integrates social innovation for the sustainability of urban and regional development. A detailed account is presented of the critical stage in the evolutionary process encompassing EI recruitment of peers to the organization of consortia that assume responsibilities as regional innovation organizers at the threshold of institutionalization. We illustrate the pathway of a citizen- and consortia-driven approach in innovation for the creation of Brainport Smart District in Helmond, in the Metropolitan

region of Eindhoven in The Netherlands. The paper contributes to an empirical data pool for the categorization of citizen-driven innovation pathways within an extended approach of economic evolutionary economics (EEG).

PROBLEMS AND OPPORTUNITIES FOR A REFORMED EU COHESION POLICY: THE EURO-MEDITERRANEAN PERSPECTIVE

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The paper focuses on the shortcomings of the ‘place-based’ approach of EU Cohesion policy and provides policy recommendations from a Euro-Mediterranean perspective. The EU’s 20-20-20 goals (20% increase in energy efficiency, 20% reduction of CO2 emissions, and 20% renewables) and the ‘Southern Range’ project – based for example on an integrated network of ports and Special Economic Zones – are key policy objectives to be achieved in a Euro-Mediterranean perspective. Such a Euro-Mediterranean strategy, however, cannot be entrusted to individual regions, and would require a centralized governance, that would make it a central element of the overall EU sustainable growth project. In this paper we explore the conditions for making the Mediterranean region a qualifying ingredient of an overall sustainable development strategy to be implemented within Cohesion policy.

FDI INFLOWS IN EUROPEAN REGIONS: WHAT ROLE FOR INVESTMENT PROMOTION AGENCIES?

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Investment Promotion Agencies (IPAs) represent an increasingly common policy tool not only for countries but also for regions to attract foreign investment. While some literature exists on national IPAs, there is no research on the effectiveness of their regional counterparts. This paper aims to fill this gap by exploring the regional impacts of both national and regional IPAs in Europe, analysing how the diverse institutional configurations and strategies relate to investment attraction. The paper leverages an ad-hoc survey on the structure and strategy of national and regional IPAs, developing a differences-in-differences model to estimate their effectiveness in attracting foreign investments to the host regions. This analysis is complemented by counterfactual evidence obtained with the synthetic control method. The findings suggest that regional IPAs have a positive impact on the inflow of FDI (in terms of both dollar values and jobs created) towards targeted sectors. The evidence on the impact of national agencies on European regions is more mixed. We exploit the heterogeneity in the configuration of IPA structures within countries to investigate the most effective models for investment attraction.

NEW FORMS OF DELEGATED GOVERNANCE IN COHESION POLICY: WHAT IMPLICATIONS FOR THE DISTRIBUTION OF RESPONSIBILITIES AND POWER RELATIONS IN POLICY IMPLEMENTATION?

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Financial instruments (FI) introduce major changes to the governance of Cohesion policy (CP). Five types of innovations are identified. First, financial instruments involve a new category of actors – fund managers – that did not exist before and entrust them the management of public resources. Second, they create new relationships between these new actors and those traditionally involved in CP at programme level. Third, FI create structures that determine one (specific funds) or two (holding funds) extra layers of delegation. Fourth, financial instruments introduce new rationales for policy delivery, none of which underpins the use of grants to deliver the EU budget. Fifth, financial instruments

innovate Cohesion policy by offering a range of financial products (equity, loans, guarantees), having in common the provision of repayable support.

The delegation/entrustment of fund management functions to actors outside the public administration gives way to a shift in the governance of Cohesion policy (Dąbrowski, 2014) and requires strengthened scrutiny (Wishlade and Michie, 2017). For these reasons, the delegation and principal-agent literatures is the most appropriate theoretical framework to study these new modes of governance and their implications for the distribution of responsibilities and balance of powers in policy implementation.

Thanks to a combination of sources, this paper can offer several insights. First, it identifies a typical governance structure for FI implementation. Second, it identifies multiple chains of delegation: a substantial amount of tasks is carried out by fund managers, while the formal responsibility over those duties is of the so-called 'intermediate level' actors. Also, the paper finds that there is limited scope for 'agency drift' in FI implementation, given that agent's actions are effectively constrained through contract design and monitoring and control. Lastly, the study finds that the extent of authority granted to agents depends on a combination of factors, among which expertise is central.

KEY VARIABLE WHICH DEFINE THE USE OF ICTS IN THE EUROPEAN ENTERPRISE. A COMPARATIVE ANALYSIS OF SPANISH REGIONS IN THE EUROPEAN CONTEXT

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The paper addresses enterprise's use of ICTS in the European Union (EU) at regional/national level. The overall objective lies in advancing the scientific interpretation of the digital divide (DD) in the EU. In order to achieve this overall aim, the following specific objectives are set out: 1. Construct and verify a conceptual and interpretive model of the use of ICTS in the EU; 2. Construction of a synthetic index of digital development for countries/regions in the EU; 3. Establish a taxonomy of regions and countries of the EU according to its digital development. To undertake this work, we have statistics provided by Eurostat at regional scale and at state level regarding at the access and use of ICTs in companies. The main results are: a) the key variables which define the use of ICTS in the European enterprise; b) a synthetic digital development index at different European scale; c) a ranking from more to less digital development of the regions and countries.

This study is based on a R&D project financed by Spanish Ministry of Economy, Industry and Competitiveness. Plan Estatal 2013-2016 Excelencia - Proyectos I+D. Ref: CSO2015-67662.

LABOR MARKET'S BORDER. LABOR AND SOCIAL IMPLICATIONS OF ECONOMIC MIGRATION BETWEEN POLAND, THE EU, AND UKRAINE

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Poland is the largest has the most dynamic economy of the former Warsaw pact countries that joined the European Union in 2004. The Polish economy has grown by an average of 3.92% since 2004, the highest average rate of GDP growth in Europe.

It has also experienced a unique change in the profile of its workforce, with over two million Polish people migrating to western European countries in search of better work opportunities; meanwhile,

as the Polish economy has grown, and with geopolitical turmoil in Ukraine, approximately one million Ukrainians have migrated to Poland for much the same reasons.

This talk explores the change in work conditions experienced by both sets of workers, how their labor rights and opportunities have evolved, and the social implications for both sets of workers in this period of significant change in Central Europe.

AUTOMATED VEHICLES IN LATIN AMERICAN CITIES? FEASIBILITY OF ADOPTION, IMPACTS ON URBAN STRUCTURE AND TRANSPORTATION AND PUBLIC POLICIES

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At present, automated vehicles are being tested in cities of the developed world. Even though, automated driving technology is considered to be still in its infancy, cities are looking into ways to adapt for its adoption and possible impacts. At the same time, cities from developing countries, face big challenges ahead, related to how this new technology is likely to influence passenger and freight transport. The deployment of automated transport creates favorable conditions for shared mobility systems, but also can increase individual vehicles use and transforms land use in urban, suburban, and rural areas while also having fiscal impacts. Considering the need to identify and evaluate the spatial impacts of automated transport systems, including their social, economic, and environment implications at metropolitan level for Latin American cities, this paper assess the impact of autonomous vehicles on urban mobility and urban structure. It develops estimates of the distributional consequences of AV technology and outlines some policy guidelines considering the particular characteristics of the region, from very denser urban metropolitan areas, lacking an appropriate governance structure, high inequality, massive private vehicle consumption growth in the last decade, and a path to informal urban extension without the appropriate infrastructure. The paper includes a detailed spatial analysis of 30 metropolitan areas in the region, based on an innovative database on urban structure and population density. The study is complemented by a three-round Delphi survey to transportation and urban experts from public, and private sector (academia, multilateral organizations, planners and public authorities, but also from industry and technology). This section of the analysis is intended to achieve the construction of consensus or a reduction in the range of variation of the formulated forecasts of AVs impacts and policy requirements, based on an interactive process of exchange among the experts. The whole research project is part of a study commissioned by the Inter-American Development Bank (IADB) on AVs in Latin America.

THE GREAT RECESSION AND INDUSTRIAL RESILIENCE IN THE USA

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This paper adopts an evolutionary framework to study the industrial resilience of counties in the USA with respect to the economic crisis in 2008. To do so, resilience is conceptualised as a regions' capacity to embrace structural change and successfully develop new growth-paths despite adversities. Empirically, resilience is measured by the extent to which a county maintained or improved industry entry rates in the post-crisis period of 2009-2016 as compared to the pre-crisis period of 2002-2007. The study exploits employment data on 3200 counties and 320 four-digit NAICS (North American Industry Classification System) industries, collected from the USA Bureau of Labour Statistics and the Business Pattern Program. An econometric analysis explores the determinants of industrial resilience. Specifically, the aim is to isolate the impact of the local economic structure on the probability that a county is resilient. The literature on regional innovation and growth argues, that the presence of a

variety of related and unrelated industries creates a portfolio effect against economic shocks as well as opportunities to make new recombinations across industries from which new specialisations can emerge that support long-term development. Following this argument, understanding the impact of related and unrelated variety on industrial resilience is the focus of the econometric analysis. In line with previous studies, I expect to find significant differences in industrial resilience across counties even under the same state institutional frameworks as well as differences among metropolitan and non-metropolitan counties. Moreover, I hypothesise that related and unrelated variety in the local industrial structure favours industrial resilience and largely determine the geography of industrial resilience in the USA.

PATHS, PATTERNS AND NETWORKS OF KNOWLEDGE-CREATING CITIES: ENDURING THE ECONOMIC CRISES AND STRUCTURAL CHANGES IN GERMANY

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The economic crisis in 2009 caused the deepest downturn of GDP for the first time in after-war Germany. Though national economy overcame the crisis in 18 months, the effects of structural changes are probably ongoing. The question is to what extent and - if yes - how the crises and structural changes are affecting the population and employment developments in German functional urban areas (FUAs) from 1998-2018 and how inter-connected firm networks in knowledge economy alter the structure of the urban hierarchy.

Three main hypothesis are conceivable: (1) The level effect assumption expects that the ranking remains unchanged, but the connectivity shrinks because of general decline in demand. (2) The slope effect suppose that either locations with good accessibility, human capital, R&D attract knowledge-intensive firms, hence the hierarchy becomes sheer, or the peripheral locations are magnet for the firms and therefore the hierarchy is flatter. (3) The ranking effect suspects that the German cities with greater connectivity of advanced businesses to BRIC recover faster from the economic crises than the regions with stronger connectivity to Western industrialized countries. We expect the results of this study will speak for the ranking effect.

Longitudinal analyses of population, employees and GVA will show the patchwork patterns of growth and decline in FUAs and demonstrate evidence of structural changes. We will collect data on locations of TOP-30 companies in sub-branches of Advanced Producer Services in 2018/2019 on their websites. Analyses on connectivity will apply interlocking network model because networks between enterprises represent an intermediate for flows of knowledge-creating information between the cities and their connectivity. The familiar data collection and study for 2008 by Lüthi and team (2011) will make comparison before and after the economic crises possible.

GOVERNANCE AND GOVERNMENT IN THE EUROPEAN TERRITORIAL COOPERATION AND EU REGIONAL STRATEGIES

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European Territorial Cooperation and EU regional strategies account a significant number of bodies involved in the various programming, implementation and evaluation phases, as well as in the governance to ensure a wide representation of countries and regions involved. This paper will present an analysis of managing bodies as well as governance ones identifying point of strength and

weaknesses in the 2014-2020 programming period, especially related to programmes related to EU Regional Strategies.

PERFORMATIVITY OF CITY-REGIONAL IMAGINARY IN BETWEEN CHANGING ORGANIZATIONAL PRACTICES AND STABLE INSTITUTIONAL RULES IN STRATEGIC SPATIAL PLANNING

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City-region has emerged as a scale for strategic spatial planning and economic governance across European countries. Often it has appeared as a non-institutionalised space of planning crossing formal administrative boundaries and scalar levels, which entails that the accountability of actors is institutionalised at another level of scale or in other social and political conditions (Salet 2018a:152). In planning theory, the conditioning role of institutions has been gaining increasing interest (e.g. Alexander 2005, Moroni 2010, Sorensen 2018) and attempts have recently been made to better understand the dialectics between institutional rules and purposive and situated actions of organisations of (city-regional) planning (Salet 2018a, 2018b). However, these attempts have tended to approach the dialectics by alternating between each end of the dialectical relationship, rather than addressing the relationship itself.

This study develops a unified approach for analysing the dialectics between organisational practices and institutions rules by building on Jessop's (2001) strategic-relational approach and the concept of spatial imaginary (Jessop & Oosterlynck 2008). The article examines the analytical feasibility of the approach with a case study of strategic planning in a Finnish city-region of Kotka-Hamina, where highly regulative instruments of statutory municipal master planning are used in a strategic manner for spatial planning at a city-regional scale.

Through the case study of Kotka-Hamina this study shows how institutional rules, which do not correspond to the present regional dynamics and imaginaries, may lead to an institutional void (Hajer 2003) and conversion of existing institutional rules (Mahoney & Thelen 2010). Furthermore, it reveals a dialectical relationship between emerging organisational practices of non-statutory city-regional strategic planning and stable conditioning institutional rules of regulative municipal statutory planning and governance. Thereby this article contributes to the institutionalist planning-theoretical discourse by elaborating on the dialectics of organisational practices and institutional rules in the institutionally vague city-regional context.

PUTTING THE WATERING CAN AWAY - TOWARDS A TARGETED (PROBLEM-ORIENTED) CLUSTER POLICY FRAMEWORK

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In view of the undisputed promising effects of regional clusters and spurred by lighthouse examples such as the Silicon Valley, cluster policies have been popular in many countries worldwide. However, in recent years the complaints have become louder about the actual economic relevance and efficiency of such regional innovation policies. In particular, the high degree of standardization in the so far applied cluster policies, focusing primarily on collaborative incentives to strengthen the relational density in clusters, have been criticized as being rather ineffective and costly to society (e.g. Vicente, 2014). In order to solve this one-size-fits-all problem it has been proposed that cluster policies should instead focus on the concrete conditions and needs within regional clusters. The aim of this paper is to respond this call by considering firm-, cluster- and market-/industry-specific particularities.

Based on an extensive systematic literature review and own empirical results about the relationship between clusters and firm's innovativeness, an overview about relevant conditions is elaborated. Such an overview makes it possible to identify potential problems, e.g. in terms of missing absorptive capacities, which cluster policy can purposeful address. For each identified problem, a potential targeted (problem-oriented) policy intervention is therefore suggested. The corresponding result of this procedure is a policy-framework that offers a highly practical value in terms of bringing forth specific adaptive cluster policies rather than one-size-fits-all policies and thereby contributing to a more sophisticated understanding of the design of cluster policies.

SECURING THE SUPPLY OF STAFF FOR THE HEALTH AND SOCIAL CARE SYSTEM IN RURAL AREAS: INSIGHTS INTO CHALLENGES AND OPPORTUNITIES FROM ENGLAND

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George Bramley, University of Birmingham, UK

With population ageing securing the supply of staff the health and social care system needs to deliver high quality care now and in the future is crucial. This is a universal challenge, but this paper applies a rural lens to this workforce issue by drawing on analyses of economic and labour market data, a literature review and primary research entailing interviews and workshops with stakeholders in contrasting rural areas. The challenges faced and opportunities identified here are of wider policy relevance to economic development and rural labour markets elsewhere.

Disproportionate out-migration of young adults and in-migration of older adults have implications for health and care services demand and for labour supply, especially in tight labour markets. Rural areas are characterised by fewer health service staff per head than urban areas yet the lack of a spatial component in workforce planning means that the generic characteristics of rural labour markets are overlooked. The conventional service delivery model is one of a pyramid of services with specialist services and good career advancement opportunities in major urban locations. Brexit and immigration system reform have implications for international migrant labour supply.

These challenges require innovative solutions to service delivery and recruitment, retention and workforce development challenges. Rural areas can be attractive locations for clinical staff with generalist skills and developing 'centres of excellence' in particular specialities or ways of working could make rural areas more attractive to workers. Rural areas can also be in the vanguard of drawing on the voluntary and community sector in service design and delivery, utilising 'life experiences' of older workers as an asset and supplementing staff resources with technology in health and care delivery.

ENTREPRENEURIAL ECOSYSTEMS AND INNOVATION SYSTEMS: IMPLICATIONS FOR POLICY AND REGIONAL ECONOMIC DEVELOPMENT

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The concept of entrepreneurial ecosystems (EE) has attracted increasingly attention from policy makers and scholars and stimulated debate in its comparison with innovation systems (IS). A criticism of both concepts is the lack of theoretical or scientific support. Much of the IS literature has focused on the economic dimensions of innovation, with further attempts to establish the central role of institutions, social dimensions of the systems and the context of historical path-dependencies of countries and regions. Criticisms of the EE concept include determining where an ecosystem starts and where it ends and establishing what is 'entrepreneurial' about an EE. This paper takes the position that the EE and IS debate should not be considered a theoretical battle to find the best tool to boost

regional development, but rather as the search for a set of different tools to observe the economic evolution of a region. The absence of unifying theories for EE and IS and use of different definitions require careful consideration of the methods used in interpreting their relevance for policy and practice. The paper argues that EE and IS share some common features, but they have quite different applications. The EE focuses more on the individual entrepreneur and the environment and related resources to support entrepreneurial activity, while IS more broadly emphasizes regional development through the capacity for learning in the creation, development, transfer, diffusion and exploitation of new knowledge, science and technology. Some countries, such as China, have paid significant attention to IS, while others, such as Chile, are increasingly adopting policies informed by EE. The paper contributes a taxonomy of both approaches, followed by an analysis which considers how the EE and IS concepts might be applied in different regional contexts.

THE ROLE OF REGIONAL SMART SPECIALISATIONS IN CREATING A MORE INNOVATIVE AGRI-FOOD SECTOR IN RURAL AREAS

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Current food-related expectations force the agri-food sector to comply with new requirements and standards, which in turn generates a need to implement innovations reducing costs and increasing food security and quality. However, the development potential of the agri-food sector depends, to a large extent, on the region in which it functions. There is a positive relationship between the region's innovative activities and its competitiveness. The adoption of an appropriate approach is of particular importance in the case of the poorer regions, often subject to an "innovative paradox", when the economically weaker regions that actually need to strengthen innovation are also weaker in the use of funds as are not able to transform them into effective innovative activities. Smart specialisations seem to be a good solution. They offer a framework for shaping priorities in line with the logic of resource allocation and making of appropriate choices with regard to budgetary challenges.

The objective of the study was to examine the impact of regional smart specialisations on the innovation development of regions in the EU, with particular consideration given to the agri-food sector. The method of the review and critical analysis of source materials were used based on primary and secondary sources of information.

It was concluded that current smart specialisations are treated mainly as a distribution mechanism for the European Regional Development Fund resources. One of the reasons for the ineffectiveness of policies implemented based on smart specialisations is the use of solutions identical for all regions (one-size-fits-all approach), without taking their specificities into account. The selection of smart specialisations should not identify the most fashionable trends, but areas where new research and development activities will complete other production resources, so as to create future local values and comparative advantages of the region.

ADAPTING MOBILITY INNOVATIONS TO RURAL NEEDS: MATCHING MESO AND MICRO-LEVEL DEMANDS

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Driven by the proliferating digitization of services, an increasing number of new mobility options evolved recently, significantly improving living and working conditions. Those novel solutions though have mainly been introduced in cities so far, developments on the countryside are surprisingly still behind. 'Smart' solutions however may not only help to better organize rural mobility, but also to improve tailored on-demand services and enhance sustainable rural development strategies. Against

the background of shrinkage and depopulation trends in the peripheries, a well-developed digital mobility system can further be campaigned as a promising location with overall positive effects on regional development. Hence 'Smart Mobility' offers various chances for peripheral regions: If first, the transfer and implementation of urban innovations to rural areas is managed successfully and second, if innovations are adapted to the rural users' needs.

Hence this presentation will first discuss necessary requirements when attempting to transfer mobility innovations from urban to rural context conditions. Expanding the concept of regional absorptive capacities (Cohen/Levinthal 1990) with a level perspective, promoting yet also impeding factors that affect the implementation of 'smart' transport solution on the meso-level are revealed, based on a wide database of 30 expert interviews conducted in the case study area of Heinsberg, Germany (Gross-Fengels/Fromhold-Eisebith 2018). By additionally portraying the user on the micro-level (Rogers 2008; Venkatesh/Bala 2008), those expert statements will be fruitfully contrasted by findings about the local user's attitudes towards alternative mobility use, having executed a standardized online survey in the case study area in 2018 (N= 360).

The Heinsberg example reveals supportive, yet also impeding factors that shape the rural use patterns of 'Smart Mobility' (i.e. sharing, pooling, platforms), but declares furthermore the inconsistencies of mobility planning policies and actual user needs. Critically discussing the "Smart Country-side" (ENRD 2018; Fraunhofer IESE 2017) approach, a rural analogy of the "Smart City", some planning and policy related conclusions for adapting innovations to rural requirements are derived.

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URBANISATION DYNAMICS AND URBAN ENERGY SYSTEMS

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This paper aims at understanding how urban morphology impacts on energy demand at a city level. Cities are often characterised by high spatial densities of energy use. A large portion of energy demand comes from buildings and transport sectors. The paper investigates how compactness, population density, and other characteristics of land use in urban morphology affect energy consumption in these two sectors. In particular, referring to a sample of European cities of different size, using data on energy consumption, heat energy efficiency, number of renewable energy plants, urban traffic mode, and urban form indicators, we are able to observe how energy demand is related to the spatial configuration of cities. We control for economic, socio-demographic and climate variables in order to disentangle diverse causal effects. We find evidence about the variation of heat-energy demand and energy transport demand within similar and between different categories of urban morphologies. We also observe the percentage of energy demand coming from green energy, being able to capture how sustainable energy uses are incentivised by particular morphological configurations. This kind of analysis provides useful insight for economic and planning policies designed to foster a successful transition towards sustainable urban energy systems.

BETWEEN IMAGINARIES AND REALITIES OF THE IDENTITIES OF TERRITORIES

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Identities are often used in spatial planning and marketing practices as ways of claiming the singularity of regions. However, as regions are represented through the selection of tangible and intangible features, such representations do not always reflect the 'real' identity of territories. That is why territorial identities, at different scales, are frequently characterized as being imagined. Several studies have identified gaps between the reality and the aspirations of the identity of territories and have also highlighted differences between identity narratives among different groups. Bridging these gaps is an important way of increasing the economic and social values of the identities of territories. But how does this process work in regions with ill-defined institutional and symbolic boundaries? To answer this question, we focus our study on the North of Portugal case. Being inside one of the most centralized western European states, the North of Portugal is a European region with no administrative autonomy, that is endowed with supra-municipal structures capable of producing identity narratives through economic, cultural or social inter-municipal projects. In this sense, our purpose is to explore the official representations of the North of Portugal space. To that end, we do a quantitative content analysis of the region's supra-municipal planning and marketing strategic documents. By comparing the characteristics and spatial entities employed on these representations, our contribution highlights the main contradictions of the official representation of the identities of territories in regional planning. Furthermore, our analysis allows identifying those territorial features that could bind territorial entities together, which is particularly relevant in a moment when Portugal is taking important steps towards decentralization.

GLOBAL MONOPOLY, FINANCE, AND REGIONAL DISPARITIES (OR, THE GEOGRAPHY OF CLINTON'S TONE-DEAFNESS)

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There is solid evidence that monopoly power in the USA has grown dramatically since 1980 (Eggertsson, Robbins, and Wold 2018; De Loecker and Eeckhout 2017). The growth of monopoly coincides with the growth of inequality (Piketty and Saez 2003) – not surprising, since monopoly exacerbates inequality of income (Khan and Vaheesan 2016) and wealth (Commanor and Smiley 1975).

In the same period, the country has undergone a stark political polarization: it is now common to speak of Red States and Blue States as if they were natural categories. It is in Blue states that we find places like the Silicon Valley, Seattle, Boston – the so-called "dynamic" parts of the country include most of the nation's technology clusters. The firms in these clusters contribute to economic dynamism, and to their regions' boast of producing such an outsize share of the GDP.

Most of the vast body of research on these clusters has focused on their benign Marshallian properties: specialized clusters of innovative firms seen as virtuous circles in which rivalry between firms, localized knowledge spillovers, access to specialized labor, suppliers and customers, and favorable local or regional institutions, between them produce skills and innovation, raising productivity, wages and profits, and products useful to the rest of the world. See, for US cases, Audretsch and Feldman (1996), Best (2001), Iammarino and McCann (2006), Klepper (2011), Moretti (2012), Saxenian (1994), and Storper (2013), among others.

It is easy to read this literature as implying that, if these clusters are more prosperous than other parts of the USA, it is just because they are better than anybody else at whatever their specialty happens to be. If the less prosperous places want to close the gap, they should turn around, face front, and find their own areas of specialization. To the extent that America's regional political polarization flows from economic polarization, the remedy is to help the lagging regions pull themselves up.

If there were nothing to the Marshallian story we would not expect specialized clusters to exist – tech startups do not locate in the Silicon Valley for the low cost of operation. But what if today's high tech clusters are the homes of numerous profitable global monopolies, large and small, and are also forcing beds in which to sprout new monopolies? If so, there is a good case that these dynamic clusters are, in fact, holding much of the rest of the country back, in three ways: 1. monopoly pricing is a tax on others, and many of America's tech monopolies impose their taxes on a global basis; 2. a large and growing monopoly sector drains financial resources from firms in competitive sectors, while the wages and prospective profits offered in regions where monopolies are based drain skilled workers from other regions; 3. the barriers to entry which sustain monopolies constrain not only the emergence of competing firms, but the innovative use of certain basic materials of the information age. Our contribution will illustrate each of these arguments using different geocoded datasets.

SMART SPECIALISATION FROM THEORY TO PRACTICE

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Research and Innovation Strategies for Smart Specialisation (RIS3s) were launched within the EU Cohesion policy for the 2014-2020 period as a significant novelty. The move from a 'generic' to a 'place-based' regional-development policy appeared justified in light of the academic discussion. However, at that time, limited knowledge was available on whether policy makers were ready to implement RIS3s. Five years into this large-scale policy experiment, it seems important to check what Smart Specialisation has meant to those responsible for designing and implementing it.

This paper illustrates the results of a survey on the RIS3 experience across European regions and countries. By analysing the views of national and regional authorities, the survey takes stock of RIS3 implementation, identifies critical issues and challenges while drawing some lessons and recommendations in light of the debate on the post-2020 Cohesion Policy.

Despite being considered challenging in terms of policy intelligence, skills and capabilities for public authorities and other stakeholders, Smart Specialisation is positively valued by the vast majority of respondents. Substantial improvements are detected with respect to: stakeholder engagement, priority setting, concentration of funding, level of trust and emergence of innovation potential. More efforts are needed in relation to the quality and effectiveness of monitoring and outward-looking activities. Further progress is still required for the policy regulatory framework, governance and institutional capabilities along with the involvement of relevant actors (notably SMEs and civil-society groups). With respect to the ultimate economic objectives of the policy, respondents are not observing significant progress, yet they recommend maintaining the current policy framework for the future, with small adjustments. The survey provides robust empirical insights on the debate on place-based policies, highlighting the importance of supporting the adaptation to new frameworks across the multiple dimensions of the policy-process.

CARBON EMISSION STOCKS AND FLUXES OF CHINA'S OVERSEAS ENERGY INVESTMENTS

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Overseas investment is always deemed as a crucial part in global economic development. Overall, China's energy investment across the world has surpassed most of the countries partly due to its "Going Global" strategy. Along with this trend, the possible energy savings and carbon emission reduction strategies are expected in some developing countries. Based on the input-output analysis and life cycle assessment, this research focuses on the carbon emission stocks and fluxes of China's overseas investments with the multi-regional intensity inventory. In this context, this work is conducted to examine the distribution and patterns of energy investments and conduct the carbon emission assessment in different regions. By comparing the costs and benefits of China's overseas energy investments from economic and environmental perspectives, the sustainable investment patterns are discussed and the related policy implications are suggested for possible regional economic development and global climate change mitigation.

THE IMPLEMENTATION OF COMMUNITY LED LOCAL DEVELOPMENT IN A LESS DEVELOPED REGION OF THE UK: A CORNWALL CASE STUDY

Judith Hann, CLLD - Cornwall Development Company, UK

NB: Our proposal is based upon our experiences of running the CLLD programme in the Less-Developed region of Cornwall, UK. We are coming to this as practitioners not academics, but have identified a number of lessons that feed into the assessment of the approach as a future mechanism for localised growth. It is these views we would wish to present to conference.

Engaging communities most in need in their future development is commonly accepted as theoretically and morally correct approach to localised economic development. However, often these communities lack the necessary community, social and economic infrastructure required to identify, develop, fund and support projects.

That said, engaging Local Action Groups in the oversight, strategic development and management of the programme is a substantial way forward. Questions remain about the representative nature of these groups and how effectively the programme mechanisms can be devolved to local level. Similarly, the processes for administering EU funds require a high level of management expertise, strong administrative systems and the ability to digest competing funding priorities and eligibilities – which can be at odds with the desires of local communities and their resources. Ensuring these processes are accessible by those with low skills (as is often found in the targeted areas) is a challenge for all. The definition of communities in the spatial dimension can lose sight of the economic interdependencies across geographies; by using the terms core and functional we have identified key investment geographies and their economic functional partners to counteract the often arbitrary separation in geographic eligibility.

Finally, the CLLD mechanism requires communities to be sufficiently robust and agreed in their own priorities and requirements; this level of community resource and infrastructure is often lacking. Differences between those areas with experience of receiving funding and those who have not accessed territorial investments at a community level previously are clearly visible. The lack of skills in our targeted communities adds a layer of complexity to the developmental process; our communities are those with prolonged, sustained levels of deprivation and offering funding is only part of the solution to supporting their development from deprivation. Flexible community cohesion /development apparatus is required to ensure investment is successful.

WHERE DO WE BELONG AND WHERE DO THEY BELONG TO? A RESEARCH ON MACROREGIONAL IDENTITIES IN EIGHT NEIGHBOURING COUNTRIES

Tamás Hardi, Széchenyi István University, Hungary

Between 2012 and 2015 the students' macroregional identities and its formative factors were analysed in Hungary and eight neighbouring countries (Austria, Slovakia, Ukraine, Romania, Serbia, Croatia and Slovenia) . An empirical (non-representative) survey constituted the backbone of the study, during which 1300 young people were surveyed by a questionnaire. The questionnaire was principally based on the methodology of mental map.

The purpose of the survey was to research the followings:

1. How do the respondents see the location of their own country and the neighbours in the political geographic space (Central Europe, Eastern Europe, Balkans)?
2. Which relations of countries do they consider?

The presentation is based mainly on the results of this survey. It demonstrates the differences between the answers in certain states regarding the formation of the concepts of Central Europe, Eastern Europe and Balkans, and reveals how these concepts are related to each other and what kind of new spaces, relationships are visible. Owing to our own standardisation, we can see the idea of the "excluding" and the "fugitive-enlarging" Central Europe, the "secluding, rejective" reactions, and the extremely strong territorial identities (often having political roots). Comparing the answers, the old and new relationships of the studied countries can be detected, which reveal particular internal grouping, respectively external orientations. These only partially refer to historical determinations, several new directions can also be observed among them.

WHITHER REGIONAL PLANNING?

John Harrison, Loughborough University, UK

Daniel Galland, Norwegian University of Life Sciences, Norway

Mark Tewdwr-Jones, University of Newcastle, UK

Since Regional Studies was founded in 1967, planning and planners have been central to understanding cities and regions. In the first ever issue of the journal the opening four papers all had "regional plan" or "regional planning" in their title. Yet as Regional Studies celebrated its 50th anniversary in 2017 planning is facing powerful challenges – professionally, intellectually, practically – in ways arguably not seen before. Recent developments and trends are therefore raising fundamental questions about the 'p' word (planning) in academic and policy circles. We can point to how planning is no longer solely the domain of professional planners but has been opened up to a diverse group of actors who are involved in place-making and place-shaping. We can observe how the study of cities and regions traditionally had a disciplinary home in planning schools (geography departments, and the like) but this link with place and space disciplines is being steadily eroded as research increasingly takes place in and through interdisciplinary research institutes. We can point to the advent of real-time modelling of cities and regions, and the challenges this poses for the type of long-term perspective that planning has traditionally afforded at a time, and in a society, where immediacy and short-termism are the watchwords. We can reflect on 'regional planning' and its mixed record of achievement. And we can also recognise how the link between 'region' and 'planning' has been decoupled as alternative regional (and other spatial) approaches to planning have emerged in conjunction with more networked and relational forms of place-making, and the re-imagination of the urban and the region in the current period. In this paper we move beyond the narrow confines of existing debate to outline a new agenda and provide a forum for debating what planning is, and should be, for in regional studies.

TRANSITIONS STUDIES: A USEFUL FRAMEWORK FOR EXPLAINING WHERE NEW INDUSTRIES EMERGE?

Robert Hassink, Kiel University, Germany

Where new industries emerge in space is one of the key theoretical questions of economic geography. The evolutionary perspective contributes to answering this theoretical question. The older theoretical concepts of windows of locational opportunity and new industrial spaces both stress the locational freedom of newly emerging industries, whereas path dependence, path creation and related variety emphasize the interdependence between paths, which means limited locational freedom. More recently, transition studies, working with the multi-level perspective and technological innovation systems as theoretical frameworks, explore sustainability transitions. Although initially not with an explicit geographical focus and mainly focusing on sustainability transitions, these studies might contribute to the understanding and explanation of the emergence of new industries in space in a broader sense, which will be discussed in this theoretical contribution.

SILVER LINING IN CHINA'S RESOURCE-BASED CITIES? AN EXAMINATION OF THE TRADE-OFF BETWEEN GROWTH AND LIVEABILITY

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Ka Kit Sun, The Chinese University of Hong Kong, China

Yuanyuan Guo, The Chinese University of Hong Kong, China

The classic city growth paradigm has shed light on the cultivation of economies of scale to urban amenities. Yet not every single city could sustain expansion at a prolonged period and thus the recognition of active shrinkage preparation is paramount. This paper aims to examine the situation of amenity dimensions in shrinking cities, in particular resource-based cities in China, by testing the hypothesis that disutility incurred during urbanization could be naturally repressed in depopulating cities. We identify a number of environmental, social and economic indicators to compare the city performance of resource-based cities with different population growth schedules. It is found that as population and economic parameters of a city decelerate, several socio-environmental indicators advance towards a more liveable direction. Based on our findings, growing faster and bigger may not be the ultimate goal in urban development, while economic restructuring is not the only way out for decaying cities. Instead, active shrinkage plan with constructive policy support could also consolidate urban amenities and rejuvenate urban liveability.

REGIONAL DISPARITIES

David Hearne, Birmingham City University, UK

Alex De Ruyter, Birmingham City University, UK

Regional disparities in the UK are of considerable importance to government and society. In economic terms, these focus particularly on regional Gross Value Added (GVA) and derivatives thereof (including subnational productivity figures). Moreover, GVA per capita is a major contributory factor in EU funding allocations. Productivity features prominently in the government's recent Industrial Strategy, the Northern Powerhouse and Midlands Engine initiatives. Such figures also feature prominently in literature from LEPS and the newly created Combined Authorities.

Modern international best practice is to compare countries' GDP in a numeraire exchange rate (at current prices) and at PPP, which adjusts GDP to take account of the differences in costs between countries. These are substantial in international comparisons. In Euro terms, France's GDP per capita

is a full 38% higher than Spain's. In PPP terms the gap falls to below 14%, implying that much of the nominal GDP/capita disparity between them is due to price differences.

In comparison, research into subnational PPPs is in relative infancy. Regional price levels are calculated in the USA using a combination of hedonic regression and a weighted country-product-dummy approach, before using the Geary-Khamis method to aggregate. In Europe, the Italian National Institute of Statistics has begun work to evaluate the computation of sub-national PPPs within Italy based on CPI data and in Czechia researchers have also taken an interest in the problem. This project augments existing GVA figures produced by the ONS by developing measures of subnational purchasing-power parities (PPPs). Doing so builds on previous work done by the presenters.

RECENT EVOLUTIONARY DYNAMICS OF SMALL EUROPEAN BANKING CENTRES: VARIEGATED PATHWAYS ACCORDING TO OWNERSHIP AND EUROPEAN MACRO-REGIONS

Tereza Hejnová, Charles University Prague, Czech Republic

Jiří Blažek, Charles University, Czech Republic

Financial geography is one the most vigorously expanding research streams within the contemporary economic geography. This is a highly desirable phenomenon due to a crucial role of ever-shifting modes of operation of the circuits of financial capital in a modern highly globalized economy.

This paper deals with a recent evolutionary dynamics of about 70 smallest European banking centres focusing upon ownership of the banks headquartered in particular centres (foreign/local) and their financial performance based upon indicators such as total assets, profitability, the level of risk over the 2004-2015 period. The investigation is based upon data from The Banker Database and the examined period is further split into four sub-periods covering particular phases of the crisis evolution and its aftermath.

The research is motivated by the fact that in contrast to leading financial and banking centres that attract considerable research attention, the smallest banking centres remained under-researched despite their number and important role they play in their host regions and nations. Our investigation proved that financial performance of the smallest banking centres is highly variegated depending primarily upon ownership and European macro-regions – Western Europe, Southern Europe and Central and Eastern Europe.

PATH RENEWAL THROUGH DIGITAL TRANSFORMATION – AN OPPORTUNITY FOR OLD INDUSTRIAL REGIONS?

Dylan Henderson, Cardiff University, UK

Digital transformation has rapidly become part of policy discourse and nascent academic debate, with widespread implications identified for firms, individuals, and places. This transformation has seen the growing adoption of digital technologies by business, including cloud computing, voice-over the internet applications, social media and ecommerce, as well as innovations in areas such as AI, robotics, drones, 3D printing. Yet, while the literature on regional path development has tended to focus on innovative firms in the creation of new paths, comparatively little attention has been given to the role that policy can play in modernising paths through the introduction of existing technologies, and preventing further decline.

The paper seeks to contribute towards the debate around strategies for path upgrading and modernisation in old industrial regions. Such regions have been identified as having below average

growth profiles, locked in to particular sectors, with deficiencies in innovation activities. In such regional contexts policies, it is argued, may provide a strategy to upgrade competitiveness in the absence of strong endowments of innovation firms and industries. It has three main aims. First, it unpacks the wide ranging disruptions and implications for firms and old industrial regions from digital transformation. Second, it critically reviews what is known about path upgrade and modernisation in old industrial regions, and develops a framework for exploring path upgrade and policy effects, based on multilevel and multi actor influences, regional and non-regional assets. This is examined empirically using the case of Wales, and policies for digital transformation aimed at SMEs. It concludes by considering the nature of opportunities and challenges for digital transformation in old industrial regions.

SPATIAL PATTERNS OF ENTREPRENEURSHIP IN THE UK: OPPORTUNITY, RESOURCES AND SPILL-OVER EFFECTS

Andrew Henley, Cardiff University, UK

The paper focuses on the spatial pattern of entrepreneurship in Great Britain, to describe levels of spatial dependence in geographical variation in entrepreneurial activity and to investigate hypotheses about the strength of spill-overs. It analyses associations with local area indicators of economic vibrancy and opportunity, as well as human and financial capital resources, in order to allow the testing of hypotheses about the necessity, opportunity and resource drivers of spatial entrepreneurship patterns.

The research focuses on, as outcomes, variation in self-employment rates and the size of the micro-business population at the local area level. It analyses how their growth over the period from 2009 to 2016 varies across Great Britain, using quantitative data for 375 local and unitary authority districts. Informed by the conceptual framework, multivariate spatial regression analysis is used to examine potential drivers of this variation, using local area data on median/lower quartile earnings, unemployment, median house prices, population age structure, and average educational attainment of the local population. Spatial econometric methods are used to describe spill-over and spatial dependence patterns in entrepreneurship. Spatial weighting is constructed using two approaches: contiguity between local area pairings and measures of inverse distance between pairings.

Findings confirm significant associations between entrepreneurship and the various local area measures of opportunity and resource. Alongside these findings are strong, statistically significant spatial dependence effects consistent with knowledge spill-overs. This supports the notion of local area “catch-up” since the financial crash. Strong growth in entrepreneurial activity in the south east ripples outwards.

The paper shows that not only are such spill-overs significant in themselves, but that also local variations in opportunity and resource drivers explain spatial patterns in entrepreneurship across Britain. This speaks to a double policy challenge facing the encouragement of entrepreneurship in lagging or peripheral regions, firstly in terms of addressing the constraints of lower financial and human capital resource and economic opportunity, and secondly the problem that would-be entrepreneurs benefit less from local knowledge and informational spill-overs and social ties to other existing and antecedent entrepreneurs.

THE DETERMINANTS OF RESILIENCE IN RURAL REGIONS. AN EXAMINATION OF THE PORTUGUESE CASE

Barrai Hennebry, Adam Mickiewicz University, Poland

This paper examines the factors that contributed to resilience in rural regions of Portugal following the recent crisis. Portugal has for a long time faced the issue of regionalisation, specifically littoralisation, which is the concentration of economic activity in coastal regions. However, rural regions in Portugal are not homogenous. Rural regions in Portugal are very diverse and experience very different economic realities. This paper adds to the growing body of literature on regional resilience by focusing exclusively on rural regions. Using an adaptation of Martin's (2012) sensitivity index as a measurement of resilience and bivariate analysis this paper examines the determinants of resilience in rural regions. In terms of economic structure, the paper interestingly finds that reliance on agriculture was beneficial while innovativeness hindered resilience. As for measures of social capital, the paper has some contradictory findings. Higher rates of crime had a negative impact on resilience, however higher political participation also had a negative impact.

LABOUR MARKET POLARIZATION AS A REGIONAL PROCESS

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Rikard Eriksson, Umeå University, Sweden

There are widespread concerns that the post-industrial process of economic change entails an increasing polarization on the labour market, driven by a changing composition of jobs in the economy. At the same time, regional divergence characterizes spatial development in many developed economies. This paper creates a link between labour market polarization and regional divergence, and analyzes the spatial patterns of labour market polarization in Swedish city-regions (municipalities) during the period 2002-2012. The paper shows that the national pattern of labour market polarization is driven by two main tendencies: first, increasing labour market polarization and spatial selection in the fast-growing top-tier metropolitan regions, and second, polarization in previously manufacturing-dominated regions. Outside these polarizing spaces, most city-regions, and in fact a majority of the entire population, still experience more traditional patterns of job upgrading. This means that the much-discussed abandonment of the traditional West-European job upgrading model towards a polarizing trajectory is ambiguous. Rather, structural change, demographic changes and metropolitan selection make labour market trajectories highly varied across space. The paper draws on Swedish matched employer-employee data containing detailed geo-referenced information on individuals' occupations, sector affiliations and incomes, to assess which segments of the labour market grow or decline, and in which types of regions this is taking place.

THE IMPORTANCE OF BORDERS IN THE CHINESE ECONOMY: WANSHENG DISTRICT AND QIJIANG COUNTY, TERRITORIAL REFORMS IN CHONGQING CITY

Miguel Hidalgo Martinez, Xi'an Jiaotong-Liverpool University, China

In October 2011, the State Council announced a major reconfiguration of administrative territories in Chongqing, the western province-level city of China. Each of two small urban districts would be merged with a vast rural county. Wansheng district, a historically wealthy coal mining area, would merge with Qijiang county to become Qijiang district. Shuangqiao district would merge with Dazu county to become Dazu district. Reterritorializing counties as districts is the most common administrative change in the process of urban transformation in China. One merger, the establishment of Dazu district, took place in relatively routine fashion. The attempt to establish Qijiang district had a far different outcome. In Wansheng, thousands of people took the streets to violently protest against

becoming part of the new Qijiang district. Wangsheng residents claimed that the merger would reduce per capita public budget for social services, dragging down standard of living. After tense weeks, marked by demonstrations and clashes between civilians and the military police, the central government repealed the merger and established Wansheng as an “economic and technological development zone” under the Chongqing government. Meanwhile Qijiang county became a district. The solution to the conflict demonstrates not only a top-down state response, but also a social process in which local leadership plays a decisive role.

UNCOVERING KNOWLEDGE ABOUT THE INTERACTION OF PLACE, INSTITUTIONS AND FIRMS TO UNDERSTAND THEIR CONTRIBUTION IN SHAPING THE MERSEY DEE CROSS-BORDER ECONOMY

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This study examines the interaction of place, institutions and firms to provide a place-based investigation of the Mersey Dee cross-border economy, between North East Wales and North West England. This is in a context where national governments for England and Wales have found it challenging to design appropriate policy frameworks to realise the economic potential of local places, especially outside of major urban areas. This is partially since space-neutral economic frameworks have underpinned UK sub-national economic policy. It is also because sub-national policy has primarily focused on the contribution of cities, observed through the creation of Combined Authorities and, in England, the election of Metro Mayors. By comparison, places more peripheral from major cities have been given less attention. However, ‘place’ was recently acknowledged as one of five foundation pillars of the UK’s Industrial Strategy, and Local Enterprise Partnerships in England have been given a responsibility to prepare local industrial strategies. These provide an opportunity to revisit evidence for ‘place’ in local economic development. This study contributes knowledge by applying a place-based framework to a functionally connected area that is outside of any major conurbation. It also crosses the England and Wales national border. This is shown in three ways. First, by considering how history, geography and institutions have shaped the distinctive character of the Mersey Dee. Second, by uncovering knowledge about the local economy from its firms - understanding how they arrived there, their firm to firm and institutional relationships and how they view their location in the area today. Third, it provides insights from institutions and firms might contribute towards shaping policy locally and nationally in both England and Wales. This is relevant to realise the potential of the Mersey Dee and provide evidence of value to other sub-national places.

LOCAL-REGIONAL GOVERNANCE OF THE ENERGY TRANSITION: DRAWING LESSONS FROM ‘NEIGHBORHOOD ENERGY LABS’ IN THE REGION ‘HART VAN BRABANT’

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In order to accelerate the energy transition international, European and national energy and climate goals must be translated into concrete action in the coming years. In the Netherlands, in various regions, cities and neighborhoods approaches are being developed to realize energy neutral neighborhoods.

To investigate these innovative approaches, the extent to which they ‘work’, and the conditions under which they work, we carry out experimental, action research in ten so-called ‘neighborhood energy labs’ and a ‘regional energy lab’ in the ‘Hart van Brabant’ region. We focus on social innovation in the energy transition rather than on technological innovation and we specifically look at the governance interventions and processes on the regional, local and sub local level. We do longitudinal and comparative work on social dynamics in different spatial settings.

The goal of this paper is to present and discuss an integrated framework for the analysis of transition governance at the regional, local and sub local level. In this paper we present what is already known about what 'works' and what 'does not work' realizing energy neutral neighborhoods, based on a review of literature on local and regional transition governance. Based on the literature we developed an integrated framework for the analysis of governance at the regional-local-sub local level that we applied on preliminary empirical results from the 'neighborhood energy labs'. In the paper we present the framework and apply it on one of the nested cases.

CITY-REGIONS, DEVOLUTION AND LOCAL GOVERNANCE IN A POST-BREXIT ERA

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This paper investigates the way that top-down policy and governance reforms are shaped and challenged by the logics, tactics and politics of local political and economic agents. In an era of globalisation and market determinism, there has been a tendency to consider local and regional government bodies as merely delivery mechanisms to implement national and global political and economic agendas. However, alternative ideas have recently emerged that expose the need to pay more attention to the role that local actors play in intervening and transforming policies and growth discourse from 'above' to suit local interests and address local concerns. In response, this paper offers an empirical investigation that aids the development of a conceptual framework for analysing local governance from 'below'. It does so in the context of a new pro-growth devolution agenda in England since 2010, during a period of intense political disruption following the UK's vote to leave the European Union in 2016. The analysis draws on 56 interviews with senior local government officials and business representatives between 2015-2018 in the Sheffield City Region.

THE GRADUAL CITY-NESS AND TOWN-NESS OF PUBLIC SERVICE LOCATIONS: FOUNDATIONS FOR A REGIONAL PLANNING CONCEPTION OF 'CENTRAL PLACES AND FLOWS' UNDER HYBRID GOVERNANCE CONDITIONS

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In this paper we engage with strategic planning concepts for public services. Our motivation stems from recent reform plans for the Finnish social and health care sector. This sectoral reform is embedded into a significant regional governance reform which will introduce a true regional tier into the Nordic state architecture of Finland. We find that spatial implications of the reform are widely overlooked. Beyond the case, we criticise a general reluctance of national public sector policies in accounting for regionally unequal conditions. We departure from two ideal-typical regional planning concepts – 'polycentricity' and 'central places' – and their limitations regarding state or free market logics as well as regarding regions of different urbanization. In search for their complementary potential, we build on 'central flow theory', which we, for this purpose, transfer into a spatial planning and public service sector context. The 'territory-place-scale-network (TPSN) framework' helps us to combine, conceptually, the otherwise contradictory structuring logics of 'polycentricity' and 'central places'. To overcome the opposing institutional logics of state and market organisation of (public) services, we draw on conceptual models of 'hybrid governance'. We ultimately suggest a 'central places and flows concept' for purposes of sector policy relevant, strategic regional planning that accounts for unequal regional conditions.

RURAL BUT NOT THE SAME: ON THE DIVERGING DEVELOPMENT OF RURAL GERMANY

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Some rural regions in Western Germany have experienced a very positive economic development in terms of employment and incomes in the past decades. This development, however, is in sharp contrast to the the enduring economic lag of many rural regions in Eastern Germany. This paper seeks to find out, to what extent these differences in economic performance can be explained by region-specific sectoral patterns and their evolution over time.

We employ an extended shift-share SUR regression model that simultaneously explains the development of employment and of firm-numbers in German districts between 2007 and 2016. The model differentiates between Western and Eastern German regions as well as between urban and rural regions by means of location effects. This specification helps us to capture both the historically evolved differences inherent in the socialist and capitalist past of Eastern and Western Germany and the varying economic environments in urban and rural areas. The extended shift-share regression confirms that simple industry effects, i.e. linear effects of industry shares, cannot explain the differences in economic performance very well.

Nevertheless, further analyses of the estimated industry, region and location effects reveal that the production sector, despite its general loss in employment shares, is of crucial importance for rural prosperity. Evolutionary dynamics and path-dependence explain that the apparent disadvantage of rural districts in Germany's East is caused by a lack of specific, complementary production capacities and capabilities for manufacturing. Spatial externalities, according to the results, are more important for urban development in terms of agglomeration effects: Urban districts in the East overcome their historical disadvantage if they manage to attract knowledge intensive industries and high-skilled workers. Within (rural) production regimes, in contrast, substantially altered economic structures cannot usually be expected to become economically efficient in the short run.

THE TECHNOLOGICAL RELATIONSHIP BETWEEN MINING AND ELECTRONICS MULTINATIONAL ENTERPRISES (MNES) IN THE EXPLOITATION OF CONFLICT MINERALS IN AFRICA

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The current trends in the global division of labour and capital, and the Global Production Networks and value chains (GPNs/GVCs) in which establishments and groups of activities and functions are 'unbundled' (Baldwin, 2011) across geography, emphasise a growing complementarity between some advanced technology-intensive industries in the secondary sector, mining within the primary sector, and even financial services in the tertiary sector (the latter not covered in this abstract, to be explored at a later stage). The gradual technological paradigm shift to Industry 4.0 – the industrial revolution based on automation and data exchange in manufacturing technologies – together with the connected modularity and separability of production stages in GPNs and GVCs led by high-tech MNEs, are strengthening such interdependencies.

Mining and minerals – and in particular 'conflict minerals' such as cobalt, gold, tin, coltan and tantalum, and tungsten, their refining and their ultimate use in many different types of electronic and electrical equipment – are providing a material infrastructure to the global digital economy, but the input-output and technological relationships in the global value chains across these industries have not yet been explored in a systematic way. Scholarly work in the broad international business ethics

literature has so far especially focussed on Corporate Social Responsibility and human rights issues (e.g. Surtheland, 2011); some interesting work has been done on transparency, certification and accountability along the resources supply chain (e.g. Bleischwitz et al., 2012), but technological determinants and effects in the new Industry 4.0 GPNs/GVCs are still underexplored (see, in this direction, Nathan and Sarkar, 2011; Nest, 2011).

This research is aimed at providing an analytical background for exploring the production and technological connections – through GPNs and GVCs led by large high-tech MNEs – between micro-electronics technologies (used in the production of lithium-ion batteries, crucial for manufacturing of, for example, smart phones, computers, electric cars) and mining in some of the sub-Saharan African countries rich in the ‘conflict minerals’ (e.g. Democratic Republic of Congo). The revenue and profits coming from the exploitation of such resources are of critical importance to economic development and the alleviation of poverty in the source countries. However, a proper discussion on the use of coltan and other ‘conflict minerals’ revenues – and their distribution and implications for economic and social development – requires a wider understanding of the technological properties of the many natural resources found in Central Africa (including cobalt, copper, diamonds, gold, manganese, etc.) for the shift to Industry 4.0. We use USPTO data in order to map conflict minerals-intensive technologies as a first step to trace inter-firm and inter-industry relationships.

OUTWARD FDI FROM MEXICAN REGIONS: LOCAL DETERMINANTS AND POLICY INCENTIVES

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Mainstream theories on the internationalisation of firms are based on the idea that firms that invest abroad must possess firm-specific intangible assets that grant them an advantage over local competitors in the host economy. However, some firms may also engage in outward FDI not to exploit advantages they already possess, but to overcome a relative disadvantage in their home region. These firms are typically found in emerging economies and have received considerably less attention both in the theoretical and empirical literature. Compared to their developed country counterparts, emerging country MNEs, tend to be smaller in size, possess less cutting-edge technology and less sophisticated resources, while operating in home countries with difficult institutional environment and inefficient or missing factor markets. Relatively little research has been done on the internationalisation of emerging economy firms either into other emerging economies or into developed economies. In this paper we explore the question of whether determinants of internationalisation of developed country MNEs explain sector-regional Outward FDI patterns in an emerging economy like Mexico. Furthermore, we investigate whether these effects differ according to the income group of destination countries. We investigate the structural determinants of active internationalisation of Mexican sector-regions, with particular attention to innovative activities, labour productivity, exports and the role of public incentives in supporting firms’ activities abroad. By examining a panel dataset on 32 Mexican subnational regions and eight macro-sectors observed over the period from 2006 to 2017, we estimate the effects of determinants of active internationalisation along three dimensions (i) the propensity to internationalise, (ii) the extensive margin of OFDI and (iii) the relative degree of internationalisation. Mexico provides an interesting setting to conduct this research because outward FDI stocks have been rising steadily since the early 2000s. Not only has the investment of Mexican firms abroad risen substantially, but its importance relative to the country’s GDP has also increased. Moreover, the country has become a leading economy in the Latin American region. Results herein suggest that the effects of some OFDI determinants are not in line with those from developed economies. We find heterogenous effects of local determinants across OFDI

destinations. Mexican MNEs seem to be adopting different strategies in order to remain competitive in the globalised economy, especially when it comes to the sourcing of innovative activities.

JESSICA INITIATIVE - AN INNOVATIVE CHANGE IN THE EU COHESION POLICY FOCUSED ON SUSTAINABLE URBAN DEVELOPMENT AND LEVERAGING RESOURCES

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The JESSICA initiative is one of the financial engineering instruments used under the EU Cohesion Policy that entered into life in the years 2007-2013 (the previous EU financial perspective). It was a response to insufficient financial resources for the regeneration processes that promoted regeneration actions and economically viable and sustainable urban development projects through the use of the repayable financing mechanism. Revolving funds, complementary to grants, were meant to increase the financing capacity of the Managing Authorities of regional operational programmes. JESSICA aimed at the creation of strong incentives for private investors to develop projects aimed at redressing the market failures in deprived urban areas, and also at being a powerful catalyst for mobilising additional financial resources for public-private partnership.

One of the JESSICA objective has been set out as providing a leverage effect. This implies that the JESSICA support should mobilise additional public and private sector resources for the benefit of sustainable and integrated urban development. In other words, JESSICA should create incentives for investors by providing catalytic first-loss capital to facilitate urban development operations and at the same time mitigate financial risk. To put this in a more detailed way, JESSICA was expected to be able to engage the private and/or public sector, and thus to leverage both further investment as well as competence and expertise in project implementation and management. Thus, the main aim of the study is to examine and determine the extent to which the projects implemented in Poland within the framework of the JESSICA initiative contributed to achieving the leverage effect. In addition, the study seeks to also identify those of projects executed which can be recognized, with regard to JESSICA assumptions, as the most appropriate for leveraging financial resources and accelerating the sustainable development of urban areas.

The empirical analysis in this study builds on a dataset containing details on all the projects implemented under the JESSICA initiative in Poland during the 2007 – 2015 period . This dataset was created by the authors on the basis of the information made available by the Marshall Offices of all regions implementing the JESSICA initiative and institutions acting as managers of the Urban Development Funds. The dataset was also further completed with information derived from own examination of other sources. The analysis relies here upon comparing different groups of measures (numerical and categorical data) and therefore we applied techniques that allow for modelling the association between different types of variables.

This study contributes to the debate on revolving instruments in the EU Cohesion Policy and highlights that they should be an area of particular interest for policy-makers, also in the fields of sustainable urban development. It builds up the other studies carried out within the project supported by the National Science Centre, Poland (2015/19/D/HS5/01561).

MEASURING INTERREGIONAL ECONOMIC NETWORK BASED ON THE INTER-FIRM TRADING DATA IN JAPAN

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The government of Japan has been launching several regional development policies aiming to support local businesses to prevent local economic decline. In line with the trend of the evidence-based policy making, those policies are designed to incorporate big data for corporate behaviors. For example, the Act on the Promotion of Regional Investment for Future selected approximately 2,000 medium-sized regional businesses to emphasize support for regional economies. These firms were selected by some indexes such as sales, transaction relationships, and employment or so. This policy intends to boost economic trading in regions utilizing the information about interfirm networks among businesses. Money inflow and outflow accompanying business trading are expected to affect regional economies in this policy design.

However, whether these interfirm networks can actually contribute on driving regional economies or whether money flows over region can be measured has not been verified so far.

This paper quantitatively measures interregional economic networks from the inter-firm trading data to clarify features of regional money flows across a domestic economy. This paper employs business transactional information, which was collected from approximately 850 thousand corporations in Japan. Individual transaction amount of B to B trading were aggregated into interregional economic flows in a municipality level. Differences in economic inflows and outflows of each municipality illustrate how regional economies are connecting with local businesses or how regional economies construct their networks to others. As a result of analysis, we can find out the Tokyo-led, or the metropolis-led, interregional economic networks in Japan. Measuring interregional economic networks would shed light on the regional connectivity reflected by the inter-firm transactions, and would provide new evidences for policy making.

BEYOND THE SOCIO-ECONOMIC USE OF FISCAL TRANSFERS: THE ROLE OF POLITICAL FACTORS IN GREEK INTER-GOVERNMENTAL GRANT ALLOCATIONS

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Greece is empirically justified as amongst the less fiscally autonomous countries in which municipalities rely heavily on fiscal transfers from the central government in order to cover their fixed or ordinary and exceptional financial needs. Especially with respect to the latter, which are non-formula related, Greek local governments face the central government's discretion on the levels of grants transferred to them annually. In order to shed light on the ability of social, economic, geographical or politically-oriented incentives behind the allocation of the alternative types of grants to municipalities in Greece, this paper analyzes different sets of socio-economic, geographic and political-entrenchment variables and offers unique empirical results on the factors lying behind different types of grant allocations during the period 2001-2009. Our evidence demonstrates that different types of grants are driven from different factors; while ordinary (based on predetermined criteria) grants respond to local government socio-economic and geographical characteristics and needs, the more discretionary (unexpected and non-formula related) extraordinary grants are mainly driven from political incentives and may be used by politicians, at both local and national levels, as a

tool towards gaining more votes or eliminating voting opposition groups. Apart from possible self-interest and the political power exertion effects behind grant transfers to local governments, our evidence also demonstrates the need for reforms towards a more transparent way in the allocation of extraordinary grants in Greece and the urge for reforms leading to a more justifiable way in setting such fiscal transfers.

EARNINGS AND THE LABOUR SHARE: A REGIONAL ANALYSIS OF THE UK

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Autor, Dorn, Katz, Patterson, and van Reenen (2017) show a falling labour share in conjunction with rising industry concentration in the US. There is a concern that low labour shares will contribute to rising inequality, as less income goes to workers and more to the owners of capital. However, I show that in the UK, the region with the lowest (and falling) labour share is London, where average earnings are highest. Following the arguments by Autor et al. (2017), this suggests that more superstar firms can be found in London than in the other regions. A positive correlation between a low labour share and high earnings may be explained by economic rents earned by firms that are partly shared with workers (Furman & Orszag, 2015 & 2018). Other explanations might include differences in outsourcing behaviour across industries and firms, e.g. the outsourcing of lower value-added activities to contractors or branch plants (Weil, 2014; Katz and Krueger 2016).

In this project, I test some potential explanations for the regional differences of the labour shares in average earnings. First, I test differences in the labour share across industries and regions, to check whether differences are driven by industry composition or heterogeneity within industries. Then, I test how the labour share varies across the supply chain, i.e. whether industries with low labour shares tend to use inputs with high labour shares.

My paper makes two contributions: first, it adds evidence for the UK on the relation between labour shares and earnings, a topic that has been studied mainly for the US. Second, to my knowledge, mine is the first paper that studies the change in the labour share at the regional level for the UK.

ANALYSING THE IMPACT OF INTELLECTUAL PROPERTY RIGHTS ON FIRM PERFORMANCE: THE CASE OF SMES

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Innovation, an important determinant of firm performance, is both costly and risky (de Rassenfosse, 2012; Audretsch et al, 2014) particularly for SMEs which are frequently financially constrained (Czarnitzki, 2006). Despite theoretical reasoning as to the importance of intellectual property rights (IPRs) such as patents for innovation (Denicolò and Franzoni, 2004; Rehman and Yu, 2018), there is a low level of IPR activity in SMEs relative to larger firms (DJEI, 2015; OHIM, 2015). This paper examines the impact of IPR use on firm innovation and performance in SMEs in Ireland. IPRs, defined in this paper as patents, trademarks and industrial design rights, enhance innovation and firm performance by strengthening a firm's ability to appropriate or protect its innovative output (Baum and Silverman, 2004; Teixeira and Castro, 2015). Empirical evidence shows a positive relationship between IPR ownership and firm-level performance and a positive trend in IPR use globally (OECD, 2013; OHIM, 2015). There is, however, a distinct dearth of research on the economic impact of IPR use in SMEs (Agostini et al, 2016), particularly in the Irish context. Employing the Innovation in Irish Enterprises dataset with newly included questions on IPR use (since 2014) and an adapted innovation value chain - estimated using a system of equations incorporating probit and instrumental variable generalised

method of moments (Crepon et al. 1998), we provide novel analyses of the impact of IPRs on firm performance (turnover growth, productivity growth and innovative performance) with a specific focus on differences across firm size classifications. Additionally, the paper explores the complementary use of IPRs and the performance outcomes. Findings from this analysis yield important practice implications in terms of firm-level IPR investment decisions and policy insights valuable in designing more targeted policy interventions to build IP capacity in SMEs.

FROM GAS TO CONCRETE: UNPACKING NATURAL GAS PRODUCTION NETWORKS AND RENT DISTRIBUTION IN PERU AND BOLIVIA

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While the research about global production networks and resources peripheries has shown repetitively that the interaction between lead and local firms is weak and produce 'enclave' economies, the local economies of commodity sources regions critically changed by other mechanisms of rent distribution which have been overlooked. In this paper, I propose that those mechanisms have been neglected on global production networks literature because of the conceptualisation of value as economic rent. By extending Marxian rent theory towards the GPN heuristic, I analyse how the capture and distribution of surplus value by states acting as landlords is crucial for studying processes of economic change at commodity source regions in the context of global production networks. Through a relational comparative analysis of natural gas industry between Peru and Bolivia, I show how rent appropriation and distribution is an essential dimension for analysing the geography of natural gas extraction. The expression of natural gas rents as revenues for sub-national governments in both cases triggered massive investments in public infrastructure, and consequently an aggressive change on the local economies led by the construction sector. Therefore, these cases show that the processes of economic change at the commodity source regions which are plugged into global production networks do not only obey to inter-firm dynamics but also to contradictory processes of rent distribution to sub-national governments.

DIGITALISATION AND REGIONAL INDUSTRIAL DEVELOPMENT. A CONCEPTUAL CONTRIBUTION

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Digitalisation is seen to severely change the conditions for regional industrial development. How digitalisation affects regional development is, however, less studied, partly because digitalisation is a rather fuzzy concept. Our approach for making studies of regional effects of digitalisation more concrete is to distinguish between three types of digital activity; (i) development of scientific knowledge that forms the basis for digitalisation ('digital knowledge creators'), (ii) production of digital products and services ('digital producers'), and (iii) use of digital products and services in production and work processes ('digital users'). We aim to investigate how organisations that carry out these activities build digital knowledge and how their activities may affect regional industrial development. In empirical terms, the paper aims at exploring how different manufacturing firms, media firms (newspapers), and knowledge organisations in the Agder region in Southern Norway work to become more digital. Digitalisation constitutes a challenge and an opportunity for different types of firms and organisations. Digitalisation builds on scientific knowledge that flow into the economy through embodied and disembodied spillover. Digitalisation is an all-compassing activity at digital producers and users, it includes both digitalisation of workflow, development or adaptation of software and hardware and investment in new machines and robots. We study how organisations that carry out the

three types of digital activity mentioned above build digital knowledge internally and acquire such knowledge from external sources. The regional outcome of digitalisation depends on types of organisations. Digital knowledge creators can potentially initiate path creation through academic spin-offs, but contribute in small regions often to renewal of existing industry. Digital producers can initiate new regional industrial paths through diversification, while digital users mainly renew and improve the efficiency of their existing activity.

CONTEXTUALIZING RESPONSIBLE RESEARCH AND INNOVATION (RRI): LEARNING LESSONS FROM DIFFERENT SECTORS AND REGIONS

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RRI has gained prominence in the literature and in policy spheres in the last decade or so. This is particularly the case within the European Union, where debates centre on European research and innovation policy (von Schonberg 2013, European Commission 2014, Stilgoe and Guston 2017), i.e. closely linking research and the impact of research, and innovation. This stream of the literature, and its understanding of RRI, can be traced to the Science and Technology Studies (STS) literature. STS literature has for a long time debated issues on science and 'responsibility', exemplified by discussions on the negative impacts (and how to avoid them) of research. Linked to this tradition, the more recent literature on RRI contributes insight on how to ensure the stewardship of research and to make it more inclusive and sustainable. It offers forward-looking approaches, methods and frames of reference for reflecting on the societal impact of research and innovation. Furthermore, it involves a focus on participatory ways of doing research and innovation (Owen et al 2012, Uyarra et al. forthcoming).

Nevertheless, RRI is an immature category. It resembles a top-down perspective with standardised principle for public governance of research and innovation. In this paper we provide a first step towards a more contextual sensitive understanding of RRI. The paper use empirical examples from different sectors and regions in order unveil the heterogeneity of responsibility practice and provides potential learning lessons across the selected cases.

EUROPEAN INTEGRATION AND CROSS-BORDER ECONOMIC CONVERGENCE

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State borders constitute a barrier disturbing the course of socio-economic processes, and thus often adversely affecting the development of the so-called border areas. At the same time, in Europe, there are significant disproportions in the level of economic development between countries, which are particularly visible in border areas. The European integration leads to the gradual abolition of barriers resulting from the existence of traditional state borders and differences resulting from the separate legal, fiscal and monetary systems, etc., as well as the development of cross-border cooperation. This contributes to the increase of economic and social ties in cross-border areas, what – in accordance with the concept of interregional convergence – should, under appropriate conditions, lead to the dynamisation of the development of a part of cross-border areas characterised by a lower level of economic development. This phenomenon, which can be described as a cross-border convergence, is poorly recognised so far.

The paper aims to identify the factors determining cross-border convergence/divergence in the conditions of the European integration through empirical verification of the following research hypotheses: (1) multifaceted European integration processes lead to the reduction the level of

tightness of the national borders and to the increase of cross-border links, thus less-developed areas border areas are benefiting from additional development factors fostering gradual equalisation of the level of the economic development of the areas located on the two sides of the national borders (the phenomenon of cross-border convergence); (2) the processes of political and economic integration in Europe are not a sufficient condition for the emergence of cross-border convergence, which is influenced also by other factors of a geographical, socio-economic and institutional nature.

DIGITAL WORK/PLACE

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This paper engages with digital transformations of work and employment practices emergent from the rapid growth of on-demand labour in the 'platform economy'. Here, internet technologies are used to unbundle production from formal employment, with digital algorithms and artificial intelligence used to manage and motivate work beyond 'typical' workplaces through online labour markets. Some commentators have welcomed the digital possibilities for socially inclusive growth amongst low income communities. However, there is also growing criticism of the quality of those on-demand ('gig') work opportunities, for workers with limited legal protection as 'independent contractors'. Recent estimates suggest that over 70 million workers worldwide find work through digital platforms. Yet, the regional studies research community has largely failed to engage with these workers and their everyday geographies of practice. In response, this paper reports on recent research with platform workers across different cities and regions of the UK using a range of popular white collar work platforms (PeoplePerHour, UpWork, Fiverr, Elance, TaskRabbit, Copify, Freelancer). The paper focuses on: (i) place-based motivations for engaging in online gig work; and (ii) geographical variations in workers' experiences of being managed by algorithm (workflow, hours, income). The analysis points to exciting possibilities for developing a larger, regional agenda around digital labour practice in the platform economy.

HAS REGIONAL DEINDUSTRIALIZATION REDUCED CITIZENS' SATISFACTION WITH DEMOCRACY? A DYNAMIC PANEL STUDY OF EUROPEAN REGIONS (1983-2017)

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Chiara Allegri, Bocconi University, Italy

To date, little quantitative research has explored the impact of variation in exposure to regional manufacturing decline as a cause for geographic variation in citizens' democratic satisfaction. The aim of this study is to investigate the dynamic influence of regional decline on the public's support for democracy. We explore two possible mechanisms which underlie this relationship: 1) individuals are materially motivated by the decline in their local economic conditions or 2) individuals feel a symbolic sense of loss due to living in a place where industrial work is no longer the predominant mode of economic and social life. From these premises, we formulate hypotheses which we empirically test by exploiting the spatial variation in deindustrialization at the regional level (161 NUTS-2 regions) across 15 Western European countries using Eurobarometer data across four decades (1983-2017). Using dynamic panel data techniques, we show that differential exposure to regional deindustrialization, engendered by the social stratification of manufacturing work and geographical stratification of manufacturing production in industrial societies, has contributed to systematic differences in satisfaction with democracy.

CITY REGIONALISM WITH CHINESE CHARACTERISTICS: THE GEOPOLITICAL DYNAMICS OF THE YANGTZE RIVER DELTA REGION

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Yi Li, Hohai University, China

Focusing upon the evolution of Yangtze River Delta (YRD) region in China, this paper offers a new interpretation of Chinese city-regionalism in the context of the internal and external relations of the national state. Following economic reforms in the 1980s, the formal designation of YRD as a city-region reflected the Chinese state's aspiration for accelerated economic growth and the internationalization of the domestic economy. Confronted with widening regional inequalities, the Chinese state has greatly expanded YRD region to incorporate peripheral cities and provinces for the sake of regionally coordinated development. Chinese city-regionalism vividly exemplifies countervailing geopolitical processes at work within and beyond national state borders. The paper's theoretical argument provides a counter-foil to post-Westphalian or hyper-globalist perspectives on the rise of global city-regions in a seemingly stateless world.

THE CASE FOR A PRACTICE-ORIENTED APPROACH TO REGIONAL ECONOMIES

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There has been a growing interest in the nature of economic practices across economic geography, economic sociology, management studies and international business. However, whilst much of this work has been directed towards better understanding of regional economies and their interconnectedness in the global economy, there has only to date been limited direct engagement between these 'practice-oriented' approaches within regional science. Within economic geography in particular, practice-oriented research has shed new empirical and theoretical insight into the complex relationships between the multitude of economic actors that are important in shaping economic outcomes. This paper argues that understandings of regional economic development trajectories could gain greatly from further integration of the methodological and epistemological deployment of practice-oriented research, enabling a better understanding of, for example, how firms are embedded in a complex spatial configuration of relationships that perforate regional economies. Practice-oriented research, it further argues, could thus represent a powerful tool for addressing some of the more difficult questions around regional economic success and failure that are only partially captured by dominant approaches.

THE RURAL-URBAN DIGITAL DIVIDE: EVIDENCE FROM WELSH SMES

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Dylan Henderson, Cardiff University, UK

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There has been much debate recently about the impact of emergent technologies such as automation, artificial intelligence and cloud-servitisation on business structure, behaviour and competitiveness. Given that a number of these technologies rely heavily on the internet and can require significant human and financial capital to adopt and exploit, there have been concerns that businesses will benefit unevenly across sector, size and space. In particular, the potential for less well-connected rural businesses to be disadvantaged have been highlighted. This paper reports on an extensive multi-year EU funded survey which examines the utilization of superfast broadband, dependent technologies, ICT capacity and investment amongst SMEs in Wales, a region of the UK. We construct a firm level 'digital maturity index' that reveals significant differences in the technological readiness and take-up of rural and urban businesses.

IMPLEMENTING ERDF THROUGH CLLD: EXPERIENCES SO FAR

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In 15 Member States across the EU there are over 700 Local Action Groups (LAGs) using Community-led Local Development (CLLD) as an implementation mechanism for European Regional Development Fund (ERDF) funding. This paper looks at the experiences to date of both ERDF managing authorities and selected LAGs, focusing particularly on six Member States (Austria, Czech Republic, Portugal, Slovenia, Sweden and the UK). Even where ERDF funding is used for CLLD, the degree of its use is very diverse. In some Member States (e.g. Czech Republic, Slovenia), all LAGs make use of ERDF, in others the use of ERDF remains an exception (e.g. Austria, Greece, Netherlands). The paper looks at whether policy-makers see any added value of the CLLD tool in terms of governance, policy integration and territoriality. While benefits can be seen mostly in the form of improved governance and strengthened territoriality, the potential of CLLD for an increased policy integration appears to be still not used to its full extent. Amongst the challenges discussed in the paper are prolonged strategy development procedures, regulatory complexity and insufficient capacity at local level.

SMART CITY GOVERNANCE FROM BELOW: HOW HUNGARIAN TOWNS RESPOND TO THE NEED OF INSTITUTIONAL DESIGN AND DIGITAL CAPACITY BUILDING

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Recently the concept of smart specialisation has appeared in the European Union's cohesion policy, as well as many cities and regions choose to use culture and creativity for achieving economic development. In addition, key elements of user-centric e-government can be observed both in the smart and the creative cities concepts within the broad framework of digital transformation. As a result, local and central governmental institutions are required to provide an enabling environment by creating smart governance frames to improve the decision-making process, increase the quality of public services delivery, as well as dealing with growing urban problems.

As a complex developmental program focusing not just on the infrastructural development but also on the improvement of the human abilities, the Hungarian Government launched the so-called 'Digital Welfare' Programme, within which several smart city pilot developments will be supported in a few chosen Hungarian towns and small cities providing best practices for further investments in other urban areas. On the basis of a data-driven comparative case studies focusing on selected small and medium Hungarian cities the paper argues that there is a need to create a digital strategy which should be relied on a strong leadership with proper institutional and digital capacities in order to establish a 'digital ecosystem'. The main findings of the research show that cities participating in the pilot programmes seek to play a role of 'strategic enabler' in order to develop a new business model and collaborative digital environment between the public and private actors. However, its success for depends mainly on the 'smart ability' of local governments based on citizen-friendly institutional design, administrative efficiency and interoperability.

FIRMS PERFORMANCE, PLACE UTILITY AND REPEAT INVESTMENT IN AUSTRALIA

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This study examined the efficacy of the relationship between firm performance, place utility and the repeat investment of foreign subsidiaries operating in Australia. In considering the migratory behaviour of people, Brown and Moore (1970) posited that 'place utility' seeks to measure the level of overall satisfaction within a given location as determined by an individual decision-maker. Can the same then be said about MNE management making investment decisions with regards to the

continued existence of their firm in the location in which they operate. According to Hayter (1997), if firms are 'satisfied' in terms of their relations with the location environment in which they operate then for the most part they continue operating in the same manner with minimal or no changes to the established order of practices. In a similar vein, Benito, Grogard and Narula (2003) and Pedersen (2006) have suggested that MNE management, despite sometimes less than optimal results, may be 'satisfied' to continue operating in the same location so long as they remain competitive.

In introducing the concept of place utility with regards to firm location, this study sought to test its mediating effect on the relationship between firm performance and repeat investment. From a sample of 356 foreign MNE subsidiaries operating predominantly in the states of New South Wales and Victoria in Australia, the results revealed that place utility partially mediated the relationship between firm performance and repeat investment. This suggests that in order to embed existing subsidiaries in a location through ongoing investment, policy makers need to implement policies that make a location appealing not only because it allows for positive firm performance but also contributes to a location's place utility. The study found that place utility as summative measure of a subsidiary's manager evaluation of a location is a reliable predictor of repeat investment. Thus, understanding the place utility of a location is important if governments and policy makers are to better comprehend what motivates foreign MNEs to continue investing within their regional location.

GLOBAL CONNECTIONS, LOCAL DEVELOPMENT? CAPTURING VALUE FROM TOURISM GPNs IN NAMIBIAN CONSERVANCIES

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Tourism plays a key role in the design of community based natural resource management (CBNRM) programmes for nature conservation. By commodifying wildlife, an utilisationist approach is applied that aims at fostering regional development to achieve consent among local communities on conservation measures. The benefits are mainly generated by consumptive and non-consumptive tourism. Local communities are awarded direct use rights, which are then transferred to tourism investors and hunting companies. By this means, conservancies in peripheral rural areas are integrated into global production networks (GPN) of the tourism industry. While benefit-sharing and value distribution at the local level are subject of an ongoing debate, less attention has so far been paid to the negotiation processes of conservancies with actors of the tourism GPN. Moreover, it can be assumed that linkages of tourism operations to the local economic structure are weak. Thus, a global production network approach is used to reveal varying patterns of local value capture and territorial embeddedness of tourism enterprises in conservancies of the Zambezi region in Northern Namibia. This is based on qualitative interviews with tourism entrepreneurs and conservancy managements as well as on conservancy financial reports. In this way, the factors that influence the effectiveness of conservancies to capture value in tourism GPNs are highlighted. All in all, the study leads to a refined understanding of the role conservancies play in the process of marketing their wildlife to global players.

THE LOCAL DEMOCRACY EFFECT OF JURISDICTION SIZE OR CENTRALIZED ADMINISTRATION? A DECENTRALIZED ADMINISTRATION MITIGATE THE DETRIMENTAL EFFECT OF POPULATION SIZE ON LOCAL DEMOCRACY QUASI-EXPERIMENTAL EVIDENCE FROM A LARGE-SCALE STRUCTURAL REFORM IN DENMARK

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In the past decades, most OECD countries have reformed local government, amalgamating municipalities and jurisdictions into larger units. The arguments for large municipalities refer to critical population mass underpinning fiscal federalism, economies of scale in public service provision and the containment of negative externalities between smaller municipalities.

However, amalgamation may come at a democratic cost if the population size and geographic scope exceed the optimum size. A strong tradition in political thought argues that the population size and the distribution of local public administration affect the local democracy, as social and geographic proximity between citizens and the decision-makers underpin local democracy including citizens' political trust. However, the existing empirical evidence from mostly cross sectional studies is ambiguous and inconclusive due to sorting effect and problems of endogeneity.

We exploit a structural amalgamation reform in Denmark in 2007 and the subsequent redistribution of local governmental administration in some of the amalgamated municipalities as a quasi-experimental setting to estimate the causal effect of the population size and the geographic distribution of local public administration on citizens' political trust. The reform was implemented by the central government in the period from 2004-2007 and affected some, but not all, of the municipalities. Hence, it exogenously increased municipal population size. We employ various difference-in-differences-designs using four survey waves in 1978, 1993, 2009 and 2013 with identical survey questions on political trust. We find a substantial detrimental effect of the relative increase in population on political trust. However, some municipalities centralised the administration in the main city, whereas others maintained a more decentralised distribution of the local public administration. It turns out that the centralisation drives a large part of the effect of amalgamation on political trust, suggesting that a decentralized public administration may mitigate the detrimental effects of population size.

SME EXPORT FINANCE GAPS THROUGH A GEOGRAPHICAL LENS OF WALES: AN EXPLORATION

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Max Munday, Cardiff University, UK

Annette Roberts, Cardiff University, UK

While goods and services exporting from peripheral regions is dominated by large firms, recent events linked to EU transition processes have led to an increasing focus on SME overseas trade activity and the challenges such firms face in trading internationally. While SMEs face multidimensional problems in terms of access to general finance, this paper suggests that there are very specific problems that need to be addressed in respect of export finance products for small firms and that problems are exacerbated by geography, with both the supply and demand conditions impacted by different dimensions of space. The paper uses the lens of Wales to explore the specific problems that SMEs face in respect of export finance, and how this relates to more general problems in accessing finance. We identify significant gaps in the provision of export finance services for parts of the SME population. We evolve a theoretical framework through which to study SME export finance services that combines perspectives from pecking order theory with organisational fields and policy-mix frameworks, but with geographically grounded theoretical arguments intersecting both the demand and supply side. This

together with the case evidence from Wales leads to a series of prescriptions for more targeted interventions to better serve the regional SME base.

RESTRUCTURING OF THE NEWSPAPER INDUSTRY IN AN ERA OF DIGITALISATION: A CASE STUDY FROM A PERIPHERAL REGION IN NORWAY

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Zelia Moss, University of Agder, Norway

The expectation to digitalisation as a mega trend that will challenge and change industries and regions are high. However, how digitalisation will challenge industries and regions are less studied. Theoretically, the paper intends to explore the concept of digitalisation in the intersection between the organisation and the regional level. Digitalisation as new knowledge challenges the capacity of organisations and regions to recognise, assimilate and apply the knowledge for innovative purposes. Previous studies have often had an external perspective on absorptive capacity, and also lack an explanation regarding how organisations can facilitate the development of this capacity through changes in their internal culture, structure and knowledge. Hence, the aim of this paper is to investigate the synergies and compatibilities between internal and external factors affecting organisations' digitalisation processes.

The object of study is the newspaper industry, which is an industry already heavily challenged by digitalisation. Although the newspaper industry is seen as a creative industry, this industry has not been able to profit from digitalisation on a big scale. The industry is suffering from reduced revenues and seems to suffer from a cognitive lock-in situation. Digitalization is simply necessary to survive as the traditional newspapers are declining and probably soon disappeared. The research question is: How can the local newspapers acquire and build the knowledge and capacity needed to digitalize and thereby meet the future demands concerning digitalization?

The case consists of four local newspapers (one fully digital and three hybrids) owned by Norway's largest publishing house. The newspapers are located in the most southern region of Norway, a peripheral region with about 75.000 inhabitants.

RELATED VARIETY IN INDUSTRIAL SYMBIOSIS: THE CASE OF DUNKIRK

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Industrial regions, specialized in heavy industry, currently face many challenges, due to their strong specialization (job losses, closure of plants etc.) and are looking for new paths of diversification. Industrial ecology can be an engine of this diversification, by creating an eco-innovative milieu (Kasmi et al., 2017, Kasmi, 2018) favorable to sustainable territorial development (Gallaud, Laperche, 2016). In this paper, our goal is to answer the following question: can territorial attractiveness be generated due to the construction of such an eco-innovative milieu? We use the concept of related variety (Boschma et al., 2015) according to which diversification becomes a territorial development asset when new activities are "related" to existing ones. We study the case of Dunkirk (North of France), pioneer city in France for the implementation of industrial ecology. The degree of relatedness between new companies and firms of the industrial symbiosis is measured by two indicators: 1) sectoral links (quantitative analysis of a database of 124 companies, NAF nomenclature) and 2) flows of industrial ecology (qualitative analysis, interviews with 7 cases of new and innovative companies). We find that a large share of new companies (created between 2014 and 2018) belongs to the same business segments as those of the industrial symbiosis. In addition, the creation of eco-industrial

synergies appears to be an increasingly important factor of territorial attractiveness. Our results are in line with the theoretical analysis, it confirms the potential role of industrial ecology in territorial diversification. Indeed, industrial ecology could be a smart specialization niche allowing the discovery of new entrepreneurial opportunities (Foray, 2015, Asheim et al., 2017). However, this dynamic, depends on the implementation of an adapted territorial governance.

APPLICATION OF GROUNDED THEORY CONCEPT IN THE COMPARATIVE ANALYSES OF UNIVERSITIES

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Zoltán Baracska, Széchenyi István University, Hungary

Dávid Fekete, Széchenyi István University, Hungary

Entrepreneurial Universities provide value for their community not only by the educational activity, but also by seeking and maintaining partnerships with local firms. Goal of the presented study is to describe and analyse differences and similarities of the transformation process of universities seeking to be entrepreneurial in four European cases – France, Germany, Hungary and Poland. Novelty in the methodology is that it represents how grounded theory concept helps researchers in the constant comparative method of qualitative analysis. The authors first revisit the related literature of multi-case analyses to position the research categories. Then discussion continues with representing steps and phases of data analyses, which follows the logic of grounded theory building concept, in which highlighted data hubs are represented from the cases. Authors adopt a closer standpoint to the main questions of the study: Can role differences be observed among the cases? What kind of institutional or strategic elements are behind sustainable partnerships? Is there any interdependence with the rate of diversification in the local industry and the presence of university services targeting local firms? It can be concluded that novel approach of applying grounded theory supports to answer of these questions as valuable topics in the substantive literature base of entrepreneurial universities. Role differences of universities can be observed, mainly due to historical and institutional backgrounds. Notions of sustainable partnerships are different in the cases. There are two definable presences of strategies in presenting university-firm interactions, which can be linked to the structure of local industrial environment of universities. Findings support the answer for the general question, that is how universities can determine and adapt practices in their own stage of entrepreneurial transformation?

EUROPEAN CROSS-BORDER COOPERATION. STAGES OF TERRITORIAL INTEGRATION AND CONTRIBUTION TO COOPERATION NETWORKS IN CROSS-BORDER REGIONS

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Border regions face several difficulties compared to regions and cities located centrally within states, which are related to the barrier effects originating from political and other kinds of borders. Local authorities are those that experience the benefits and costs of the cross-border area most directly and are often very engaged in cross-border issues (Perkmann, 2007). In order for policy-makers and institutions to be prepared to respond to complex territorial challenges and changes, adequate governance structures and functioning actor networks need to be in place.

There is a diverse picture of cross-border governance structures in the EU, ranging from long established and institutionalized Euro-Districts or Euro-Regions, legally established European Groupings of Territorial Cooperation (EGTC), to loose and weaker cooperation structures and ad-hoc INTERREG coordination.

Several academic discourses deal with the issues of regionalization and integration processes in cross-border regions. The notions of (cross-border) regional governance (Healey, 2002, Jessop, 2002, Gualini, 2003) and policy networks (Perkmann, 2002, Svensson, 2015) cover the planning dimension, while the notions of innovation-driven integration and cross-border regional innovation systems (Trippel, 2010, Lundquist and Trippel, 2013, Makkonen and Rohde, 2016) cover the socio-economic dimension.

What is currently missing in the academic discourse is a systematisation of cross-border regions (CBRs) according to governance structures, stages of integration and institutionalization and patterns of collaboration networks in connection with an analysis and evaluation of cross-border regional development policies. It is not sufficiently clear, which regional conditions and processes drive CBR institutionalization or collaboration patterns and which governance structures lead to better collaboration results. The paper at hand aims at contributing to bridge this research gap by systematizing CBRs according to their governance arrangements and stages of integration. Based on a typology of CBRs, selected cross-border development policies are analysed regarding their focus and impact on different kinds of cooperation activities.

REPLICABLE AND REPRODUCIBLE RESEARCH IN ECONOMIC GEOGRAPHY AND SPATIAL SCIENCE

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The ability to replicate and reproduce scientific research has recently emerged as a topic of concern and drawn public attention in several fields of study. While not yet a focus in the spatial sciences, the question of replicability should potentially be a central concern of geospatial, regional, and spatial economic research. Conceptually, the spatial interactions, spatial interdependencies, and regional variations that define economic activity create complex spatial generating processes that are difficult to operationalize in consistent and reproducible ways. Methodologically, spatial dependencies and spatial non-stationarities necessitate additional decision making in research design and econometric specification, which can be difficult to communicate and replicate. Practically, regional variation often leads to a situation in which the results from one geographic area are not replicating in another. In the best cases that variation complicates policy advice, in the worst cases those results fall out of the evidence base. This presentation analyzes some of the ways spatial relationships complicate the reproduction of spatial economic research and more broadly the practice of economic geography.

SHOULD A REGION BE TERRITORIAL? THE INSTITUTIONAL AND POLITICAL ORGANISATION OF FRENCH ABROAD: A SOCIOLOGICAL ANALYSIS

Tudi Kernalegenn, UC Louvain, Belgium

Governments sometimes think of their emigrants as an (extra)territorial extension of their administrative system. Haiti, Ecuador or Chile's emigrants have thus been described as respectively the country's 10th department, 5th or 14th region (Glick-Schiller and Fouron, 1999; Boccagni, 2014; Baeza, 2010). According to Michael Collyer (2014), this is a "rhetorical device" to create a "symbolic connection between core state institutions and emigrants" and reincorporate them into the body politic (Collyer, 2013). It is not only symbolic though. Increasingly, nation-states have been developing not only discourses, but also legislative and administrative devices to integrate better the emigrants in their home country political body (Levitt and Dehesa, 2003; Ragazzi, 2014; Délano & Gamlen, 2014; Østergaard-Nielsen, 2016), and not only among emigration countries. In fact, France is one of the countries which has gone further in that direction. French abroad do not only keep their voting rights, they are also represented at the local (with 443 consular councillors in 130 consular councils), "regional" (Assembly of French Abroad), and central levels (with 11 deputies and 12 senators). The

aim of this presentation will be therefore to explore this metaphor of the extraterritorial region, focusing on the French case. We will first assess its politico-administrative reality, in comparison to the “internal” regions. We will then question its symbolic dimension, as far as the imagination of the French nation-state is concerned: is this new empowering of emigrants a tool to reimagine sovereignty? How do emigrants participate to this new political and ideological opportunity structure?

ENERGY CONSUMPTION BEHAVIOR AND USER SATISFACTION IN GREEN PUBLIC RESIDENTIAL BUILDINGS IN HONG KONG

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The green certification system like LEED and BEAM-Plus is to evaluate and standardize the environmental benefits of green buildings, including energy performances. However, it is plagued by costly certification, performance gaps, and negligence of human behavior. Occupant behavior has a significant impact on the energy performance of building given that where people spend more than 90% of the time, thus it is crucial to understand occupant behavior in a comprehensive way. Due to the stochastic and diverse characteristics, occupant behavior is often neglected since the inception of building design. In Hong Kong, we face severe problems of its unique landscape of dense high-rise buildings and social context where large population residing in public housing. This paper studies the effectiveness of green certification system and reviews the existing policies implemented in Hong Kong. We incorporate both quantitative and qualitative methods based on data collected from various sources and analysis of consumption behavior and user perception based on data obtained through a questionnaire survey. We test the relationship between occupant consumption behavior and the living environment associated with green facilities by incorporating the social perspective, addressing the changes in people's lives due to the interaction between green building technologies, spatial choices, and differences across population groups. The result shows the occupants residing in green buildings do not necessarily behave better in energy-efficiency, and the adoption of green building technologies does not improve energy savings and enhance user satisfaction. This paper enables the study of adaptation behavior of the occupants staying in green buildings and analyses the actual benefits of being green building in a highly populated city.

URBAN REGENERATION: A DUCT-TAPE REMEDY OR PLANNING FOR SMART SHRINKAGE?

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Whilst urban shrinkage has been identified as a global process, with certain common causes and patterned manifestations across a variety of contexts, policy and planning responses vary, reflecting different institutional and cultural path dependencies. In The Republic of Korea, shrinking cities predominantly take the form of small provincial cities located outside of metropolitan conurbations such as Seoul. Here the drivers of urban shrinkage are threefold: deepening uneven geographical development between the capital and non-capital regions; the functional weakness of small cities stemming from depopulation in rural areas following the decline of primary industries; and embedded social norms and values around the centrality of Seoul as a marker of personal success. The country's low fertility rate will in all likelihood exacerbate these trends. This paper focuses on policy and planning responses to these issues in Korea, focusing in particular how urban shrinkage is discursively constructed and materially addressed at national and local scales through city centre regeneration imaginaries and strategies. Drawing on a mixture of qualitative methodologies – including two months of non-participant observation and 52 semi-structured interviews, undertaken at national and local levels – this paper analyses these regeneration imaginaries and strategies, teasing out resonances and dissonances between their scales of operation. Specifically, the paper explores the enactment in 2013

of the 'Urban Regeneration Special Act', a piece of legislation that selected local case projects as part of a nationwide urban regeneration programme, asking how it has been rolled-out in the context of one of these local areas - Yeongju, a typical Korean shrinking city – and critically questioning whether it simply reflects a sticking-plaster to cover deep structural issues or whether it might signal new possibilities for a more transformational 'smart shrinkage' approach.

MEDIATING DISTRIBUTIVE POLITICS: POLITICAL ALIGNMENT AND ELECTORAL BUSINESS CYCLE EFFECTS ON MUNICIPALITY FINANCING IN GREECE

Tasos Kitsos, City-REDI, University of Birmingham, UK

Antonios Proestakis, European Commission, Joint Research Centre, Belgium

Electoral politics and clientelism are not new notions. Yet, the, often suspected, pork barrelling activity has been difficult to identify until recently. A relatively recent trend involves studies utilising publicly available data on resource allocation and electoral results and being able to econometrically derive evidence of clientelistic relationships between the national government and voters. However, distributive politics are often mediated by factors such as multi-level governance systems and the political business cycle. These mediators have only recently being explored in the literature.

This paper examines the role of political partisanship and the electoral cycle in the allocation of funding from the central to local government in Greece between 2003 and 2010. A panel dataset that combines data from the Greek local and national elections and municipalities' budgets for the period 2003-2010 is used to test whether the political alignment between local and national government as well as the stage of the political business cycle impact on municipality financing.

The findings suggest that aligned municipalities receive more grants in the run-up to national elections. This is evidence of pork barrelling, stronger vertical network dependency and the political business cycle considerations in the allocation of resources. The results call for greater fiscal decentralisation in order to reduce the dependency and eradicate the use of intergovernmental transfers for political gain.

THE ROLE OF EMBEDDEDNESS ON REGIONAL ECONOMIC RESILIENCE

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André Carrascal-Incera, City-REDI, University of Birmingham, UK

The 2008 crisis has been the focus of a range of fields within social sciences. Regional economists and economic geographers have predominantly focused on the varying degree of impact on places and regions within countries. As a result, the notion of economic resilience, namely as the capacity to overcome or avoid the negative effects of a downturn, has been brought to the centre of attention. Since then, numerous contributions have identified some of the determinants of economic resilience, leaving the embeddedness of local economic systems relatively unexplored due to data constraints. This paper examines the effects of local economic embeddedness on the resilience performance of UK NUTS2 regions during the 2008 crisis by means of different measures that show the nature and incidence of the domestic production. It is hypothesised that embeddedness can lead to positive externalities through economies of complexity and enhance resilience performance, especially during recessions. Concurrently though, increased embeddedness can lead to lock-in effects and reduce the above effects for higher levels of embeddedness.

To test these hypotheses, the paper utilises input-output tables to approximate the embeddedness of local economies in UK NUTS2 regions. The level of embeddedness is then used in a panel data

examination to identify whether more embedded economies have performed better during the crisis and whether these effects are monotonic or not. Preliminary results point to a complex non-linear relationship between the above industrial structure characteristics and economic resilience to the 2008 crisis.

MODELLING THE DEVELOPMENT PATHS OF NUTS-3 LEVEL REGIONS

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Mariann Veresné Somosi, University of Miskolc, Hungary

Dóra Szendi, University of Miskolc, Hungary

The geopolitical change that took place after 1989 led to a major structural reorganization in the social and economic situation of the Hungarian regions. Some regions have started to develop; others are permanently stagnating, while others have a permanently lower level of development compared to the centre.

Based on the ex-post experiences, the authors defined four development paths (improving competitiveness path – leaders; deteriorating competitiveness path – slowing; converging path – emerging; peripheral path – lagging) and examined the ex-ante path movements using their model extended with expert panels.

THE INFLUENCE OF URBAN CORE ON SURROUNDING THE HOUSING MARKET OF METROPOLITAN AREAS (THE CASE OF RUSSIA)

Evgeniya Kolomak, Institute of Economics And Industrial Engineering, Russia

Metropolitan areas are considered as poles of growth in the recent political discussions in Russia. However an influence of large cities on the neighboring territories is ambiguous and depends on how successfully the impulses and quality of growth are transmitted from the center to the periphery. The paper presents empirical estimates of the influence of the urban agglomerations on the value of residential real estate. The housing market is considered as an indicator of the population's incomes and perspectives of the territorial development. The tested hypothesis is that in cities belonging to metropolitan area, housing prices are higher than in settlements beyond its borders. In the regression, where the dependent variable is the average cost per square meter of housing, along with the fact of belonging to the metropolitan areas, we control for the distance to the center of the area, the distance to Moscow and the population density in the city. The estimates showed that in the cities of the metropolitan areas housing prices are significantly higher than in the cities outside the areas. This result is an indirect confirmation of the positive effects of the agglomeration process in the Russian urban system.

REVITALISATION POLICY IN POLAND – IS THAT A SUFFICIENT RESPONSE TO URBAN SHRINKAGE?

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Negative demographic trends are among the most important challenges of the sustainable development of cities and regions in several countries in the 21st century. The process of urban shrinkage follows a specific pattern in the post-socialist countries of East-Central Europe, including Poland. The reason is that – apart from such 'typical' factors controlling this process as demographic

trends or the decline of traditional industries – it is closely connected with the course of the great institutional changes produced by transition from a command to a market-oriented, democratic system. Therefore the management of shrinking cities in those countries makes use of several approaches and tools. One of the most significant is revitalisation policy.

Our paper attempts to identify the main problems of urban shrinkage and revitalisation policy in Poland. It consists of three parts. The first offers a theoretical background, emphasising the specificity of urban shrinkage in Poland in the conditions of the post-socialist transformation. The second presents the scale, forms of manifestation, and consequences of shrinkage in a variety of spatial contexts. In the third, policy issues as well as revitalisation problems and challenges are discussed and assessed. The latter include: 1) limited funding for revitalisation activities, (2) large spatial dispersion of investment, (3) gentrification and speculation in revitalisation areas, and (4) social participation and cooperation between different stakeholders in programming and implementation of revitalisation policy. The presentation ends with concluding remarks and policy recommendations.

KUNMING: BORDERLAND METROPOLIS OF CHINA'S 'RADIATION' CENTER, YUNNAN PROVINCE

Victor Konrad, Carleton University, Canada

Kunming is the emerging hub of China's economic linkage and development strategy for Yunnan Province, southwestern China and southeastern Asia. Kunming is also a borderland hub critical in the development of borderland systems and integral to borderlands growth and configuration. Indeed, Kunming gives character and meaning to the borderlands. This paper examines the role of Kunming in the region's borderlands emergence, development and control in the context of current border studies thinking about borders in relational motion, multi-scalar representation, and borders as process. The study draws on a multidimensional assessment of Kunming's power and centrality, and it relates this information to its role as the political, financial, manufacturing, communication, cultural, and energy center of not only Yunnan, but also adjacent Vietnam, Laos, and Myanmar, and beyond into southeast Asia.

CROSS-BORDER REGIONALIZATION IN ENVIRONMENTAL GOVERNANCE AND PLURI-REGIONAL COMPLEXES FORMATION AT THE INTERFACE OF RUSSIA AND EUROPE

Elena Koritchenko, University of Geneva, Switzerland

Regions abound in the contemporary world, taking new forms, crossing the borders and finding their place in multi-level governance structures. To address the growing complexity of regional governance and map the increasing diversity of regional forms, this research is using the term pluri-regionality as a traveling concept to refer to situations where regions overlap (spatially, institutionally, functionally, etc.) and start interacting with each other. In particular, the research aims at increased understanding of regional environmental governance (REG) forms that bring together states and/or sub-national territorial units in their efforts to address environmental issues across the borders.

The territorial research area covers the space of interaction between the Russian Federation and its western neighbors, referred to as the Russia-Europe interface. Despite the international political volatility and controversy in this area, it has provided a fertile ground for active but unevenly distributed regionalization which has resulted in the emergence of multiple functional regions as well as “pluri-regional complexes” in environmental governance.

The background of regional and pluri-regional dynamics here is formed by a unique combination of factors, including presence of numerous shared environmental commons, remarkable dynamics of the

borders and associated political discourses and geopolitical ambitions. Most countries of the interface have developed elaborated national environmental governance systems, yet they follow remarkably dissimilar patterns - starting from overarching values, approaches and governance styles through the most active actors and understanding of regionalism and to technical aspects. Federal structure of the Russian Federation and interaction of the two active neighborhood policies provide an increasing amount of possible institutional settings as options for region-making. The research addresses links between geopolitical conditions, types of borders and modes of regional environmental governance, including main actors and ways of defining a region.

NEW APPROACHES OF FINANCIAL SERVICES FOR THE INCLUSIVE AND SUSTAINABLE ENVIRONMENT

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The concept of 'financial exclusion' developed in the last decades, so today, it means more than in the past. Leyshon and Thrift (1995) use 'financial exclusion' to indicate the limited physical access to banking services. This trend is the only one issue, the geographical form of the exclusion. Some groups of people or households are excluded from the mainstream or basic financial services due to their fiscal positions (low income, unemployed, etc.). This is the social issue of financial exclusion. In the 21st century this concept has expanded a new approach, with the digital exclusion. The original exclusion can be improved and mitigated with the opportunities provided by the internet (e-banking, phone apps, mobile payments and other FinTech methods), but this requires some basic conditions, e.g. internet network and connection possibilities, IT-knowledge, financial culture.

Some statistical data and complex indicators (branch density, operational or functional distance etc.) are appropriate for the analysing of geographical exclusion and the social and digital exclusion can be measured by some other methods from the basic statistical data analysis to the interviews and focus group meetings. These methods help for the measurement of the financial culture and knowledge of local society.

The main goals of this paper after the mapping of the problems of financial exclusion that it offers some innovative solutions for the inclusive and sustainable environment, for example:

- the development and spread of FinTech modes must be encouraged;
- increasing financial inclusion within poor neighbourhoods;
- promoting and development of sustainable and green finances.

SHRINKING RURAL AREAS IN HUNGARY – INQUIRING TYPES AND CAUSES

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As a rule, rural population is shrinking in Hungary: from among the 81 rural districts (LAU-1 units) the population was growing or stagnating between the 2001-2017 period in as few as seven districts and was moderately shrinking in nine districts (an experimental typology for LAU 1 units is based on DEGURBA). Stagnating and growing has been exception from the rule in urban and suburban districts as well restricted mainly to the suburban districts of the metropolitan area of Budapest. In this context, shrinking rural districts were identified according the degree of decrease by drawing the line at -10% population loss between 2000 and 2017 (the rural average for this period was 9.2%). When socio-economic variables are looked at, two deserve special attention, ageing and labour-market

weaknesses both reflecting lacking dynamism. Spatial aspects do count as well: peripherality is certainly an important precursor to significant demographic degradation, inner and geographic peripherality alike. Relationship between shrinking and lagging is worth mentioning as well: in some most deprived rural border districts, where extreme poverty and Roma segregation prevail, shrinking does not come about understandably due to the relatively high birth rate among the Roma population.

DELINEATING AND CHARACTERIZING FUNCTIONAL CROSS-BORDER REGIONS IN EUROPE

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Filipe Batista e Silva, European Commission, Joint Research Centre, Italy

Carlo Lavalle, European Commission, Joint Research Centre, Italy

According to a recent European Commission communication, border regions are places where the European integration processes should be felt most positively – studying, training, working, receiving medical care and doing business across borders are activities that should be possible regardless of the existence of administrative national borders. Border regions are currently defined by the NUTS3 regions that share (or are sufficiently close to) an international land border. However, NUTS3's heterogeneous size and shape make comparisons across borders inconsistent, and may be detrimental to targeted and effective policy action and funding.

In this study, we propose a new delineation of cross-border areas in Europe based on a functional approach rather than a purely administrative one. The proposed 'functional cross-border areas' are based on driving time to land border crossings computed from a high-resolution pan-European road network. While the approach is flexible to consider different driving time thresholds, the current analysis applied 30 and 60 minutes drive-time thresholds to identify areas included in the functional border regions. In addition, we combined the resulting cross-border areas with detailed population data at municipality and grid levels to characterize them according to their demographic characteristics and trends since 1960.

The results obtained reveal that demographic growth in border areas is significantly lower than the EU average, suggesting lower overall attractiveness and economic performance. Notwithstanding, the results also show a huge diversity of accessibility and demographic trends across the EU border regions and between the two sides of each border. These findings highlight the need for renewed and more targeted policy action and investment in border areas. We argue that the proposed method to delineate and characterize cross-border regions is highly useful to support this endeavor.

REGIONAL ASPECTS OF THE EFFECTS OF AIR POLLUTION ON MORTALITY IN URBAN AREAS IN POLAND

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Grzegorz Formicki, Pedagogical University of Cracow, Poland

Air pollution is one of the key drivers of adverse health effects on a local and regional scales. Gases such as nitric oxides, sulfur oxides, carbon oxides or ozone have irritating influence on the upper respiratory tract. They damage the natural barriers against pathogens, induce chronic inflammation and may also induce neoplastic transformation in the respiratory system. Special attention has been also paid to air pollution with particulate matter PM₁₀-PM_{2.5} i.e. particles having the diameter between 2.5 and 10 micrometers. Particulate matter have different chemical composition and thus different biological effects in human organism. Considering human health, the most important seem to be metals (mainly in the form of oxides) and large group of polycyclic aromatic hydrocarbons (PAH) including benzo(a)pyrene which is considered as a model PAH in environmental monitoring and

laboratory toxicological studies. PM2.5 or smaller particles are the most harmful because they easily penetrate deep into the lungs and into the blood. Depending on their chemical composition inhaled PM may induce large number of health effects including neoplastic transformation in different organs, cardiovascular diseases, neurotoxic effects, disruption of hormonal regulation etc.

Biological effects of toxic compounds of PM have been well recognized thanks to the laboratory studies using animal or in vitro models. Much less is known about their influence on human health in relation to environmental exposure. This is why different mathematical models of human exposure and its effects are developed. The problem is complex because the concentration of pollutants carried by the air shows spatial and temporal distribution, and additionally, chemical composition of air pollution be also different in urban areas and time of the year.

Taking all above into consideration, we decided to combine analyses of air quality with spatial and temporal distribution of pollution and human premature mortality using geospatial modelling.

CLUSTER SUBSIDIZING IN RUSSIA: THE ROLE OF REPUTATION

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The research seeks to understand, which factors: innovative development of cluster home regions, economic performance of cluster members, management and governance practices of cluster teams, or their reputation and ability to build trust of governmental officials – influence cluster selection for subsidising and the volumes of such funding. The research is based on the case of Russian programme to support pilot innovative clusters in 2013-2015. In particular, it explores the data on 25 clusters, selected for subsidizing within the framework of the most large-scale national cluster programme so far. A two-step model with a selective bias control (Heckman correction) was used for the hypotheses testing. The first step of analysis revealed that long-term factors of regional innovative development (socio-economic conditions, STI capacity, and innovation activity of companies) influence the probability of cluster selection to be supported. Most Russian pilot innovative clusters are located in the leading innovative regions. The second step of analysis resulted in the acknowledgment of trust as the most influential factor for the volumes of cluster subsidy. Other factors, as our analysis shows, proved to be less significant. The paper adds academic novelty to the discussion of public funding based on trust / reputation from a cluster perspective. Policy implications, revealing from this research, suggest reconsidering the previous cluster support programme design by improving selection criteria and procedures.

BARRIERS FOR NEW REGIONAL INDUSTRIAL PATH DEVELOPMENT

Nina Kyllingstad, University of Agder, Norway

Due to increasing globalisation, regional industries face competition worldwide. Thus, how regional industries can develop in a sustainable way is high on the research agenda. The paper aims to contribute to a better understanding of barriers hampering new regional industrial path development. This is analysed by using the oil and gas supplier industry in the Agder region in Norway as a case. Further, the paper analyses how a new policy tool, a centre for research-based innovation in offshore mechatronics (SFI OM), can contribute to breaking down barriers for new industrial path development. The SFI OM was awarded its status and funding from the Research Council of Norway during the peak of the oil and gas industry. The aim of the centre was to improve growth and innovation within the established industry and beyond. However, at the time of initiation, the oil prices had dropped severely, thus resulting in new conditions for the centre and its partners. This

changed dynamic, to the established industry of oil and gas, makes the SFI OM an interesting case for studying barriers for new regional industrial path development.

INNOVATION-BASED URBANIZATION: EVIDENCE FROM 270 CITIES AT THE PREFECTURE LEVEL OR ABOVE IN CHINA

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With the rapid development of knowledge economy, a number of important shifts are emerging in urbanization pattern across the world. Traditional urbanization theory has become hard to interpret these changes on a global scale, and "innovation" is a core concept to explain the new changes of the urbanization dynamics. As one of the important contents of urban geography, urbanization dynamic needs to turn from the general population flows between rural and urban areas into emphasizing high skilled migrants flow among cities and regions research. Against this background, we propose a conception of innovation-based urbanization. Using this concept, this study analyzes the spatial distribution characteristics of high skilled migrants and cultural diversity on urban innovation in China, based on the data of the sixth census of 270 cities at the prefecture level or above in China. This study measures the extent to which highly skilled migrants and cultural diversity increase urban innovation, by using spatial Durbin method to constructs urban innovation regression model, to support the concept of innovation-based urbanization. The result shows that: first of all, the concept of innovation-based urbanization conforms to the the development of knowledge economy, which emphasizes the migration process of highly skilled labor to cities. It helps to promote the changes in urban functions and landscapes and the expansion of urban knowledge activities, which undelines new dynamics of urban development, innovative landscape. Secondly, innovation urbanization based on highly skilled migrants flow is an important driving force for the development of Chinese cities, especially for eastern coastal cities and capital cities. Thirdly, the scale of highly skilled migrants flow and the level of urban cultural diversity in China both have been demonstrated of having positive effect on urban innovation output. With other conditions unchanged, a ten percent increase in the number of urban highly skilled migrants and urban cultural diversity will directly result in an increase of 3% and 2% in urban innovation output respectively. This research has deepened our understanding and awareness of the openness and dynamics of the regional innovation system, and it has also provided an important theory basis for the formulation of urbanization and urban development policy under knowledge economy.

THE PROLIFERATION OF DUTCH CYCLE HIGHWAYS: NOT ONLY DIFFUSION IN SPACE BUT ALSO INCREASING VARIATION IN CONDITIONS, APPROACHES AND MEANINGS

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Huub Ploegmakers, Radboud University, The Netherlands

Fariya Sharmeen, Radboud University, The Netherlands

Laura van Kruijl, Radboud University, The Netherlands

Over the last decade, the Netherlands has witnessed a proliferation of 'cycle highways'. While not literally highways, they entail separate, comfortable, and relatively fast routes connecting cities and their environments with limited non-priority crossings. Currently approximately 60 routes are (almost) completed with many more under construction and consideration. This paper explores the geographical diffusion of cycle highways, probing local conditions as well as changes and variations in approaches in meanings, using configurational analysis (QCA). Variation has emerged, the paper argues, due to the way the phenomenon started from a marriage of convenience between two rather different drivers, namely, the initiatives of local cycle advocates (policy makers and NGOs) and the central government's wish to reduce motorway congestions by shifting short-distance car trips to

other sustainable modes of transport. The study provides an analysis of cycle highway initiatives, both completed and ongoing, in the provinces of North Brabant and Gelderland, using a new, systematic form of data analysis. Besides vindicating the usefulness of the approach, the findings reveal the significance of local advocates, political signature and built environment conditions. The conclusions discuss whether there is a need for a more focused definition and approach of cycle highways.

MULTISCALAR BORDER(LAND)S AS SITES OF RELATIONAL MOTION: THE ROLE OF YUNNAN'S BORDERS FOR TRANSREGIONAL SECURITY

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The paper builds on the ongoing discussion on bordering, borders and borderlands as sites of multiscalar and relational motion. It depicts the case of the southern Chinese Yunnan province as a dynamic venue where various phenomena manifest in ways that advance the concept of bordering as relational motion. It is argued that the dynamic processes, phenomena and responses emanating in and across China's southwestern borderlands are insufficiently understood and represented spatially. If the complexities and transformations of the current era are to be better understood and managed, a nuanced and critical re-reading of borders is mandatory. The province of Yunnan is perhaps the most illuminative example of how rapid and strategic transregional development has not only stimulated growth and prosperity, but also fears and insecurity. A multiscalar analysis proposed here, suggests security in this region cannot be understood merely as national, military, or purview of a state. Nor can security be analysed simply in terms of interstate relations and threats one entity may pose to another. Rather, there is a need for multi-dimensional and -scalar approaches to security that holistically capture global processes, new forms of supranational and transnational developments, as well as local level cross-border processes.

PRACTICAL APPROACH TO THE DEVELOPMENT OF INTER-REGIONAL INNOVATION COLLABORATION

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Valerie Brett, Waterford Institute of Technology, Ireland

Bill O'Gorman, Waterford Institute of Technology, Ireland

While most innovation collaboration projects consist of partners who are located at close proximity and within organisational and cognitive boundaries (Dettmann, von Proff and Brenner, 2015), recent literature has explored the development of an innovation collaboration without spatial proximity. The perception of spatial proximity as a necessary condition for efficiently sharing tacit knowledge especially in research and innovation activities (Rallet and Torre, 1999) raises the question of the possibility of establishing inter-regional innovation collaboration. In order to address this question, this paper explores the collaboration among regions that do not share contiguous borders. Hence, this paper presents a practical approach to developing inter-regional innovation collaboration by exploring a research in action project which was represented by fifteen collaborating triple helix institutions from four different European regions that do not share contiguous borders.

The research employed a multi-phase mixed methods research design wherein desk research, a three time-point longitudinal survey and interviews were conducted. The findings indicate that the inter-regional collaborative group (CG) was working from the beginning and continued to collaborate effectively despite their differences throughout their collaborative process. While literature suggests that geographical proximity is advantageous for research and innovation activities, the findings of this research suggest that inter-regional CG established an interaction and collaboration that works effectively over a distance. Consequently, based on the findings of this research, this paper presents a methodology and framework for developing inter-regional innovation collaboration.

The major contributions of this research are the uniqueness of the method employed especially the longitudinal aspect of the study, the generation of a deeper awareness of 'proximity' with regard to developing an inter-regional innovation collaboration and the development of a novel framework for inter-regional innovation collaboration, which can be applied to regions that want to collaborate from a distance.

THE ROLE OF CULTURE IN THE ERA OF 'DIGITAL MUTATION'

Luciana Lazzeretti, University of Florence, Italy

This is the time of narratives and storytelling. This is the time of surfing and multitasking. In the Era of the Economic Complexity, men look for simple solutions to increasingly complex issues. Decision processes change thanks to the application of artificial intelligence (AI) and algorithms. Metrics and rankings are produced in order to justify or to take final decisions.

The effort of analytic research on which is based the essence of the concept of experience is delegitimated and progressively substituted by the request for velocity, the urgent need of an answer, in contexts that lead towards a progressive annul of the spatial-temporal dimension thanks to the applications of new technologies and information and communication technology.

The refusal of an increasingly complex and difficult to face reality leads to taking refuge in estrangement, in the search for an escape that finds in the game, the crowning of the replacement of the principle of fatigue with that of pleasure. This leads to building other worlds, multiple truths. The notion of true or false fades as well as the system of rules and codes that helped distinguish between real life and imagination.

Concepts such as 'virtual reality' or 'augmented reality' are part of the daily life of many digital natives and not. In many places we talk about 'augmented humanity', a technological revolution that is also becoming a mental revolution generating a real Darwinian change of the existential condition of humanity.

The twentieth-century cultural elites, the so-called 'experts', are replaced by influencers, bloggers and measured by the number of followers searched on social networks that modify the processes of dissemination of knowledge and the legitimacy of knowledge. The 'dematerialization of products', increasingly conceived as knowledge systems, is characterized by a progressive loss of relevance of the material component compared to the intangible ones. Products are 'crystals of imagination', as Hidalgo (2015) taught us, and the tendency to their ubiquity generates such significant changes that it becomes the natural condition rather than the exception.

How does the concept of learning and experience change in this context? What are the new subjects that attribute value and what does it mean today?

Starting from the suggestions emerged from the debate that has recently grown in Italy from the two essays by the writer Alessandro Baricco, "Barbari, saggio sulla mutazione" (2006) and "The game" (2018), on the so-called digital insurrection, we ask what is now the role played by culture and cultural and creative industries in these mutation processes that have overwhelmed society by transforming it, not only from the technological point of view, but also and above all in cultural, social and economic aspects.

Inspiring from what was written by one of the fathers of the technological revolution, Stewart Brand, inventor of the personal computer (1974): "Lots of people try and change human nature but it's a real

waste of time. You can't change human nature, but you can change tools, you can change techniques and that way you can change civilization” (p. 108).

We construct our discussion inspired by the suggestions of the aforementioned essays to bring us back to a reflection on the transition from the analogical to the digital paradigm and the implications that are deduced in terms of the economy of culture and creativity.

Widening the Gap: Uneven Spatial Development in Galicia During Spain’s Property Boom
Iago Lestegás, University of Santiago de Compostela, Spain

This research addresses the phenomenon of uneven spatial development in Galicia (NW Spain) by examining the evolution of housing construction during the property boom and in the aftermath of the global financial crisis in two distinct parts of its territory: the Western half—comprising the demographically and economically more dynamic provinces of A Coruña and Pontevedra, crossed by the AP9 highway—and the Eastern half—including the declining provinces of Lugo and Ourense. It draws on official quantitative data at different scales provided by the Spanish Ministry of Development, the National Institute of Statistics and the Galician Institute of Statistics on construction output and population dynamics between 1991 and 2016. The results evidence that, while the number of building starts per year was similar in the West and in the East in the early 1990s, it grew much faster in the former during the property boom and remained significantly higher until 2008, when it dropped dramatically in both territories reaching very small values in the mid-2010s. Property values also increased much faster in the West during the property boom and, despite the remarkable post-crisis decrease, they have remained significantly greater than those of the East after 2008. The results evidence that, while the West experienced urbanization with (very moderate) demographic growth during the property boom, the East experienced urbanization with demographic decline. In Eastern Galicia, most construction activity was concentrated during the early 2000s in its main urban areas amid progressive rural abandonment, and in the coastal region of A Mariña as the construction of the A8 highway stimulated the second-home market in several of its municipalities. Following these results, I argue that the property boom that collapsed due to the global financial crisis deepened the gap between Western and Eastern Galicia and consolidated existing patterns of uneven spatial development.

EVALUATION OF THE IMPACT OF PUBLIC INVESTMENT PROGRAMS ON SOCIAL AND ECONOMIC PERFORMANCE OF RUSSIAN REGIONS

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Marina Nesena, ICSE "Leontief Centre", Russia

The goal of this research was to evaluate the impact of public investment programs on the social and economic development of Russian regions (subjects of the Russian Federation). Two sets of programs - the federal target programs for the development of regions and investment programs of the financial development institution — Vnesheconombank, designed to solve the problems of regional development - were considered. The impacts of the public interventions were evaluated by the “difference in differences” method, using Bayesian modeling. The results of the evaluation suggest the positive impact of federal target programs on the total factor productivity of regions and on innovation; and that regional investment programs of Vnesheconombank are improving the regions’ export activity. All of the investments considered are likely to have contributed to the reduction of unemployment, but their implementation has been accompanied by an increase in interregional inequality.

TRAVELLING IMAGES: METROPOLITAN RENAISSANCE

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In regional planning, an emphasis on interests implies a focus on the target of images provided in the process of strategic framing and regional design. In this contribution, the author assumes that, by analysing the visualizations that have been produced during interaction among different actors, both in the frame of hierarchical and soft-governance processes, as well as the ways they have been used to, it is possible to understand how these processes have mutually influenced each other, acting the first in a context of meta-governance and the latter with the effective will to influence the institutional contexts and even to create new institutions.

Focus of the contribution is the approach to strategic spatial planning occurred in the Italian metropolitan city of Florence. During the spatial planning process, finalised to connect places with strategic development directions, many problems are emerged while defining, selecting and making sense of the complex reality of the metropolitan city and its positioning into the global context.

In such a complex framework, the making of the strategic metropolitan plan (PSM) has been conducted as a creative regional design practice for framing the urban region and envisioning its possible future development. By using spatial representations and shared visions, the debate has raised on physical changes, sharing responsibilities and resources. In the implementation phase, this process has conveyed to conceive a multi-level and trans-scalar approach to local projects, conceived as part of the integrated visions of the PSM.

Starting from this reflection, the contribution discusses the role of travelling framing ideas, i.e. the use of images, metaphor and narratives, and opens to further research questions concerning the performance of regional design in leading to lasting effect over times and changing actor's preferences.

COUPLING NATIONAL STRATEGY UNDER THE BELT AND ROAD INITIATIVE: A CASE STUDY OF THE CHINA-BELARUS GREAT STONE INDUSTRIAL PARK

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The joint development by Belarus and China of the Great Stone Industrial Park (GSIP) is designed to establish a high-tech industrial zone and an eco-friendly satellite city of Minsk as a key node on the Eurasian Land Bridge linking China with the Eurasian Economic Union and the European Union. To understand the development and the organization of the GSIP this article sets it in the Belt and Road Initiative (BRI) and examines the role of different stakeholders in shaping the industrial park with the policy coordination framework of the BRI. On the one hand, China hopes to put the BRI forward to Central and Eastern European countries; on the other, Belarus wants to develop its economy by attracting foreign direct investments. Attention is paid to how the two countries' strategies are coupled and how the coupling is realized from top-down with the hope of generalizing this new development mode advocated by the BRI.

HOW VOLUNTARY IS POVERTY ALLEVIATION RESETTLEMENT IN CHINA?

Kevin Lo, Hong Kong Baptist University, Hong Kong

Mark Wang, University of Melbourne, Australia

Voluntary resettlement, typically framed by the principle of free, prior, and informed consent (FPIC), has emerged as a preferred alternative to the heavily criticized forced resettlement approach, but there are growing concerns over whether those “voluntary” programs are genuinely voluntary. In China, the government maintains that its poverty alleviation resettlement (PAR) program is a successful example of voluntary resettlement. Under this national anti-poverty initiative, millions of people living in the poorest parts of the country have been resettled “voluntarily”. However, few studies have critically examined this claim. In this study, we collected empirical evidence through a survey of PAR resettlers. Drawing on a large and representative household survey (1723 resettlers from 30 different PAR projects) and 142 qualitative interviews, we report inconclusive and conflicting findings. On the one hand, a number of mechanisms were put in place to guarantee voluntarism, and the respondents strongly expressed that they willingly participated in resettlement. The perception of willingness was especially high among those who were younger, wealthier, and had off-farm employment. Furthermore, the consent to relocate was mostly free and driven by a desire to improve the quality of life. On the other hand, we observed that consent was not fully informed due to inadequate consultation. The villagers were not given detailed information about the resettlement or time to consider the implications. To ensure genuinely voluntary resettlement and to enhance the effectiveness of the program in poverty alleviation, the government needs to improve the consultation process, offer more targeted assistance to poor households, and provide better post-resettlement support.

ASSESSING NEW CULTURAL AND CREATIVE TERRITORIAL DISCOURSES.

SETTING UP THE CAMINO FILM COMMISSION

Lucrezia Lopez, University of Santiago de Compostela, Spain

The progressive de-materialization of the tourist experience makes this sector more challenging, as it has to follow the pace of the social and cultural post-contemporary dynamics. The assumption that the tourist experience begins at home is commonly recognized, thus reinforcing the role of a powerful visuality. The visual anticipating experience is not yet limited to pictures; rather it includes holistic and creative cinematic productions. Consequently, expressions like experiential, cultural, creative and film are suitable ones to define new tourist tendencies. Regarding the case-study, the Camino de Santiago (Spain) has a central role in cinematic productions engendering identity discourses. Post-contemporary pilgrims and cultural tourists along the Camino are nourishing this new cultural practice: they are spectators, producers and film tourists. For instance, the first edition of The Camino de Santiago Film Festival celebrated in Boston in October 2018 was an occasion to exchange ideas, to create a suitable space for the general public, pilgrims and film professionals and to promote joint efforts of filmmakers.

Considering all that, the main aim of the contribution is to advance the creation of a Camino Film Commission. The methodology is based on a critical case-study approach, resulting in an evaluation of the implications that the vacuum of planning and management in this field might bring. Apart from regulating strategies to attract productions to destinations (which seem to depend on a spontaneous creative inspiration producing “incidental” tourism promotional images), the Film Commission should regulate the Camino movie productions by assessing the appropriateness of their multiple territorial

representations. This creative and cultural tourist project would be conceived as a cross-border Euro-regional initiative (when referred to the Portuguese Route). It should be responsible for evaluating the unique characteristics reproduced in the cinematic discourse in terms of destination marketing (territorial history, pilgrims' profiles, material and immaterial heritage).

ICT ADOPTION IN COMPANIES FROM A GLOBAL PERSPECTIVE. PLS-SEM MODELLING AND MEDIATION ANALYSIS

Javier López, University Isabel I, Spain

Rosa Jorda-Borrell, University of Sevilla, Spain

The purpose of this research is to model the factors that influence the adoption of ICT innovations in companies, identifying on the one hand the direct influence of explanatory factors in the dependent construct, and on the other to study the influence among the explanatory factors themselves.

Therefore, a bibliographical review was undertaken to identify the main incident factors in ICT adoption, using the TOE and DOI models. Hypotheses were tested using a sampling of companies with aggregate data at state level, and also including information from developed and underdeveloped countries. PLS-SEM was later used as estimation method to verify hypotheses, detecting direct and indirect effects of the factors identified. The results indicate that: 1.- The built model explains 78% of the variance in adoption of innovations and establishes that the rate of those adoptions depends firstly on the extent of the countries' globalisation and secondly on the accessibility level of ICT capacities that countries have. Obviously, the influence of globalisation on ICT adoption and access to ICT capacities is mediated by the pressure of institutions and the industrial environment, as well as by companies' resources. 2.- Analysis of mediation conducted among the explanatory factors for adoption ended up being a key technique for identifying interactions between explanatory constructs, which in turn enabled integral assessment of each factor's influence on the dependent construct. 3.- The significance of the mediation hypotheses indicate that the indirect effects of the Extent of Firm Globalisation of a Country factor on that of adoption are bigger than the direct ones. But until now the direct ones were considered to be more significant. 4.- The Competences Accessible to Companies construct was likewise key, owing to its great impact on adoption of innovations, as well as for its role transmitting the indirect effects of the other constructs.

THE NEW GEOGRAPHY OF KNOWLEDGE PRODUCTION IN AEROSPACE AND DEFENCE INDUSTRY. INTERNATIONAL KNOWLEDGE SPILLOVERS IN THE AEROSPACE INDUSTRY

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Increasing R&D costs, and political pressure from governments in the aerospace industry, are forcing OEMs (Original Equipment Manufacturers) to decentralize and globalize innovation processes to top specialized suppliers, in facilities located around the world. As a result, aerospace firms have set up production, commercial and R&D plants globally. However, one question arises: ¿are there real losses of knowledge towards international corporations from research institutions, local companies, or even national military research?. To answer this question we carried out an analysis in which we studied the host country (HC) factors that favor knowledge creation through technological collaboration with foreign firms.

Data sources include a dataset from the European patent office, OECD and Stockholm International Peace Research Institute (SIPRI) from a sample of 65 aerospace and defense companies which comprise 701 international tier plants and 151 OEMs. The analysis showed that knowledge spillovers

from aerospace R&D and research institutions in HCs do indeed exist. However the OEM group is more efficient than its counterparts when it comes to appropriating aerospace R&D. While OEMs create knowledge based on R&D, tier firms do it based on previous experience in the field. This difference revealed a new insight into the way in which OEMs and tiers produce knowledge which, as far as we are aware, is new in the scientific literature in the field. Other results proved that top suppliers receive knowledge spillovers from universities and research centers, and that geopolitics is an important factor in the appropriation of knowledge spillovers, but only for OEMs. Finally, emerging countries are increasing their share in technological alliances.

INNOVATION IN CHINA: DOES INDIGENOUS' MEAN CLOSED?

Sebastian Losacker, University of Hanover, Germany

Ingo Liefner, Leibniz University Hanover, Germany

China's government aims to become an innovation nation and promotes the development of so-called indigenous innovation. Under this paradigm, it is unclear how domestic firms organize their innovation processes. We distinguish between two strategies in that respect: closed vs. open innovation. Our findings suggest that firms with closed innovation processes collaborate in close geographic distance, rely on DUI-modes of learning, and collaborations are based on guanxi. In contrast, firms with open innovation processes collaborate over large distances and rely on STI-modes of learning that are not necessarily guanxi-based. The findings help to understand the heterogeneous nature of (indigenous) innovation in China.

MOBILIZING COMMUNITY ASSETS IN RURAL COASTAL REGIONS: ANALYSIS OF ASSET MAPPING INITIATIVES IN RURAL NEWFOUNDLAND AND LABRADOR

Brennan Lowery, Memorial University of Newfoundland, Canada

The proposed paper presentation will examine sustainability and well-being in rural and resource-dependent regions, considering how the use of locally-crafted indicators can enhance governance for sustainable regional development. This paper considers how rural and natural resource-based regions are often overlooked in traditional conceptualizations of sustainable development, which often focus on implementation in large cities or at the global level. Furthermore, in coastal areas where significant declines have occurred in fisheries and related industries, socio-economic trends such as out-migration are over-emphasized to tell a story of decline about these regions. These narratives dominate discourse about Newfoundland and Labrador (NL), where rural regions are searching for economic and social renewal in light of fisheries moratoria and resulting economic crises. Rural NL regions have also experienced the retreat of regional development institutions in the last 20 years, with provincial and federal governments currently exploring new options for regional governance based on collaboration between municipalities and various sectors. In this context, the proposed paper considers how rural NL regions can offer their own alternative narratives about the vitality of their communities while offering novel avenues for strengthening regional identity and collaboration. The research shared in this paper focuses on the use of sustainability indicators – tools used around the world at scales from the neighbourhood to the European Union level and the Sustainable Development Goals – to define sustainability in context and chart a path to its implementation. It considers how rural coastal regions can use sustainability indicators to enhance regional sustainability in the context of the exploration of regional governance models. The paper will share findings from research in rural NL on local initiatives where rural regions have sought to create indicators to measure well-being and sustainability. These findings will highlight how these initiatives came about, how they integrated various kinds of knowledge on interrelated dimensions of coastal community sustainability,

to what extent diverse stakeholders were engaged in their development, and what outcomes they ultimately had on regional development and governance.

HOW REGIONAL IDENTITIES ARE FORMULATED AND DIFFUSED IN THE MEDIA IN CHINA- A CASE STUDY OF GREATER PEARL RIVER DELTA

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Regional identity is a growing research field, and the number of studies about place branding has proliferated in literature in recent years. This research focuses on policy discourse on the regional identity of the Greater Pearl River Delta (GPRD) in China, how these regional identities are reinforced or diffused in the media. As a large proportion of newspapers in China are supported by governments, they can be regarded as a reliable source to study the policy perspective of regional identities. The variety and patterns of phrases or keywords related to regional identity are collected from corresponding planning documents, and we further examine their appearance in newspapers from 2003 to 2018. By comparing different promotion focus of newspapers supported by different governments, we analyse the interest and goals of different administrative entities in the regional identity formulation process of the GPRD. The keywords related to regional identity surge in the media in 2009 and 2017, right after two key regional policies issued by the national government. As for the focus of newspapers, the national supported ones promote economic development and international competitiveness, which consists with the national policy to reinforce the strategic awareness and development goal of this cross-border region. Besides economic development, newspapers supported by Guangdong Province also emphasized infrastructure provision, which is related to recent transport network investment. As for Hong Kong, the pro-mainland newspapers imitate national government policies, while local media discuss more about public participation and local interest. Overall, regional identities are strongly supported by newspapers in mainland, but fragmentations and conflicts can be found in Hong Kong's pro-mainland and local media. This research investigates the different attitude of governments towards the regional identity in the GPRD, and further research can explore the reaction from individuals in different administrative regions.

BUILDING CONSENSUS: SHIFTING STRATEGIES IN THE TERRITORIAL TARGETING OF TURKEY'S PUBLIC TRANSPORT INVESTMENT

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Andrés Rodríguez-Pose, London School of Economics, UK

A growing amount of research explores how the allocation of regional development monies follows electoral reasons. In contrast to conventional regional development approaches, which have frequently seen public interventions as mainly determined by technical socioeconomic considerations, a growing amount of research in economic geography and regional studies has recently explored how the allocation of regional development monies follows electoral reasons. Yet, the existing literature on distributive politics provides different and contrasting expectations on which geographical areas will be targeted. We suggest that each of these alternative predictions may be valid, but contextual to the specific conditions faced by the incumbents. We focus on proportional representation (PR) systems. While in such settings governments have incentives to target core districts and punish foes', we suggest that when incumbents attempt to build a state-party image they may broaden the territorial allocation of benefits and even target opposition out-groups. We exploit data on Turkey's public transport investment for 2003-2014 and in-depth interviews with Turkey's central state bureaucracy in charge of investment allocations to provide results in support of our hypothesis.

HOSTING TO SKIM. ORGANIZED CRIME AND THE RECEPTION OF ASYLUM SEEKERS IN ITALY

Davide Luca, University of Cambridge, UK

Paola Proietti, GSSI, Italy

In recent years, the world has witnessed an astounding rise in the number of asylum seekers. In 2016 more than 65.5 million persons worldwide were forcibly displaced because of violence, conflict, prosecution, and human rights violations. A significant number of them try to reach Europe year. A growing amount of urban and regional research has started exploring the location of asylum seekers and refugees in hosting countries and assessing the effects of such inflows on local labour markets, social cohesion, and natives' voting behaviours. This paper offers a complementary perspective and asks if organized crime exploits the large influx of migrants as a 'business opportunity'. This paper draws on the case of Italy and investigates the shadow impact of organized crime in influencing the geography of reception centres with the objective of skimming margins from the public resources devoted to reception activities. We gather data on the geographical location of reception centres and on the presence of mafia across Italian municipalities. We exploit exogenous variation at municipal level to instrument mafia intensity and provide evidence of how the presence of mafia affects both the likelihood of hosting a reception centre and the number of asylum seekers hosted. We then assemble an innovative dataset on public procurement for the set-up and management of reception centres. Statistical evidence and in-depth expert interviews with key stakeholders suggest that the presence of organized crime is correlated to the use of direct procurement procedures over open calls.

GROWTH CORRIDORS: A SYSTEMIC FRAMEWORK FOR EXPLAINING LONG-TERM REGIONAL TRANSFORMATION AND GROWTH

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Mikhail Martynovich, Lund University, Sweden

Through research efforts in economic geography much was learnt – both theoretically and empirically about the process and causes of regional economic growth, f.i about the role of human capital, agglomeration, innovation and institutions. What has been missing, however, is an “attempt to construct encompassing explanations for differences in growth and development between regions by placing them within the same system, on the way to explaining their characteristics as a function of their varying relationship to the system” (Martin 2015). This paper is a step in this direction.

We propose a framework that builds upon two pillars. First, long-term economic growth is as much about qualitative change as it is about quantitative change. Second, regions face growth opportunities which they utilize to a different extent. We define four dimensions of growth opportunities: time – space – structural change – local efficiency. Together these dimensions constitute “growth corridors”, i.e the preconditions/restrictions for different types of regions to grow at different point of time.

Time is a functional phenomenon and frames what is technologically possible. The technological frontier represented by a dominating techno-economic paradigm acts as a meta-selection mechanism which penetrates all other dimensions of growth opportunities.

Space represents the continuous field of opportunities for all regions at every moment in time. On the one hand, regions have different capacities to catch-up to the technological frontier. On the other, space is relational in that there are systemic patterns of regional development where what happens in one region affects what happens in others.

Structural change at the regional level is a result of transformational pressures translated into the response of economic agents. Heterogeneity of economic agents and imbalances of their spatial distribution result in the lead-lag relationships in the regional system.

Finally, local efficiency relates to the opportunity of each region to improve employment, productivity, etc. within each structural setting.

CULTURE-LED URBAN REGENERATION IN COMMUNITY SCALE – CASE STUDY OF YUYUAN STREET IN SHANGHAI, CHINA

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Unlike many culture-led urban regeneration examinations have been implemented at city scale, close related with city branding and global city strategy, little attention been paid to culture-led urban regeneration in China within community and neighborhood scale. This issue was highlighted by the further development and significant transition of the socio-political context, which made the development of neighborhood and historical heritage community regeneration even more urgent and challenging. In this paper, the authors work through a case study in Yuyuan Street, a historical heritage community in Shanghai, aims to identify the major challenges, particularly related to the institutional aspects, for adopting urban regime in culture-led urban regeneration in the local community scale in China. Comprehensive literature review was employed to examine the crucial position of institutional elements in facilitating culture-led urban regeneration in community scale. In an effort to contribute to understanding various challenges that mega cities have been facing, they seek to identify cultural effects and interactions between global culture and local culture of a very distinctive process of transition, especially the circuits of cultural capital within this urban regeneration process. Furthermore, they analyze the outcomes of culture-led transformation conducted under public-private partnership. The empirical findings reveal that it is a result of multiple urban policies, emphasizing the role of local community organization, significance of bottom-up approaches, public stakeholders and distinctive relevance of local cultural context.

SPATIO-TEMPORAL NETWORK DYNAMICS: THE KNOWLEDGE ECONOMY BETWEEN 2009 AND 2018 IN GERMANY

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Knowledge generation and dissemination becomes more and more important in key sectors of the economy. Production and services based on knowledge-intensive activities shape the current economy which is characterized by an accelerated pace of technological and scientific advance. Especially advanced producer services (APS) are interesting to study because they show a highly volatile location choice behavior. APS firms establish subsidiaries abroad, coordinate production across countries and relocate their business activities according to new key account customers, changing demand, cost or qualified labour. These spatial arrangements of firms' locations have changed enormously during the last decades due to the underlying changes in the functional logic of knowledge creation. We analyze these spatio-temporal changes in the German knowledge economy space. Germany is an interesting case to study since it is Europe's biggest economy in global terms and it shows a polycentric, federal urban structure. Our research takes a bottom-up approach and analyses the intra-firm networks of the biggest APS firms in Germany measured by employment. Previous research about the German space economy of APS firms applies a cross-sectional approach and analyses the connectivity of cities through locations of APS firms. We want to add to this research in

three ways. First, we conduct a longitudinal study from 2009 to 2018 arguing that network dynamics over time yield more information about spatial behavior than a static approach. Second, we take into account the firms' perspectives by working directly with the original data structure of a two-mode network, meaning we have two sets of nodes: firms and cities. Third, we apply stochastic actor-oriented models to our network data. These models allow us to estimate and test network dynamics. We assume that preferential attachment will be significant positive based on the structural changes in the knowledge economy: Over time, APS firms will concentrate in cities where many firms are already present in order to facilitate knowledge generation and dissemination through spatial proximity.

RE-IMAGINING THE GOVERNANCE AND PLANNING OF GREENBELTS IN SOUTHERN ONTARIO (CANADA) AND FRANKFURT (GERMANY)

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Greenbelts are used to separate urban and rural areas, preserve farmland and provide recreational spaces. In the past twenty years, a new type of greenbelt has emerged which is less a reaction to an industrial past and instead is more of an interface with a dynamic regionalization process. The Regional Park RheinMain was designed more than 20 years ago to secure greenspaces and provide recreational opportunities for the residents of the Frankfurt Rhine-Main region in Germany. The greenbelt in Greater Golden Horseshoe (GGH) region of Southern Ontario, Canada was established more recently in 2005 and protects against the loss of farmland from urban development. Each of these greenspaces are located in regions with strong demographic growth and are situated within complex regional institutional environments with multiple stakeholders involved that place competing demands on these landscapes. Discourses about governance have evolved in each region since these greenspaces were established. Therefore, we ask as both the GGH and Frankfurt regions move into the next phase of post-urban growth, how do their greenbelts fit within these new forms of regionalism? Based on a review of the literature on institutional dimensions of regional governance, this paper will explore how the institutional environments in both regions shape the governance and planning of their regional greenspaces. Taking an international comparative perspective, this paper will look at how the governance of these greenspaces are being challenged by the institutional arrangements within both regions that shape the complex interplay between policy domains (e.g. nature conservation, housing, agriculture, infrastructure etc.), territorial jurisdictions (primarily municipalities) and between policy levels (municipalities, inter-municipal and regional administrations). We will conclude with a discussion about what lessons can be learned for policymakers, as they face the challenges of managing these greenbelts in today's new "regional world" (Harrison, 2013).

THE NORTHERN POWERHOUSE AS A 'STATE SPATIAL STRATEGY'

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Launched in response to widening regional inequalities in the UK (UK), the Northern Powerhouse initiative (NPh) became central to the Conservatives' domestic political agenda in 2015-2016. Following this period of 'peak Powerhouse', however, the initiative lost much of its impetus after its key champion, George Osborne, was dismissed as Chancellor in July 2016, although it remains part of government policy and has gained the support of a range of Northern actors and interests. Previous research on the NPh has defined it as both an economic development strategy and a political brand used to promote a range of disparate and often pre-existing policies. This paper aims to provide a fuller theoretical and political analysis of the NPh as part of a broader state strategy for governing and

managing uneven regional development in the UK, framed by a wider post-crisis spatial rebalancing. In particular, the paper seeks to interpret and understand the NPh through the lens of spatially-sensitive strategic-relational state theory. The paper argues that the NPh represents a 'state spatial strategy' for the North of England, comprised of an accumulation strategy and hegemonic project. This is based on the promotion of a specific model of economic growth designed to harness the region's prime assets and efforts to mobilise business interests and civic leaders behind this economic vision. It has become closely hitched to the 'state spatial project' of English devolution, based upon negotiated devolution deals between central government and local government.

ACCESSIBLE TOURISM AND COMMUNITY LED LOCAL DEVELOPMENT, POTENTIALS FOR REFUELLING THE URBAN-RURAL LINKAGE: A CASE IN CENTRAL ITALY

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Urbanisation and economy changes resulted in new types of rural-urban interactions and dependency nowadays. Such a challenge compels a due revision and revitalisation of territorial policies and governance approaches, which still have no place in the current debate. This work proposes a reflection on the challenges risen by the newly branded multi-level forms of governance, and on how structural funds are channelled to territories. The work depicts an ongoing action for putting in action a CLLD agreement among an extensive partnership. Stakeholders from the local governing bodies and civil society are involved in the process, among which, the regional council, LAGs, more than fifty rural municipalities and the three coastal medium-sized towns, the leading local trade associations, etc., reaching out for a public of 400'000 people in the region and pushing the regional constituency far beyond the business as usual.

REGIONAL ECONOMIC RESILIENCE, ADAPTIVE CYCLE PATTERNS AND POLICY IMPLICATIONS: AUSTRALIA 1986 TO 2011

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This longitudinal study examines functional adaptation and renewal in the context of regional vulnerability, identifying industrial diversity as critical for regional economic development from the theoretical perspective of complex adaptive regional systems. The study assesses resilience in the local government areas of Australia using Census data 1986-2011, during which period there were multiple economic shocks. Using the lens of a panarchy model and adaptive cycles, income change as a proxy for resilience is applied by the k-means algorithm to assess regional resilience.

Resilience in a regional economic system is about addressing vulnerability, not only by surviving shock, but also thriving in an environment of change and uncertainty. Regional economic policy that aims to build economic resilience needs to address the degree of resistance to shock (potential or actual) in the system. By identifying patterns of economic vulnerability in regions of Australia over a long historical period, this study aims to develop theoretical implications for adaptation and renewal that build diversity in the economic functional operation of regions.

This study provides a novel contribution to identifying patterns of regional economic resilience, although its empirical approach is embedded in Courvisanos et al. (2016) with the mid-2000s drought and the 2008-09 Global Financial Crisis (GFC) shocks. This study adopts the regional-based framework of adaptation and renewal to vulnerability, initially advocated by Simmie and Martin (2010). The study

finds core metropolitan regions with diverse activities demonstrating most resilience, yet no region exhibits strong resilience throughout the period, with an overall narrowing of the national industry base. Guidance for regional economic policy emerges from this study by applying industrial diversity into building economic resilience, eschewing neoclassical equilibrium approaches that advocate regional specialisation.

SMART SPECIALISATION IN EXTREMADURA AND PUGLIA: MEETING NEW GOVERNANCE CHALLENGES

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The process of globalization has blurred the power of modern governments and public administrations, making it more important to develop new approaches to governance to face complexity and uncertainty. The design and implementation of Smart Specialisation Strategies (S3) offer a unique scenario to assess the challenges of a multi-level and multi-actor approach to governance. S3s were launched within the EU Cohesion policy for the 2014-2020 period. Smart Specialisation is an experimental policy approach requiring the identification of strategic areas of intervention through both analytical methods and stakeholders participation. Such an approach implies a move from a 'generic' to a 'place-based' regional development policy. Since the introduction of S3, governance has been considered an important pillar of the strategy. However, the scientific discussion on S3 governance has largely stemmed from a theoretical perspective, ignoring the legal and administrative framework, with their underpinning constraints. This paper fills this gap by comparing the governance structures of two regions from the south of Europe: Extremadura, Spain and Puglia, Italy. Both are classified as less-developed regions, both belong to member states that devolve significant administrative competences to regions and both have suffered significantly from the financial crisis of the last decade. The paper combines the analysis of key administrative documents with interviews with key informants. The paper shows that interaction between levels of governance is crucial to successfully design and implement S3. It also highlights the importance of political engagement to ensure high-level coordination and facilitate long-term planning. Ultimately, the paper argues that the academic debate on S3 governance needs to be grounded in the reality of public administration rules and practices. Our results support the current EC proposal for the future cohesion policy, which poses that regions and member states should identify competent institutions/bodies responsible for the management of the smart specialisation strategy.

MEASURING COHESION POLICY RESULTS. TOWARDS A COHESION POLICY INDEX

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Daniel Rauhut, Karelian Institute University of Eastern Finland, Finland

The effects of the EU Cohesion Policy (ECP) are debated as measuring the results of cohesion policy is critical to evaluate its success. Nevertheless, several studies show non-conclusive results and many of the EU Cohesion Policy are based on benchmarking exercises supported in a few indicators over a short time period. Other evaluations are fragmented, qualitative and narrow in scope.

This paper aims at analysing the ECP and its impact for 2006 and 2016, before and after the more recent financial crisis, and analyse the regional differential impacts. To do that, we construct a Cohesion Policy Index using the same methodology as the UN Human Development Index, to analyse the impact at NUTS2 level. Supported in ten variables, covering the three dimensions of EU Cohesion

Policy, the first index results indicate that the bigger cities and highly urbanised regions in Central Europe did benefit the most, while non-core and lagging regions fell further behind.

REGIONAL DISPARITIES IN ACCESS TO HEALTH SERVICES IN LOW DENSITY TERRITORIES IN EU CONTEXT

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The Services of General Interest (SGI) play a preponderant role in the dynamics of rural and peripheral territories (CEC, 2003). They are responsible for ensuring minimum levels of health services, education and social support, while also playing a key role in achieving the objectives of EU cohesion and convergence processes (Marques da Costa et al, 2015). The importance of assessing disparities justifies the empirical analysis of territorial equity in access to SGI, which encompasses health services, due to its significance in policy processes. This study aims to identify inequalities that may compromise the sustainability of lagging territories regarding health services, while relating it with social models and government expenditures which are important explanatory factors for those inequalities that endanger EU cohesion, as well as to understand the contribution and the relation between the various explanatory factors to that inequality. A methodology based on statistical indicators retrieved from Eurostat and other European sources which reports to government expenditures by sector and per capita and on the factors that strongly influence the provision of SGI is developed: demographic; economic; political; social; and climate (Rauhut et al., 2012). Spatial analysis and clusters formation are used to identify the existence of inequalities in the provision of health services between the lagging regions and core regions, always recurring to Geographic Information Systems. The indicators reporting to the services are distinguished between health indicators – comprises indicators related to the provision and the availability of services; investment indicators – encompassing indicators linked to the expenses / investment of the central governments in health, reflecting different organizations of the social welfare systems; and context indicators – that comprehends indicators related to contextual conditions of countries and regions, like peripherally or economic capacity.

MULTI-LOCAL CONVERSATIONS AS ENABLING MECHANISM FOR KNOWLEDGE SPACES IN PLACE-BASED ENERGY TRANSITIONS

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The interdependent challenges of climate change need innovation in systems of practice and provision, not single innovation in products and processes. In this context, regions and cities face the challenge of moving to more sustainable, zero-carbon and resilient pathways by combining existing knowledge and economies of scale that exist within territorial strategies to produce new systemic solutions.

This paper addresses multi-local conversations as enabling mechanism for creating knowledge spaces where multi-stakeholder perspectives on sustainability transitions can be contextualised under a place-base logic. Focus is put in anchoring and consolidation processes facilitated through interactions with other elements related to broader policy frameworks and the cross-border relations.

Empirically, emphasis is put in the analysis of the underlying factors of structural differences related to local settings and what are the patterns of relations between knowledge spaces and governance

configurations. We carried out an empirical research based in a triangulation of different sources (i.e. policy documents, secondary data, participatory processes). The main empirical material examined is the collection of multi stakeholder participatory processes addressing systemic solutions in low carbon economy as part of the thematic area of EIT Climate-KIC.

The study analyses evidence from four case studies, spanning from 2017 to 2018 in the cities of Valencia, Malaga, Birmingham, and Valletta with the aim to generate knowledge among peers through negotiated meaning and favouring commitment among stakeholders around urban sustainability and access to energy.

This study aims to contribute to a better understanding on multi-local conversations as a mechanism to accelerate innovation in the urban environment that can contribute to enhance collaboration to achieve more equally distributed progress across all Europe. Additionally, this paper seeks to highlights the effect of inclusive approaches for enabling the place-based energy transitions.

HOW DOES INTERNET ACCESS AFFECT REGIONAL CONVERGENCE?

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The ever-growing availability of internet access, especially from narrowband to broadband, shapes individuals and households behaviour as well as socio-economic performance of communities. Individuals and firms can access to a larger market to satisfy their needs and business. Moreover, thanks to the net, ideas and culture spread freely among them, increasing human capital, social cohesion and labour productivity. This is expected to boost growth process and to reduce inequality, both in communities and individuals. Several empirical studies stress the positive effect of internet access in fostering local convergence and national performance. The nexus is circular: if internet access fosters the growth process, hence increasing the standard of living, more people and firms will be induced to adopt such a technology, triggering a virtuous multiplicative effect.

Nonetheless such a circular nexus could operate in the opposite direction as well. Individuals who cannot access to the net could be stacked in a “poverty trap” that increases inequality and slow the convergence process.

Obviously, much part of the story is related to investments in internet coverage and its costs, and this adds a policy implication to the question. If internet availability produces positive spill-overs, then national and local governments should implement policy actions targeted to make internet access as large and cheap as possible. The Italian strategy for next generation access network, approved by the Council of Ministers in March 2015, aims at developing a high-speed access network to maximise the take-up of an infrastructure able to guarantee services above 100 Mbps and to ensure the availability of services above 30 Mbps for all by 2020. Italy adopted a national state aid scheme to support ultra-broadband in areas where market failure is present.

But even when internet access is available, individuals could be able not to exploit it. According to the Italian National Institute for Statistics (Istat) in 2016, about 57% of Italian households did not use internet because of a lack in their skills. This opens to another way at perpetuating inequality among individuals and communities and calls for another policy action: the digital education.

The aim of the paper is to manage the questions in a whole view. By starting from a simple micro-founded model of individual behaviour in choosing whether adopt internet - given social, economic and infrastructural constraints – we investigate empirically such a choice by means of Italian data at Nuts2 and the effect on the convergence process among Italian regions.

REGIONAL INEQUALITIES, ECONOMIC GROWTH AND INFRASTRUCTURE: THE RECENT DEBATE ON CONVERGENCE ANALYSIS IN BRAZIL

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The paper explores the relation between regional inequalities and infrastructure in empirical studies. Particularly, the paper examines the recent literature on regional convergence analysis and discusses their potential contribution to the comprehension of the regional inequalities in Brazil. There are several studies on this issue, but the conclusions are not a consensus. We focus on main studies, observing the databases, the methodology and the major finds. Special attention is given to the studies which consider the role of infrastructure on regional inequalities. The emphasis is on the period from 2000, when Brazilian economy oscillated through phases of economic growth and crisis, as well as years of rises and falls in the investment in infrastructure. More than a survey of these studies searching for identifying tendencies, the paper intends to discuss how, and in what extension, this kind of studies can contribute for regional studies and policies. We understand that these analysis can provide a more accurate measure of the evolution of regional inequalities, but their role to improve the knowledge about the natures and causes of regional inequalities is limited. Then, we discuss ways to amplify this contribution. One possibility is to consider the impacts of critical factors, such as infrastructure, which is already done by some studies. Additionally, and even more important, we propose that these studies must to be explicitly integrated into theoretical approaches and historical context in order to provide a better and broader comprehension of the regional inequalities and also to enhance improvements in regional policies.

RELATED VARIETY AND REGIONAL INNOVATION IN SWEDEN, 1991-2010

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Our study investigates how related variety in the regional employment mix affects the innovation output of a region. Departing from the idea of recombinant innovation, previous research has argued that related variety enhances regional innovation as inter-industry knowledge spillovers occur more easily between different but cognitively similar industries. This study combines a novel dataset and related variety measures based in network theory, which allows a more nuanced perspective on the relationship between related variety and regional innovation. The principal novelty of the paper lies in employing the newly developed dataset – Database of Swedish Innovations (SWINNO) – containing extensive information about product innovations commercialised by Swedish manufacturing firms between 1970 and 2016. In this respect, it allows a direct measure of regional innovation output as compared to patent measures, usually employed in similar studies. Another important aspect is that we employ a network-based measure of related variety that allows overcoming the major weakness of more traditional classification-based measures: overestimates the relatedness between industries belonging to the same industry group, while underestimating other possible channels of relatedness. It also allows investigating the impact of indirect linkages.

INTERROGATING GLOBAL CITIZENSHIP AND GLOBAL STUDIES

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This paper interrogates the category of “global citizenship” and the efforts of globalizing political theory and thought as part of a “global education.” Oxfam defines a global citizen as “someone who is aware of and understands the wider world - and their place in it [and who] take an active role in their community, and work with others to make our planet more equal, fair and sustainable.” This call

for awareness to a wider world beyond one's immediate contexts and nation-state boundaries comes at a time when nation-states efforts to control the mobility of certain people are not waning but only increasing. How do we understand this contradiction? I argue that maybe this is not a contradiction and the category of "global citizen" is not only an empty signifier but reinforces older yet persistent hegemonic nation-state practices and world order paradigm. My argument rests on a simultaneous move curriculum in universities from "area studies" to "global studies" with the aim of creating "global citizens." Within the discipline of political theory this move towards "global studies" has taken the moniker of "comparative political theory." Here I ask the question of "global" for whom and "comparison" for what. In the paper I tease out the ways in which global studies and comparative political theory can be a continuation of the area studies and these projects rather than globalizing and deparochializing can reaffirm existing boundaries and power relations. Finally, I inquire into the possibilities of a genuinely globalizing global studies/political theory and the global citizens – what could be the terms for these possibilities?

REGIONAL ENERGY FIELDS: A FRAMEWORK FOR UNDERSTANDING ENERGY TRANSITION AS A SOCIAL PROCESS

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Energy transition can be regarded as a social process based on individual and collective contributions from regional, national and international actors. This paper suggests starting from the small-scale regional level in order to gain in-depth knowledge of the specific processes of interaction that lead to energy transitions. I therefore suggest the concept of regional transition fields.

Drawing upon strategic action fields, regional transition fields constantly restructure themselves regarding strategic, normative and cognitive aspects. The actors involved in these processes come from all social, economic and political fields. With regard to strategic aspects, regional change processes occur as processes of negotiation and decision-making. The involved actors re-assess their strategic positions, leading to a relative redefinition of their regional power. In a normative perspective, actors define new norms, expectations and frameworks of acceptance and self-conception, i.e. they modify the framing of observed and conducted actions. This changes actors' understanding of what is appropriate for regional development as for energy usage and storage. Finally, turning to cognitive aspects, actors learn from each other and encapsulate their new knowledge (e.g. in new technologies) in the course of the outlined restructuring. Thereby, actors mimic each other, but also convey knowledge to each other in the form of practices, procedures and technological expertise. These different aspects of regional change that occur in regional transition fields also point at different regional development paths that can be derived from the dominant mechanisms of regional energy transition.

In summary, the paper contributes to transition research by clarifying the underlying processes of negotiation, norming and learning with different actors in focus.

COLLABORATIVE MULTI-STAKEHOLDER ARENA AS A MECHANISM ENABLING ADAPTIVE IMPLEMENTATION OF LOW CARBON REGIONAL STRATEGIES (IN PERIPHERAL REGIONS)

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Scholarly insights from evolutionary economic geography, underpinned by concepts of path dependency and industry evolution, have advanced a policy discourse that advocates adaptive, place based and 'outward looking' interventions. Despite these developments, consideration of policy tends to be confined to the normative question of policy implications, rather than trying to understand the dynamic nature of policy, including the more 'messy' aspects to do with policymaking. On the other hand, new evidence on the implementation of EU regional policies has indicated significant gaps between the planned outputs and outcomes in terms of the capacity to communicate, manage resources and delivery in different settings.

This paper aims to go beyond this normative view and look into policy implementation and explore the links between agency, policy change and institutional change. Emphasis is put in adaptive process of co-production and co-design by looking at collaborative multi-stakeholder arena as a mechanism that facilitate the alignment of problems, solutions, interest and broad innovation ecosystem resources such as knowledge and finance as well as relational assets. Focus is put in Smart Specialization as a new territory for experimentation where linkages and articulation between actor are still not necessarily in place.

Empirical evidence from EIT Climate-KIC activities is applied to document and analyse the challenges related to implementation of S3 addressing the transition low carbon economies. In doing so, the paper provides evidence on the role of collaborative multi-stakeholder arena to support policy learning processes to design comprehensive visions, goals and rules as well as identify tools and resources to address policy problems. The main empirical material examined is a series of multi stakeholder participatory processes run in 2017-2018 in multiple-locations under the EIT Climate-KIC ecosystem with focus in the EIT RIS programme.

BACK TO THE FUTURE: THE DEMISE AND REBIRTH OF STRATEGIC SPATIAL PLANNING IN ENGLAND?

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This paper analyses recent attempts by central and local government to address contemporary strategic planning issues within England drawing on a longitudinal programme of interviews with senior planning practitioners. It reviews contemporary attempts to contend with 'larger than local' planning issues that have arisen within what some would argue is a strategic planning void in England. During the past decade, strategic issues have been contemplated against a backdrop of flux in central-local government relations, austerity, localist planning perspectives, institutional restructuring and a multi-track decentralisation process for Core Cities (and their hinterlands). The need for effective spatial planning has been underscored by mounting pressure to ensure increased housing provision transport infrastructure and response to global competition. The English 'localist' approach steered by the hidden hand of central government has unleashed a somewhat confusing, fragmented and disjointed response, which it is contended has not been conducive to addressing strategic planning issues in many parts of England. There are a minority of perceived 'successful' localities, where new forms of embryonic strategic planning may be beginning to re-emerge. Our analysis questions whether this tentative renaissance will provide a blueprint for the majority of sub-national planning spaces within England.

Despite frequent reviews of the planning system and its governance, strategic planning issues remain, contributing to an uneven pattern of growth and rising social and economic inequalities across the country. The paper argues for greater devolution and strengthening of sub-national governance contributing to a national spatial framework incorporating the plans of central government departments and agencies.

HORIZONTAL INEQUALITIES: SHIFTING LABOUR MARKET DYNAMICS AND COHESION POLICY PRIORITIES

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Recent research has highlighted the consequence of regional and spatial inequalities within the EU. Papers have examined the geographies of discontent (Dijkstra, Poelman and Rodriguez-Pose 2019) and the revenge of places that don't matter (Rodriguez-Pose 2018) have focused on the links to populism, anti-EU sentiment and the role that income inequalities have played (Rodrik 2018). This paper examines the increasing horizontal inequalities between and within regions and between different social groups. Shifting dynamics within EU labour markets highlight gendered and inter-generational structural shifts, which have consequences for EU Cohesion Policy priorities and implementation.

Structural shifts in the labour market have meant that the post-crisis recovery has not been inclusive for all demographic groups (European Commission 2017) or regions. Female labour market participation and the proportion of older workers remaining in the labour market have increased. Whereas, the labour market participation rates of young people and migrants remain below 2008 levels. The youth NEET labour market is strongly gendered with variances between male youth unemployment and female inactivity rates. Additionally, under-employment remains a problem with around 50 million people reporting that they are working fewer hours than they would like (Eurofound 2017). There is an increasing number of young people out of work due to illness and disability, and disengaging from the labour market. Despite falling unemployment 22.4% of the EU population remain at risk of poverty and social exclusion (European Commission 2019). Young people have now replaced the elderly as the group most at risk of relative poverty (OECD 2016). Migrants are at particular risk of poverty and social exclusion, with 41.2% of non-EU citizens assessed to be at risk of poverty (Eurostat 2019).

This paper examines these structural labour market shifts in the context of policy proposals for Cohesion Policy post 2020. Questioning the setting of priorities and potential trade offs and competing visions of the future of cohesion policy. There appears to be two separate policy domains emerging; separating social from economic problems that appears counter to horizontal commitments to mainstream gender equality and social inclusion. Finding the need for further integrated approaches between EU funds and thematic priorities to enable further coordination and complementarity between EU, national and regional level strategies and actions to tackle shifting labour market dynamics.

SPATIAL BIOGRAPHIES OF RURAL ENTREPRENEURS AND THEIR INFLUENCE ON THE ENTREPRENEURIAL PROCESS

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Rural regions represent a specific milieu for entrepreneurship and require entrepreneurs to have different assets compared to their urban counterparts (Baumgartner, 2011). Studies have shown that besides the importance of local embeddedness, also the spatial biography influences whether people start a business in a rural region and how successful that business is (Martynovich, 2017). Entrepreneurs with spatial relocation histories bring linkages to other places, knowhow and experience to a rural region and are able to compensate for the lack of density and diversity (Bosworth, 2006). However, most studies of entrepreneurship in rural regions fail to analyse the spatial biographies of entrepreneurs and its influence on the entrepreneurial process. With the help of microdata collected by the Swiss federal statistical office, this paper aims to quantitatively analyse

how the spatial biographies of rural entrepreneurs that have established a business in the Swiss rural regions between 2014-2016 look like. Second, I examine how these spatial biographies have influenced in the past and how they are still influencing the entrepreneurial process. This will be done through in-depth interviews with selected rural entrepreneurs. By applying a mixed-methods approach, possible patterns in spatial biographies of rural entrepreneurs can be identified as well as the role of spatial relocation histories in the entrepreneurial process will be understood. Theoretically, this research will contribute to the discussion of the importance of urban-rural linkages in the entrepreneurial process in rural regions.

SPATIAL DISPARITIES IN POPULATION GROWTH ACROSS RURAL AREAS IN PORTUGAL BETWEEN 1991 AND 2011

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Maria Conceição Rego, Universidade de Évora, Portugal

This study provides evidence on spatio-temporal patterns of socio-economic performance across rural small areas (freguesias) in Portugal between 1991 and 2011, and investigates the factors underlying the differences in relative performance occurred during that period. The study creates a new unique socio-economic dataset using small-scale geographies (freguesias), while the majority of previous studies focusing on Portugal use large aggregate spatial units at the level of NUTS2 or NUTS3, and to smaller extent LAU1 (i.e. municipalities). The first part of the study provides a spatial analysis of change in key indicators of rural socio-economic outcomes, and shows there is considerable heterogeneity in performance, particularly between accessible and remote rural areas. Accessible rural areas tend to have better performance compared to more remote areas. A number of factors help explain these disparities, including differences in economic structure, demographic composition and human capital, availability of services of general interest and other consumption amenities, and accessibility to the urban hierarchy. The second part of the study tests the relative influence of these potential explanatory factors by developing econometric regression models for rural population and employment growth. In addition, the regression analysis investigates the nature of the spillover effects between urban and rural regions in Portugal. We measure the effect of proximity to main urban centres as a driver of rural population and employment growth, or decline, after controlling for the other explanatory factors. Our empirical approach follows that of Veneri and Ruiz (2013) for a cross section of small regions from 14 OECD countries, and accounts for economic structure and socio-economic factors, besides proximity to urban centres, on rural growth. The results suggest that proximity to urban areas has a positive impact on the growth of nearby rural areas, while the effect for more remote rural areas tends to be mixed. The importance of the spillover effect also differs according to the size of urban areas.

EXPERIENCE, KNOWLEDGE AND SELECTIVITY: THE DYNAMICS AMONG AUTHORS IN ARTICLES RELATED TO THE EBOLA DISEASE

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The globalization process strengthens exchanges and broadens knowledge networks on an increasing scale and in ever more complex interactions. However, networks of innovation and knowledge are not structured in a random way, but present different features related to the type of knowledge and the influence of other factors, such as the different types of proximity.

In this new context, often related to Mode 2 of knowledge production, the demands for innovations lead the academy to play an entrepreneurial role. In many cases, academic science has a relevant role in supporting knowledge associated with the innovation process, and more and more non-academic actors - such as government and industry - are incorporating science into their activities. Thus, in the current context of competitiveness and innovation, the boundaries between academia and non-academia, science and innovation become blurred.

Thus, this work seeks to identify the factors that drive the traditional countries in the production of knowledge to get closer to territories in peripheral countries establishing partnerships in academic articles related to the Ebola disease. Applying methodologies of social network analysis, it was possible to find out the main countries related to these academic networks and, also, to identify the main center - periphery connections in this ecosystem. It was also possible, on a more specific scale, to identify which regions were involved in these connections.

Among the results of this study, we highlight the ephemerality of many connections, often related to epidemiological episodes registered in the countries of the peripheral actors. In addition, we highlight specificities that make some territories in peripheral areas more connected than others. Finally, we identify some political, economic and cultural factors that influence this network selectivity.

NATIONAL TRANSFER ACCOUNTS AT THE SUBNATIONAL LEVEL: A FIRST ANALYSIS OF CANADIAN REGIONS

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In times of major demographic changes, the redistribution of resources between age groups is a recurring topic in public debates. In Canada, the population ageing challenge is both a federal and a regional issue. Even though one can claim that population ageing in Canada is overall manageable, there exists huge differences across regions in terms of intensity and pace. The ageing in Canada is thus likely to lead to very important economic and societal challenges across regions and in the Canadian federation political institutions.

In this article, we provide the theoretical foundations for building National Transfer Accounts (NTA) at the regional level and build a large database that includes age profiles for 50 variables over the period 1997-2013 and for five Canadian regions. NTA are based on a unified international methodology that consists in introducing age into National Accounts (Lee and Mason, 2011).

Our results highlight four important facts: (i) differences in per capita consumption are increasing the gap between the highest and the lowest consumption levels observed in the regions; (ii) per capita consumption increases more rapidly for dependent age groups (youth (aged 0-24) and seniors (65+)) in the two most populated provinces of Canada (Ontario and Quebec); (iii) the funding for that consumption has been covered by public transfers; and (iv) in most of the regions, middle-aged individuals decrease the share of individual resources that they transfer to dependent age groups through the public reallocation system. Together, these results suggest upcoming tensions in the Canadian confederation due to the ongoing aging transition.

WHEN CONCEPTS TRAVEL TO THE COUNTRYSIDE - TRACING THE DIFFUSION AND ADAPTION OF BASIC SERVICE INNOVATIONS

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In rural regions across Europe, basic service provision is impeded by processes of demographic and economic shrinkage. Sparsely populated areas with a high share of an elderly and resource scarce population are facing an extensive decline in crucial fields such as medical supply, education and transport. As a reaction, several regional development schemes aim to develop novel and likewise practicable solutions to meet crucial needs at place. However, scientific discourses still stress the difficulties of developing and implementing innovative approaches in rural settings and the comparative advantages of urban centres.

Against this background the paper questions how innovative basic service solutions are diffused into peripheral rural areas and adopted to the regional contextual conditions. Focussing on projects from a current German pilot program, the emergence of innovative ideas and concepts is reconstructed. Supra-regional influences and knowledge flows from other places are identified. A second focus lays on the aspects of implementation and consolidation, analysing by which motives those project-based solutions are adopted or rejected by key players in basic service provision. Thereby the analysis relates to the Schumpeterian argument that fundamental innovations can evoke resistance of those who benefit from existing power relations and property rights.

The contribution bases on theoretical reflections about the diffusion of innovations, the intrinsic logic of organisational fields and regional learning processes. Empirical evidence is derived from German regional case studies on three key fields of basic service provision, shaped by novel solutions: digitally supported primary health care, eLearning in primary school education and location management through welcome centres. In each field, qualitative interviews with actors from the projects as well as from topic-related basic service key players were conducted to identify mechanisms of basic services' diffusion and adaption.

CAN BE BRIDGED THE GOVERNANCE GAP BY LIVING LAB'S ECO-INNOVATIVE SOLUTIONS TOWARDS CIRCULAR ECONOMY? THE CASE STUDY OF PÉCS FROM HUNGARY

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Waste sensitivity is not high in Hungary, neither at household nor at corporate level. The OECD report pinpointed to the lagging at governmental level as well, suggesting a whole-of-government approach to accelerate processes towards circular economy.

From 2010 there has been a very strong centralisation process within the total governmental area, which reaches the waste management sector as well. As a result of the new legislation, the local governments have the responsibility of waste management at local level, but they cannot manage the local waste alone. These conditions don't help the spreading of circular concept at local level, furthermore, the public service provider lost the direct link to the market, hence their economic interest in improving selective collection or secondary raw materials. On the other hand, the focus area of Pécs (Hungary) was a pioneer in introducing new eco-innovations in waste management. The first attempt was that in 1996 Biokom introduced separate collection of (paper, plastic and glass) waste, first in the country. Besides this, the development strategy of Pécs is definitely based on endogenous resources, something that is considered more adaptive (as it provides resilience) than the involvement of external capital.

Taking into account the recent, contradictory situation (where local governmental level would like to innovate while central governmental level centralises every decision), we argue that living laboratory (the method that enables collaborative learning by users, producers and researchers in a real-life environment) - as boundary spanners in innovation (Geenhuizen, 2018) – can bridge this gap. Inviting people from different sectors (including public and private) with different disciplinary background, – also providing them a communication platform – can make an innovative environment where problem might be solved. It is more important in a country, where the stakeholder participation is very weak in connection with the design of different central and local/regional policies and development strategies (ESPON COMPASS, 2018).

The recent paper presents the design, the process and the achievable results of such living laboratory that makes an attempt to bridge the above mentioned gap towards circularity.

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EVALUATION OF AN APPROACH TO THE ENTREPRENEURIAL DISCOVERY PROCESS IN THE POMORSKIE REGION

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The Polish region of Pomorskie has been carrying out the Entrepreneurial Discovery Process which was acknowledged by European Commission and also academics (including myself). The general idea of this region for the selection of smart specialisation domains was to identify and to define them in the publicly open call. The involvement of stakeholders was finally shaped in the form of consortia. In the first call four domains were chosen and clarified. The outcome of this process was supported by the four agreements between Marshall and the relevant stakeholders. In 2018/2019 there was a renewal procedure verifying the members of these four consortia. In this updating exercise both the scope of the key domains and the membership of the consortia were revised.

My study investigates the output of the first members of the first consortia measured by the projects uptake from the national and the regional operational programme. As this output can be considered as a pretty low I check if this can be compensated by the other entities representing relevant sectors which constitute the domains of the discussed consortia. Further investigation also allows for the identification of the key stakeholders or the sectors which are common for all four domains.

My investigation addresses the following concerns of Smart Specialisation implementation:

- Effectiveness of translation of Smart Specialisation from strategy to projects on the ground.
- Effectiveness of continuity of the Entrepreneurial Discovery Process in implementation pointing the strengths and bottlenecks of the region of Pomorskie approach.
- The extent in which the Smart Specialisation approach have been able to facilitate the shift from a triple to a quadruple helix. Suggesting conditions that should be put in place to facilitate this shift in the future.

The role of the administrative capacity of public authorities at regional and national levels, and of stakeholders, acted as a barrier to the implementation of Smart Specialisation including efforts which have been done to overcome this.

The implementation of the Pomorskie Smart Specialisation domains shows e.g. that the sustainability of the stakeholders' interest in continuing cooperation among the members of consortia or applying for grants might have a limited potential. Some sort of compensation can be captured by the sectoral approach of my analysis. Over 80% beneficiaries follow sectors relevant to the members of the consortia. This might confirm the potential for research and innovation projects at the regional economic activities level. Other findings will be presented and discussed during the conference.

THE FLEXIBLE TOURIST REGION OF CENTRAL SPAIN

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Iván Velasco, Universidad Complutense de Madrid, Spain

Currently the limits of urban regions are not geographical or administrative, but they are linked to the main functions that are developed in that area. In fact, different limits can be established in urban regions according to the variables analyzed, which gives them dynamism and flexibility.

The present work focuses on the analysis of the evolution experienced by the central region of the Iberian Peninsula associated with the tourism function during the last decade (2009-2019). Through the analysis of statistics of overnight stays in the main tourist destinations of the region, visits to tourist landmarks and the study of the impact of destinations on social networks, we can see how, around the city of Madrid, tourism has colonized and decolonized spaces of its urban region based on economic dynamics and changes in the consumption of leisure and tourism. It has been observed that the role of the public function in the creation of destiny in this region is less and less important.

CONTEXTUALISING SYSTEM AGENCY IN NEW PATH DEVELOPMENT

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Recent studies have highlighted the importance of system transformation in new regional industrial path development, and the concept of 'system agency' has been introduced to describe a type of agency targeting the transformation of regional innovation systems. System agents are actors who transcends organisational boundaries and are able to mobilise actors, create visions and alter the functioning of the regional system to support new path development.

This paper contributes to the ongoing conceptual debate by elaborating on factors influencing 'why' and 'when' agency can play a role in new path development, emphasising the recursive relationship between structure and agency in time and space. Is the success of system agency dependent merely on actor-characteristics, or are there regional conditions influencing the capabilities of actors to act? How is system agency influenced by previous events, beyond being enabled or constrained by the structural outcomes of these events? A conceptual framework is developed, outlining the structure-agency dynamics at play in regional system transformation, and introducing the concept of 'hard and soft system attributes' as a tool to understand how historically developed regional specificities are influencing the choice and execution of strategies among system agents.

The conceptual discussion is followed by a comparison of two empirical cases of regional system transformation, associated with the development of a digital games industry in the region of Scania and radical changes in the automotive industry in the region of West Sweden. The case comparison reveals how the strategies adopted by system agents are conditioned and shaped by regional system attributes and the findings point to the fact that differences in how system agency play out can be traced back to the historical evolution of context specific factors. The conclusions suggests that a

deeper understanding of regional system attributes and structure-agency dynamics is instrumental to inform more place-sensitive regional innovation policy.

THE AERONAUTICAL-AEROSPACE SECTORS AS ENGINES OF TERRITORIAL DEVELOPMENT: WHAT CAN REGIONAL GOVERNMENTS DO?

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The aeronautics and aerospace industries tend to invest a high percentage of their revenue in R&D and innovation and generate backward-forward linkages with other industries, thus having important economic impacts in their host regions. Hence, and for some decades now, these industries have been deemed strategic to foster socio-economic development in a number of European territories. Namely in Spain, the National Government has been drafting and implementing a number of strategic and technology development plans centered around these industries, though with different regional outcomes.

In this paper, we focus on the agency of the Regional Government of Galicia and a recently formed network of regionally actors, from public and private spheres, in their efforts to nurture and diversify these industries in the region – e.g. the Galician center for aerospace innovation, the University of Vigo, the Free Zone Consortium, the National Government (Xunta de Galicia) and lead firms like Boeing. Drawing on evolutionary economic geography approaches that study industrial regional path diversification and the role of the State, we analyze how and the extent a combination of regional assets, the agency of actors and industrial policies at different levels have been impacting the reconfiguration of these industries in the region.

THE POTENTIAL CONTRIBUTIONS OF ECONOMIC AND BUSINESS HISTORY TO RESEARCHING REGIONAL ECONOMIC RESILIENCE

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Regional economic resilience refers to the “the capacity of a regional or local economy to withstand or recover from market, competitive and environmental shocks” (Martin and Sunley, 2015, p. 13). In this paper we further develop a historical and long-term perspective on regional economic resilience, by outlining the contributions that economic and business historians could make. Economic and business historians have not yet engaged with the concept of regional economic resilience; and vice versa, economic geographers and scholars in regional studies have by and large neglected to develop a long-run perspective on resilience (e.g. Henning, 2018). Nevertheless, economic and business history could add a lot to evolutionary accounts of resilience, by providing detailed and rich narratives, covering long periods, of how firms, clusters and regions have responded to economic disturbances and changes over time. Likewise, regional economic resilience – and the body of theory that has developed around it - can offer a theoretical framework, which can guide historical research, and can help this type of research to move beyond mere description and particularity. We will first provide a brief review of the literature on regional economic resilience, focussing on a number of interrelated issues: the types of resilience, the conceptualisations of resilience, and the mechanisms of resilience. And then detail the contributions that economic and business historians can make, in particular with regard to the exact mechanisms through which regional economic resilience takes place, and the determinants of success or failure in this respect.

THE SPATIAL AND FUNCTIONAL DISTRIBUTION OF SMART SPECIALISATION STRATEGIES IN THE EU: HOW SMART? HOW SPECIALISED? HOW STRATEGIC?

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Smart Specialisation represents a significant strategic shift in Cohesion Policy, aiming not only at strengthening the effectiveness of the policy at large but also specifically at introducing a new way of thinking to the problem of local economic development – by supporting regions to identify and harness their dynamic comparative advantages, so as to unleash their growth potential. As a relatively new policy – and given the varied record of performance of regions with regard to take-up and implementation of Smart Specialisation Strategies (S3) – our knowledge about its effectiveness and its impacts on unleashing regional growth potentials remains limited. In this paper we offer an exploratory investigation of the population of Smart Specialisation Strategies across the EU, trying to understand the logic underpinning these strategies and to provide evidence on the extent to which their priorities/settings match local economic potentials and needs. Specifically, we examine the prevalence of specific priorities – the so-called ‘economic domains’, ‘scientific domains’ and ‘policy objectives’ – across regions; the density of priorities within regions; the spatial distribution of the different priorities across the EU; and how these correlate with key social, economic, geographical and institutional characteristics of the regions. Our results sketch a picture of relative ‘isomorphism’, with only limited variation in specialisations and limited connections between prioritised specialisations and regional features, reflecting perhaps the limited local experience with the S3 model and suggesting a degree of over-caution in setting out these strategies. We discuss how these findings inform the further development of the S3 approach in the design of Cohesion Policy beyond 2020.

FRAGILE GOVERNANCE AND LOCAL ECONOMIC DEVELOPMENT: THEORY AND EVIDENCE FROM LATIN AMERICAN PERIPHERAL REGIONS

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Much of our understanding of local economic development is based on large urban agglomerations as nodes of innovation and competitive advantage that connect territories to global value chains. This framework not only over-represents the urban and regional dynamics of cities of the global North, it also fails to characterize well the challenges of smaller cities and peripheral regions in both the North and the South, which are following different development trajectories and modes of insertion to the global economy while still subject to the forces of globalization, financialization and planetary urbanization that affect large urban agglomerations. Drawing from debates around governance and peripheries in the Anglophone and Spanish-speaking worlds, we propose an alternative way of looking at local economic development based on the idea of fragile governance and a set of three related variables: 1) associations and networks; 2) learning processes; and 3) leadership and conflict management. We explore these variables in six Latin American regions: three sparsely populated rural regions (Arauco, Chile; Lurín, Peru; and Isla de Mompo, Colombia) and three intermediate cities (Córdoba, Argentina; Linhares, Brazil; and Quetzaltenango, Guatemala). Together, they illustrate not only the challenges and fragility of governance in small and intermediate cities in Latin America, but also the variety of governance approaches these cities and regions are innovating and implementing to achieve a more resilient and territorial vision of local economic development.

EU REGIONAL POLICY AND DEVELOPMENT IN SPAIN: CAPITAL WIDENING AND PRODUCTIVITY STAGNATION OVER 1989-2010

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Total Factor Productivity (TFP) in Spain over 1989-2010 has followed a decreasing trend. This paper seeks to answer to what degree the investments in transport infrastructure supported by the European Union Regional and Cohesion policy (EUINFP) prevented TFP over this period from falling further. Using an augmented Mankiw-Romer-Weil (1992) model we derive an econometric specification for the value added per worker where, besides the traditional factors of productions, it incorporates as TFP growth enhancing drivers EUINFP, Research and Development expenditures (RD), the interactions between EUINFP and business capital and the interactions between EUINFP and the labour market. We estimate this specification for the 17 Spanish regions over the period 1989-2010 and find positive marginal contributions on the TFP growth rate for EUINFP, RD, and the interdependencies between EUINFP and private capital. These factors partially offset the dismal TFP performance of Spain over this period.

SPATIAL POLITICS, PLACE-IDENTITY AND PLANNING STRATEGIES: AN EXAMINATION OF OPPORTUNITY AREAS IN THE LONDON PLAN

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Since the first iteration of the London Plan, 'Opportunity Areas' have been a key planning tool to focus investment and deliver housing and employment targets within the Greater London metropolitan area. The number of these areas has increased from 28 in the first plan to 47 in the most recent draft plan, and they continue to attract significant debate. Opportunity Areas range from inner-urban former industrial locations to established suburban town centres; some are already established whilst others are designated as 'nascent'. This paper explores the concept of Opportunity Areas, their origins, typologies and contexts, and their underlying formal and informal politics, including the tensions between strategic and local objectives. We examine the process and politics of naming particular areas and the debates that have followed, the strategic intentions of the OA's and the different ways development has been operationalized on the ground. We investigate whether and how a shift has taken place from the use of Opportunity Areas as a tool for coordinating investment, infrastructure and economic development, to a way to unlock housing delivery and finally a mechanism for land value capture associated with new transport infrastructure. The research is based on analysis of London-wide and local borough policies and plans, interviews with Greater London Authority officials, local boroughs and community representatives, as well as participant observation at the session on Opportunity Areas of the Examination in Public of the draft London Plan.

MAPPING THE GEOGRAPHY OF MIGRANTS' INVENTIVE ACTIVITY IN THE US: EVIDENCE FROM USPTO HISTORICAL PATENTS (1840-1940)

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The century that goes from 1840 till WWII represents the historical period when US turned into a world industrial power. It is also the period when a massive influx of immigrants moved from mainly

European countries to US states. Recent evidence shows that about 40% of US population today descends from those waves of immigrants (Bandiera et al. 2013).

Historical studies on the US show that the economic impact of immigrants is positive and highly significant (Siquiera et al. 2018; Rodrigues Pose et al. 2013). Some recent evidence found that immigrants contributed also to the rise of American ingenuity (Akçigit et al. 2017; Morrison, et al. 2018). However, the evidence is still scant, indeed several scholars have argued that more empirical studies are highly needed to unveil the relation between migration and innovation (Abramitzky and Boustan, 2017; Kerr, 2013; Lissoni, 2018). In particular very few empirical works have provided a clear picture of the geographical dimension of this phenomenon.

By drawing on a novel dataset of historical US patents (see Morrison et al. 2018), which contains unique information on immigrant inventors in US counties, we unveil the geography of immigrant inventors over a period of hundred years (1840-1940). This study contributes to the current literature on historical migration in the US by characterising the geographical patterns of knowledge migrants.

THE SPATIAL DISTRIBUTION OF THE JESSICA PROJECTS IMPLEMENTED IN POLISH MUNICIPALITIES

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Regeneration – an integrated process of activities undertaken in the spatial, social and economic dimensions – should lead to the improvement of the living conditions of inhabitants of degraded urban areas. The European Union in 2007-2013 allocated financial resources for this purpose in the form of JESSICA initiative which is based on financial engineering mechanism. Experiences gained so far allow conclusions to be drawn that JESSICA is a highly financially-efficient instrument but, however, not always delivers the desired outcomes in the spatial and sphere. The scope of projects often is limited to infrastructural investments and does not reflect the complexity of regeneration process. In the paper the authors try to assess a spatial distribution of the JESSICA projects which aims at finding relevant dependencies between spatial factors and selected characteristics of these projects. The study comprises five Polish regions that implemented the JESSICA initiative and all of the 161 projects executed by municipalities.

Our findings provide evidence that projects implemented in the capital cities of the five Polish regions were executed mostly by companies. However, in Mazowieckie region, projects located in the capital city were implemented mainly by public entities, in contrast to other regions. The relation between capacities of projects to generate own revenues and the value of JESSICA projects is visible in all regions, but in some very weak, e.g. Mazowieckie region, Wielkopolskie region. Projects implemented especially by public entities in Slaskie show relatively high capacities to generate own revenues. With the exception of Wielkopolska region, there is not significant dependence between project location (in capital city v. outside) and the value of JESSICA projects. These findings confirm our expectations, and illustrate that that location had no significant impact on factors analysed in the study. In this sense, it can be argued that JESSICA projects have contributed to enhancing the cohesion of the Polish regions in the field of the distribution of the EU support offered in the form of the repayable instruments.

FURTHER DEVELOPMENT AND NEW POTENTIALS OF URBAN MANUFACTURING – NEW HYBRID FORMS OF DIGITAL URBAN INDUSTRIES

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(Re)integration of ‘intelligent production systems’ into urban spaces is a central issue in current discussions of political economy and economic geography regarding ‘Industry 4.0’ and its impact on working environments, corporate organisations and society. Moving production of goods in urban spaces, urban manufacturing potentially helps to constructively grasp global challenges in fields of energy and resource consumption, mobility or demographic change. Industrial applications of digital technologies and Industry 4.0 potentially enable a resource-saving, low-emission and space-saving production, which is also located in direct proximity to the customer.

However, the question how compatible digitally enhanced urban manufacturing really is regarding its urban vicinities remains unanswered. Which characteristics should modern production encompass in order to better integrate into urban spaces? Answering these questions, this paper covers the results of a study in selected city regions in North Rhine-Westphalia, Germany. Regional-statistical methods as well as qualitative empirical methods are used in order to examine how technological and sector-specific characteristics of urban manufacturing vary from region to region. Thereby, we highlight the location-specific conditions of digitally supported urban manufacturing, as well as possibilities of embedding production sites into urban spaces.

As one key aspect, our study reveals that an increasing number of urban manufacturing companies is targeting and integrating a hybrid business model. Due to the increasing cut-throat competition and decreasing technical differentiation potentials caused by the alignment of quality standards, companies are even more under pressure to stand out from others. Often, complex problem-solving approaches like hybrid service bundles are chosen to ensure a customer-oriented individualisation. In doing so, a mergence of value-added chain sections can be observed, which results in a vertical integration of upstream and/or downstream processes.

The presented conceptual and practical results are based on the previously presented research project as well as first insights of a personal dissertation project.

EXPLORING THE LINKS BETWEEN ICT RESOURCES, ICT USE AND PRODUCTION EFFICIENCY: EVIDENCE FROM SMES IN WALES

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This paper examines the connections between ICT resources, ICT use and production efficiency of a sample of SMEs based in Wales. The issues are considered through the lens of the Welsh economy where the devolved administration has been working to support the roll out of new infrastructure that means more firms are physically connected to superfast broadband. We explore a chain of effects model linking ICT investment, ICT capabilities and ICT use of SMEs to their production efficiency. Underlying our paper is a context of better establishing how ICT resources and ICT use connect through to business value. We explore issues in respect of how we establish the ICT business value construct, here conceptualised in terms of superior production efficiency. We then examine the ways in which ICT resources such as ICT investment and ICT skills link through to different patterns of ICT use, subsequently affecting production efficiency. The paper meets a challenge from prior research to address the general ambiguity of ICT business value requiring more work in terms of understanding various linkages between ICT-related constructs and different types of business performance. Our approach demonstrates that there might be very different routes to combining ICT resources and ICT

use to enhance SMEs business performance, and reveals that access to high quality digital infrastructure is not in and of itself a route to ICT-enabled business success. The approach adopted also allows us to show that ICT-enabled business performance may be dependent on context factors such as industry sector, size of firm, and importantly firm location and with this having implications for policy to support SMEs' take-up of digital technologies.

EXPLORING THE RECENT UPSURGE OF REGIONAL INEQUALITY IN EUROPE

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In the last decades, and more especially since the financial crisis, some European countries have shown an upsurge of regional income per capita inequalities. This fact has revived a traditional debate in regional economic policy: the potential trade-off between a geographically balanced economic growth via regional policies or, by contrary, an uneven geographical development that enhances higher rates of national economic growth. This debate is gaining momentum in the agenda of policymakers in the European Union. Our aim in this research is to explore this issue by examining the imbalances that have risen between a set of 158 European regions (NUTS-2) over the period 2000-2015. The regions belong to Germany, Austria, Belgium, Denmark, Spain, Greece, Finland, France, Netherlands, Italy, Portugal, Sweden and UK. The databases used are the BD.EURS (NACE Rev2), and EUROSTAT. We seek to determine, first how far has evolved regional inequality in Europe, both within countries and between countries, and second, following the theories of uneven regional growth, to analyse the contribution of the structural change and region-specific factors to the evolution of the gap between European regions.

GPN DIS/ARTICULATIONS IN ZANZIBAR: PRACTICES AND CONJUNCTURES OF EXCLUSIONARY DEVELOPMENT IN THE TOURISM INDUSTRY

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A recent assessment of economic geographers' work on global production stresses the need for dialogues between Marxian, Neo-Marxian, and "mainstream" global production network (GPN) perspectives. Such a dialogue can, in particular, enhance understandings of the industry, political-economic, social, and context-specific drivers of disarticulations - uneven and exclusionary development outcomes that often occur in parallel with GPN couplings. Achieving a productive exchange is challenging given epistemological differences between these perspectives on the links between global production and regional development. This paper argues that an epistemological focus on GPN practices can yield insights into industry-specific processes (e.g., value creation, upgrading) and the region-specific conjunctural factors that conjointly produce disarticulations. The approach is elaborated on and applied illustratively to the case of Zanzibar's (Tanzania) tourism industry, a sector that has grown/globalized rapidly but with significant disarticulations. Analysis of the (GPN 2.0) practices of Zanzibari enterprises and foreign-owned resorts shows how local enterprises are increasingly marginal in tourism GPN while resorts and non-local firms capture and subsequently offshore (extravert) much of the value generated by the industry. These practices are then linked qualitatively to the conjuncture of several structural processes in Zanzibar – political, economic, racial, and technological – that produce disarticulations in the archipelago.

INVESTMENTS TOWARDS SUSTAINABLE URBAN DEVELOPMENT – POLAND’S EXPERIENCES WITH THE JESSICA INITIATIVE

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The JESSICA initiative introduced by the European Commission, European Investment Bank and the Council of Europe Development Bank (CEB) in the years 2007-2013 has being continued in the current financial perspective of the EU Cohesion Policy. The findings related to the impact of the implemented projects on the sustainable urban development are of crucial importance for regional authorities that deal with the “JESSICA 2”.

This study, builds up on the previous studies within the project supported by the National Science Centre, Poland (2015/19/D/HS5/01561) and focuses on two main research questions:

1. What areas of support of the projects implemented in Poland in the years 2007-2015 were the most adequate with regard to sustainable development?
2. What actors were involved in the designing of criteria of project selection and who were the project beneficiaries?

The existing literature and analyses hardly address the impact of JESSICA funding on sustainable urban development. Our study, focused on projects implemented with the use of JESSICA funds, provides further evidence for the debate on the specific nature of the revolving instruments that are used to accelerate investment in urban areas. The methods used in the project are based, in general, on the positivist paradigm where causal relations between the public interventions (projects) and their effects are examined. A realistic approach used in the evaluation techniques and our own expert-based assessment of all the projects are applied, and supported with the use of many analytical tools. In the research we evaluate the results of JESSICA through the conceptual lens of sustainable urban development and the use of the agglomerative hierarchical cluster analysis.

The main findings of the study reveal that the theoretical assumptions are met only partially by the projects implemented in Poland, and that there is regional diversification with regard to the model approach and actors involved in the criteria shaping. The projects related to culture and heritage renovation, followed by the re-development of the brownfield sites, reflect the most the complexity of sustainable urban development. The beneficiaries comprise wide spectrum of public and private legal entities but the investment by private beneficiaries again respond better to model approach of the sustainable urban development.

EMBEDDEDNESS IN ENTREPRENEURIAL ECOSYSTEMS AND THE EMPLOYMENT OF UNIVERSITY KNOWLEDGE BY UK SMES

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With a new focus on the quality as opposed to mere quantity of entrepreneurship in the form of start-ups, entrepreneurship is now recognised more as a system phenomenon. This has led to the emergence of the concept of entrepreneurial ecosystems with universities deemed a key part of such ecosystems. Indeed, while concerns regarding the innovation valley of death remain valid, the advent of the triple helix model has led to a huge push recently towards academic knowledge generating demonstrable impact in the economy. Scientific knowledge and inventions have long been known to enhance future competitiveness potential if harnessed properly. Yet usage of university knowledge is

traditionally low. Still, past research indicates that local embeddedness is key to development of links and usage of university knowledge. Building on such work, the paper investigates the extent to which firm embeddedness in various elements of the entrepreneurial ecosystems is associated with regard and usage of university knowledge by SMEs. We find, chiefly, that SMEs that employ graduates from within their region tend to regard university knowledge more highly. This suggests that regional graduates could act as conduits of university knowledge by bridging SMEs to regional universities in ways that national and international graduates cannot. Further, SMEs that consider the proximity of government support agencies as important are more likely to attach greater importance to university knowledge and to, in fact, also engage with universities in networking and problem solving activities. This suggests the presence of complementarity dynamics in line with the triple helix model with government agencies likely playing a facilitative intermediary role between universities and SMEs.

TACKLING DEMOGRAPHIC CHANGE AT THE REGIONAL AND LOCAL LEVELS: THE EXPERIENCES FROM SLOVENIA

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Demographic change in Europe will severely influence the development potentials of numerous regions and open questions like effective provision of services, availability of labour force, social and health care, settlement structure, etc. Thus, demographic change will become an important political issue and also an important aspect of regional development. In the paper, we present a demographic change in Slovenia (projections at various territorial levels have been made for 2023, 2028, 2033 and 2038) and the experiences with the promotion of development in demographically endangered regions that Slovenia had in 1990ies. The projections show a critical situation in many regions, especially in border areas, which requires adequate response of the regional policy. In mitigating demographic change, Slovene regional policy can base on the experiences with the implementation of the Law on the Promotion of Development in Demographically Endangered Regions in the Republic of Slovenia. Orientation exclusively to demographically endangered regions proved unsuccessful because of many other factors, that influence the development, but yet the demographic factor will play an important role in the coming decades.

ENERGY-ENVIRONMENT-GROWTH NEXUS: A PANEL DATA ANALYSIS

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The aim of this study is to find the long run relationship between energy, environment and growth. The theoretical argument of such relationship is based on IPAT identity that captures the long-run relationship between Impact of human on the environment (i.e., resource use or environmental degradation) and major human-environment facets, namely Population, Affluence (i.e., per capita output), and Technology (i.e., resource intensity). In addition to IPAT identity, we will also include the important elements of energy, such as water, food, and labour in our empirical settings.

Available literature has examined a bi-variate or multivariate interrelationship between mainly energy and economic growth that may or may not include carbon emissions or some other key economic variables. They are empirical analyses, using different methodologies, data, and selection of countries and different sets of variables. In addition, the empirical results of former studies are unfortunately very mix and mystifying. The results appear to be sensitive to sample (time and country), variable selections, and implemented methods as having been stated by many critics Karanfil (2009), Ozturk (2010). Therefore, this study aims to fill this gap by developing an empirical model using the

theoretical understanding of the resource-output nexus which is based on IPAT (Impact of human on the environment, Population, Affluence and Technology) identity. For empirical analysis, we propose a Structural Vector Autoregressive Model (or VARX) would be useful for our purpose because it allows testing theory while complying with time series property of dataset. The data on food securities is available from the Food and Agriculture Organization of the United Nations (FAO). The data for all other variable is basically extracted from world development indicators (WDI). This is work in progress and the results will be presented at the conference.

RESPONDING TO REGIONAL CHALLENGES IN NEW ZEALAND: STATE-LED AND COMMUNITY-BASED RESPONSES

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Sean Connelly, University of Otago, Aotearoa New Zealand

Issues of growing social-economic difference between and within regions, path dependency, population ageing, the reality of small town decline and recent changes in government policy have brought to the fore questions regarding the future of rural and small town New Zealand. In response, since 2015, the central state has slowly re-entered the policy terrain of regional development and initiated a policy anchored on traditional mechanisms of infrastructure and investment support which have the potential to selectively impact lagging regions and towns. In parallel, often as a direct result of the slow decline in state welfare and more general changes, many small town communities have gradually become more pro-active in terms of locally initiated and driven development focussed on both social and economic outcomes. This presentation draws on case study evidence to illustrate how both the processes of state-led and community-led development are currently playing themselves out in rural and small town New Zealand. What the study reveals is that short term state expenditure may lead to localised cash injections which might catalyse localised sustainable interventions; by contrast, where they occur, deeply embedded process of community development, drawing on local social capital have gradually improved community well-being. Both approaches face potential risks linked to policy shifts in the first instance; and challenges to community cohesiveness consequent on broader social and economic changes in the second.

BUSINESS INTERACTION AND INNOVATIVENESS IN EUROPEAN CROSS-BORDER REGIONS

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Introduction: The cross-border regional innovation system (CBRIS) approach theorizes that different levels of innovativeness in cross-border regions can be described in six dimensions, i.e. social-cultural proximity, accessibility, institutional conditions, economic structure, policy structure, and science and knowledge bases. Close interaction among different stakeholders in the innovation system leads to knowledge development, resource mobilization, and overcoming resistance to change. In this sense, business interaction is important for innovation performance but may be hampered by factors within the six dimensions. This research was motivated by the need to enhance the theoretical understanding of SME-driven innovation in cross-border regions because SMEs are major drivers of innovation.

Aim: This research aims to investigate prerequisites for SME-driven innovation in cross-border regions, and to explain the differences in innovativeness among bordering regions by factors constraining cross-border business interaction.

Material and Methods: As there was a general lack of secondary data at the scale of European cross-border regions, we decided to collect primary data by means of an online- survey. The CBRIS approach was adopted for constructing the questions. The survey was addressed to 96 representatives of European cross-border cooperation organizations (return rate: 27%).

Results: High internal consistency of the factors within each dimension was observed, indicating that the factors derived from literature address each dimension coherently. A relationship was observed between a region's innovativeness and the factors constraining cross-border business interaction: small cross-border differences in innovativeness were observed in areas with well established prerequisites for cross-border interactions, while regions constrained by economic structure, transport and organizational infrastructure, and education and research facilities showed higher discrepancies in their level of innovativeness.

Conclusion: The findings of this investigation support and complement those of earlier studies, and provide insights to researchers, entrepreneurs and policy makers about the occurrence of hampering factors and their relationship with innovativeness.

EFFECTS OF MULTILEVEL POLICY MIX OF PUBLIC R&D SUBSIDIES: EMPIRICAL EVIDENCE FROM JAPANESE LOCAL SMES

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Regional innovation policies have been implemented in several countries. Previous studies focus on the role of central government, whereas there are few empirical evidence on the relationship between the central and local governments in the discussion of regional innovation systems. In Japan, controlled decentralization of traditionally centralized innovation policy is ongoing involving the municipality level, so that we can observe multilevel policy mix of public R&D subsidies by national, prefecture and city governments.

There are different roles and advantages of central and local governments because of information asymmetry between central government and local firms as well as budget and capability constraints of local governments. City government may be more sensitive to local needs for public support, while prefecture government more advantageous in budget size, administrative capability, and experience. Furthermore, we can expect the complementarity of multilevel policy due to economies of scale, synergy, and reputation effect.

This paper empirically estimate the SMEs' productivity (Total Factor Productivity), and investigate the effects of public R&D subsidies by national, prefecture and city governments. We conducted original survey for 12,000 manufacturing SMEs and obtained 1,030 effective responses. Among the respondents, 624 firms were matched with financial database. We finally use panel data of 500 firms for 7 years on average.

We employ firm-level fixed effect panel estimation in order to control for the unobservable firm effects of any time-invariant factors. We find that only the prefecture subsidy has a positive and significant impact on the TFP of recipient firms, while interactive effect with city subsidy is also positive and significant. However, the effects become significant only when we include the years after subsidy period into treatment. These results suggest that multilevel policy mix of R&D subsidies significantly increase recipients' productivity and that this effect is durable.

URBAN TELECONNECTEDNESS AND THE BUILDING OF RESILIENCE TO DISASTERS IN REGIONAL TOURIST DESTINATIONS: EXPLORING THE CASE OF WYE RIVER, VIC, AUSTRALIA

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Alan March, The University of Melbourne, Australia

Tourism development is a globalising force that shifts the boundaries of regional destinations, contributing significantly to their increased connection with metropolitan areas concentrating financial, knowledge, institutional and technological capital and demand for resources, products, services and experiences. This is more evident in destinations that comprise a high number of holiday homes and voluntary temporary populations (VTPs) that are permanent residents in neighbouring metropolises. This paper explores the application of the concept of teleconnectedness to the study of tourism development's influence in processes of building resilience, by interrogating the case of the Wye River–Jamieson Track fires of 2015 and analysing processes of prevention, preparedness and response and recovery. Data collection involved scraping of social media (Twitter); sourcing of government and NGO documents and websites; semi-structured interviews with representatives from key organisations and tourism businesses; and direct observation. Data was qualitatively analysed through a Grounded Theory approach with the support of NVivo 12 Plus. Findings highlight the instances in which tourism development contributes to building resilience to disasters and those in which it contributes to building regional vulnerabilities by changing how regions teleconnect with metropolises. From a disaster risk reduction perspective, VTPs can bring greater government and public awareness in response and recovery, allowing regions to access a better pool of resources through increased political capital. While VTPs have greater engagement with the local environment than tourists, they can still hold less local environmental understanding when compared to permanent residents, which affects their risk profile. Finally, scale, spatiality and the combination of environmental conditions, urban design and local/regional institutional structures appear to greatly influence social cohesion among permanent residents and VTPs, and the flow of knowledge and awareness for building resilience to disasters in regional tourist destinations.

DIGITAL ECONOMY IMPACTS ON RURAL BUSINESS MODELS: A CASE STUDY APPROACH

Laura Norris, Cardiff University, UK

Economic geography has extensively considered the spatial inequalities that rural firms are subject to, an element typically exacerbated by the tendency for governance solutions to focus on the urban. The increasing digitalisation of the economy and the uneven distribution of Superfast Broadband infrastructure has made these differences more marked. These new technologies are allowing firms to become more competitive and to gain new knowledge through incorporating digital technologies into their business models. So how do rural firms with limited access to reliable broadband seize the opportunities presented? Utilising data from a pan-Wales study, this paper will explore how rural businesses are harnessing the digital economy, where the Welsh Government has intervened in the market failure that has occurred in this predominantly rural country. Case studies will be used to learn how businesses have compensated for inequitable infrastructure and transformed their business models. Welsh SMEs have utilised digital technologies to innovate within their industry, allowing them to negate their rurality and compete in international markets. These technologies have transformed how they share knowledge and contributed to business growth. This raises interesting questions as to how the digital revolution will bring about a restructuring of innovation geographies.

THE REGION AS AN ACTOR IN THE EMERGING MARINE ENERGY SECTOR IN WALES

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Energy transitions are transforming regions; this paper will consider the way in which structural elements (region, institutions), network features (knowledge sharing, proximity), and agency characteristics (social capital, intermediaries) contribute to the proliferation of a novel technology. The Multi-level perspective will be complemented with innovation, geography, and network literature to consider the role of the region in facilitating system change. Utilising semi-structured interviews and the Q methodology, the experiences of innovation system actors within the Marine energy industry in Wales have been sought to understand this emerging industry, a context rarely considered by transition literature. South Wales has excellent wave resources in a region that is a major UK energy port, declining oil and gas has brought about local action to encourage the development of this industry to bolster regional development. The formation of a regional network to promote marine energy activity has evolved into a national organisation that forms an extensive knowledge network, and acts as an intermediary for the promotion of the industry. In the North of the country, the Nuclear industry and its significant impact on employment has distracted focus from the presence of innovative tidal technologies. This is particularly poignant due to the regional branding of 'Anglesey Energy Island' as an arm of Local Government development activity. This demonstrates that regional economic development is a more distinct actor within transitions than previously anticipated. In understanding the dynamic role of the region, a contribution can be made to understanding the spatial impacts of the energy transition.

NEW MECHANISMS FOR INTEGRATED TERRITORIAL DEVELOPMENT IN HUNGARY

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The project: With an allocation of € 21.9 billion for the period 2014-2020, Hungary is a main beneficiary of the EU Cohesion Policy which aids the progress of regions lagging behind. The paper presents the regime Hungary uses for territorial strategies; municipalities devised integrated plans against a pre-set financial allocation, a menu of measures and obligatory performance targets. The mechanism implies a renewed system of domestic collaboration and increased territorial responsibilities. Despite similarities, it is a distinct mode from the ESIF territorial toolkit.

Research questions: The paper explores the interactions between multilevel governance structures and effectiveness of delivery. How have the various actors influenced policy choices and targets or the realisation of investments? What role vertical and horizontal coordination and cooperation have played? How does the Hungarian model relate to the ITI approach?

Methodology: A desk-based research analyses the critical dimensions of multiple actors' involvement. Scientific literature and documentary (e.g. policy documents, evaluation and audit reports) review is supplemented by interviews at the national (line ministries) and territorial (municipalities, socio-economic partners) level.

Coherence with panel theme: The paper offers empirical experience on how multilevel governance impacts the satisfaction of policy objectives. It informs upon the adopted strategies, capacity building and working practices; progress in execution enables preliminary conclusions on key success factors.

WHAT SHAPES LOCAL INNOVATION POLICIES? EMPIRICAL EVIDENCE FROM JAPANESE CITIES

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Increasing attention has been paid to regional innovation systems. In the regional studies literature, the concept of multilevel policy mix suggests the importance of considering different levels of policymaking. However, previous studies have so far only focused on (the regional impact of) national innovation policies or on the policies in specific regions. Moreover, the design of subsidy programs differs considerably across local authorities, especially among cities, whereas the effects of these programs may depend on their design. Yet, to date, no empirical studies have been carried out on the factors of implementation and of the variety of local research and development (R&D) subsidy programs at the municipality level. Our research fills this gap by using information on R&D subsidy programs from local authorities in Japan collected via websites and our original survey. Japan is an interesting target country of this research where the central government has recently been promoting the controlled decentralization of traditionally centralized innovation policy. Our research confirms 151 R&D subsidy programs conducted by 131 cities among all cities in 2015 and investigates the determinants of the implementation and design of local R&D subsidy programs at city level (length and upper limit of subsidies, and flexibility of subsidy conditions) considering both demand- and supply-side factors. The empirical results suggest that, after controlling for city type and population size, supply-side factors including local government conditions and capabilities significantly affect the implementation of public R&D subsidy programs. In contrast, we find that demand-side factors such as the share of high-tech industries and the availability of potential R&D partners matter more for the design of subsidy programs than supply-side factors.

THE EGTC AS A NEW TOOL FOR INTER-REGIONAL AND CROSS-BORDER COOPERATION – A QUANTITATIVE ANALYSIS

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The European Grouping of Territorial Cooperation (EGTC) is a novel European legal tool for cross-border, interregional and transnational cooperation. Introduced in 2006, it allows cooperating regional authorities, associations or other public bodies from different nation states to establish a legal entity of its own. The EGTC is meant to improve the governance of territorial cooperation, thus having beneficial economic effects in dealing with cross-border challenges in a variety of policy fields. In this paper, we analyze in how far this legal instrument may contribute to inter-regional and cross-border development by using a novel data set at the regional level.

We first shortly present the evolution of the EGTC and analyze its institutional design from an economic perspective. We put a special focus on its contribution to internalizing spill-overs and both negative and positive externalities in cross border regions, thus contributing to territorial cohesion as well as economic and social development. In a second step, we will provide an original dataset at the NUTS2 level and/ or the NUTS3 level, respectively, depending on data availability, to explore for the first time similarities and differences among regions where EGTCs are located. To this end, different variables, like regional GDP per capita, R&D expenditures, figures for employment and human capital etc. will be compiled and analyzed. Methods to be applied will be of explorative nature, like cluster analysis, in order to answer our research questions. Finally, we will take a first look at whether and in how far regions with and without EGTCs established on their territories differ in regard to territorial cohesion and economic development. After developing a set of testable hypotheses, we will use our dataset to test whether observed differences in regions with and without EGTCs are statistically

significant. Based on our findings, we will formulate recommendations for policy design regarding inter-regional and cross-border cooperation.

So far the literature on the EGTC instrument is predominantly descriptive in nature. There is a large strand of literature describing the underlying legal regulations from a legal science point of view. In addition, there exists a body of literature from political science which analyses the potential of the EGTC as a means to foster regional and thus European integration from a mainly normative point of view. Furthermore, there are some case studies which analyze the impact of a single or a selected number of EGTCs.

We aim to expand the current research on the EGTC in regard to both the questions addressed - (1) what are the similarities and differences of the regions where EGTCs are located?, (2) are there differences between regions with and without EGTCs? – and the methodology used. To our knowledge, so far no other research exists using a comprehensive EU wide data set at the regional level and employing econometric methods to answer the research questions posed. Thus, our findings will contribute to a better understanding of the potential for successful cross-border and interregional cooperation in the EU by highlighting potential benefits of EGTCs at the regional level and by providing recommendations for policy design.

STRUCTURE AND PROCESS OF COMMUNITY LED-GOVERNANCE IN IBADAN AND OKE-OGUN REGIONS OF SOUTHWEST, NIGERIA

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Almost five decades after a major local government reform, the local government system in Nigeria is still dysfunctional. Extensive review of extant literature reveals that the capacity of the local governments to perform statutory functions and effectively engage local communities is severely undermined by usurpation of administrative, political and financial authority by state governments. Consequently, constituent urban and rural communities make determined efforts to bridge governance gap through community led-governance. The structure and process of administration, as well as the role of communities in local governance in Nigeria have received negligible scholarly attention. This paper therefore explores the structure, process and level of citizen engagement in local administration in Ibadan and Oke-Ogun regions of Oyo State, Nigeria. The study is based on information from empirical literature and key informant interviews with community leaders. Preliminary findings indicate that community-led governance is organized around Community Development Associations (CDAs) in urban areas and Towns Unions (TUs) in sub-urban and rural areas. The communities have long history of informal self-governance with enviable record of collaborative achievements. The governance model engenders participatory democracy, accountability and dense networks of civic engagements, which are lacking in the present local government system. Poverty is identified as one of the key factors inhibiting effective discharge of social responsibilities by members of studied communities. There is a high level of disenchantment with the present local government system among individuals and groups on one hand and a disconnect between the local governments and local communities on the other. A new local government arrangement designed to be driven by the community has become necessary in order to foster impactful sustainable local development. This will however necessitate a fundamental legislative reform of the local governance structure and therefore the support of key stakeholders to actualise. Ultimately, an effective and inclusive local governance structure is advocated, whereby the status of local government is conferred on communities on the basis of economic viability and administrative capacity.

DYNAMIC CITIES AND POLARISATION: BREXIT AND A TALE OF TWO CITIES

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In June 2016, the UK (UK) voted to leave the European Union (EU). A number of reasons have been proposed for the 'leave' vote, with the results particularly highlighting regional inequalities in the UK. Many areas characterised by industrial decline and social exclusion voted to 'leave' while London, a dynamic centre of economic and political power, returned the highest 'remain' vote of any English region. The problems of regional economic and social exclusion revealed by Brexit, are caused by a myriad of complex economic, structural and geo-political factors, and as such, the idea that Brexit alone can offer the opportunity to rebalance decades of regional disparity is likely to be just an illusion. According to the NGO, LIS Cross-National, the UK is one of the most unequal of all developed countries. Its economy has been marked by decades of decay in its declining regions which, combined with London's dominance, suggests a degree of polarisation, unmatched in any other western economy. The Brexit debate and subsequent political upheaval, have revealed economic and social tensions resulting from poor economic performance and low growth rates in regions suffering long-term industrial decline, recently exacerbated by the effects of the global financial crisis and austerity policies. The picture of dynamic cities contrasting with low performing regions is a common one. In the UK's near-neighbour, Ireland, there is a similar dichotomy with economic and political power concentrated in its capital city, Dublin. Ireland also faces problems of regional divergence, a source of ongoing dissatisfaction that is often overlooked. This paper seeks to address this oversight by drawing comparisons between the roles played by Dublin and London in their respective economies, from a regional development perspective.

PROCESSES OF SELF-SUSTAINABLE DEVELOPMENT IN MARGINAL MOUNTAIN COMMUNITIES: A COMPARISON OF TWO CASES IN THE ITALIAN ALPS

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Living and working in the mountains is more challenging, especially in rural and marginalized areas, because of the specific physical characteristics of mountain territories.

In the Alps, many of them are currently characterised by several criticalities such as a general demographic and economic decline, remoteness from centres, increasing lack of Services of General interest and social exclusion.

Despite that, mountainous areas are often rich in natural resources and cultural values and characterized by strong and hardworking small communities that have developed their own sustainable strategy for using scarce resources and adapting to the harsh conditions in rural territories. The resilience of these communities must be encouraged and supported to preserve this heritage, enhance local economic and social development and to overcome challenges related to the natural circumstances.

The authors will present and compare the examples from two Italian Alpine communities, with different administrative and socio-economic backgrounds, that are involved in the implementation of specific bottom-up development strategies and territorial projects.

The first example refers to the Community of Val di Seren del Grappa (Municipality of Seren del Grappa), located in the Venetian Prealps in the Province of Belluno; the second one refers to the Community of Montagne (Municipality of Tre Ville), in the Autonomous Province of Trento.

Eurac Research support and monitor these actions and implementations. The two examples will be analysed to compare the methodological approaches, the interaction techniques and to highlight the differences and similarities.

The authors' aim is to foster the academic discussion on the possibilities to strengthen these innovative processes of self-sustainable development through specific territorial policies supporting associated projects and actions in the medium and long term.

THE NON-LINEAR EFFECT OF RELATEDNESS ON REGIONAL PERFORMANCE

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This paper explores the relationship between European regions' knowledge-space structure and their labour productivity over the period 2004–2015. We investigate the relationship between related variety and regional labour productivity growth, utilizing a recently developed co-occurrence-based measure of relatedness. For the first time this allows us to jointly test the effects of technological variety and relatedness on regional productivity. The evidence demonstrates that both technological relatedness and variety have a non-linear effect on regional productivity, and that these non-linear effects work in opposite directions to each other. These findings have profound implications in terms of our understanding of the evolution of regional economies and also have significant implications for the implementation of place-specific Smart Specialisation Strategies.

EXPANSION OF DOCTORAL TRAINING AND PHDS' LABOR MARKET OUTCOMES: EVIDENCE FROM GERMAN REGISTER DATA

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Similar to other countries, the number of new PhDs graduating from German universities has grown sharply in the past decades. The expansion of doctoral education coincided with major changes in German higher education, and these may have had a non-negligible impact on new PhDs' careers. We explore labor market outcomes of more than 97,000 PhDs who graduated between 1995 and 2013. Our analysis employs an original large-scale dataset that we constructed by linking dissertation and labor market data using machine learning techniques. Focusing on differences among 19 annual graduation cohorts, we find that PhDs graduating after 2000 had lower rates of full-time employment as well as lower chances to obtain high incomes. At the same time, rates of inter-regional mobility have declined, and increasing shares of new PhDs are retained in the academic sector of the labor market. Differences across cohorts are robust to disaggregation along gender and disciplinary lines and persist for at least five years after graduation. We relate these findings to increasing employment in research projects as well as in university management and administration, suggesting that universities themselves generate much of the labor market demand for the increasing numbers of PhDs they produce.

MULTISCALE AND DYNAMIC RESIDENTIAL SEGREGATION BETWEEN MIGRANTS AND ORIGIN POPULATION IN THE CHINESE CITY OF SHIJIAZHUANG

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Market reforms in China have led to greater socioeconomic segregation in Chinese cities through rising socioeconomic inequality coupled with increased residential mobility. In particular past studies have shown substantial residential segregation between migrants from rural areas, who are often poorer and face economic and institutional barriers to services, and residents who originate from the city. These studies have, however, tended to only consider one scale of segregation, have treated migrants as one homogeneous group, have not quantified the spatial distribution of migrants with regard to the centre of the city and have not addressed how segregation is changing over time. In this study we use a multilevel modelling approach to measuring segregation to address these issues. Using census data from 2000 and 2010 in the city of Shijiazhuang, our results show that migrants are substantially segregated from residents who originate from the city. This segregation is much larger at the micro scale than the macro scale, although segregation at the macro scale is increasing over time while segregation at the micro scale is remaining constant. Additionally, while migrants tend to be found in areas with other migrants generally, they are particularly likely to be located in the same areas as other migrants from their own province of origin. Furthermore migrants from certain provinces of China are substantially more segregated than migrants from other provinces. Finally we find no relationship between location of migrants and the city centre. The results show that the distribution of migrants in the city is complex and evolving and that this has implications for urban policy aimed at reducing disparities between rural migrants and the rest of the urban population.

PROJECTED EMPLOYMENT AND POPULATION CHANGE IN REGIONAL LABOUR MARKETS IN THE UK

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The “North/South” divide in rates of employment change and the occupational composition of employment are long established in the UK, with the southern regions of England emerging as most advantaged. Will these differentials continue into the future? Will regional variations become more pronounced or will there be a convergence in regional fortunes? How will employment develop over the medium-term, in terms of industry, occupation and the gender composition of employment? There are different approaches to looking at likely future trends - from quantitative projections to scenario development. Working Futures is a set of medium-term projections of the labour market which has been produced by the Warwick Institute for Employment Research in collaboration with Cambridge Econometrics every few years, disaggregated to the nations, regions and larger cities of the UK. This paper presents the main results from the latest projections for 2017 to 2027 and reflects on implications for regional economic development and associated policy domains.

TACKLING INVESTMENT-ORIENTATION IN CROSS-BORDER COOPERATION: THROUGH EXAMPLES OF TWO PROGRAMMES IN CENTRAL EUROPE

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Promotion of cross-border cooperation appears to be high in the agenda of Cohesion Policy since the 1990s, when the INTERREG Community Initiative was launched. The initiative has been widened in the

subsequent programming periods and got deeper integrated into the mainstream of Cohesion Policy: from the period 2007-2013 the objective 'territorial cooperation' has become one of the three main objectives. Parallel with that, cooperation opportunities with pre-accession countries have become wider, by integration of former pre-accession tools, the Instrument for Pre-accession (IPA) was developed. These developments were particularly important in Central Europe, where member states were neighboured with several pre-accession countries.

The paper aims to provide an in-depth yet simple approach to tackle how investment projects are funded under cross-border cooperation schemes. For introduction a short overview will be given on the changing scope and significance of cross-border cooperation within the notion of 'territorial cohesion' and the Cohesion Policy itself. Then the role of cross-border cooperation will be presented within Cohesion Policy of the investigated countries (Austria, Croatia, Hungary, Slovenia), just like the typically funded actions by the two investigated programmes. To tackle investment-orientation through implementation of hard projects, the relationship of cooperation activity and absorption of EU co-financing will be used, in order to identify which levels of the settlement structure consider cross-border cooperation as a tool for investment, through what types of beneficiary organisations and what their possible motivations might be.

PROJECTIONS OF ENERGY DEMAND IN EUROPEAN CITIES USING DOWNSCALED POPULATION SCENARIOS

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This work is an attempt to estimate future energy demand in cities based on current population projections. In Europe, the urban population is growing rapidly, and it is expected to reach 80% of the total population by 2050. This increase in urbanisation will surely shift significantly the demand for energy in cities but the real extent of this change depends on several factors determining the energy demand from the residential and transport sectors. Many of these factors, such as the urban form and the urban mobility systems, are the object of planning policies and the projected energy demand conditioned to future economic and demographic scenarios is a piece of highly relevant information for urban planners and policymakers. Starting from national-level energy density data we derived statistically downscaled energy consumption data and applied spatially explicit econometric models to reproduce population projections at the grid level for all EU member states. We then upscaled the grid-level data at the urban level using the boundaries of the Functional Urban Areas in Europe. Results suggest that the amount of energy required by cities strongly depend on their land-use patterns. This evidence poses significant challenges to the planning of future cities as it points out how the current patterns of land use will soon become unsustainable in terms of energy demand as the urban population continues to grow.

CROSS-BORDER REGIONS BETWEEN GALICIA AND ITS NEIGHBOURING TERRITORIES? EXPLORING AN EMERGING REGIONAL GEOGRAPHY

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In the last decades, much attention has been paid to the building and institutionalisation of cross-border regions. These have usually been set up by bordering territorial authorities at a regional administrative level. On the Iberian Peninsula, Spanish autonomous regions have led multiple cross-

border regions with French administrative regions and Portuguese development regions since the 1990s. A case in point is the so-called “euro-region” Galicia and Northern Portugal, created in the early 1990s as a Working Community, nowadays set as a European Grouping of Territorial Cooperation. There are exceptional cases where cross-border regions have been developed without making use of the existing politico-administrative entities at a regional level. This paper will study the configuration of new cross-border regions at a middle scale, ranging from 2 to more than 30 municipalities included in each one, in the framework of the theories on regional institutionalisation. They are quite commonly at a scale that might be labelled as a county or district in English, and ‘comarca’ in Spanish, Galician or Portuguese, but with a transboundary nature.

Galicia not only has an international Southern border with Portugal, but also an internal Eastern one, with other two Spanish autonomous regions (Asturias and Castilla y León). Interestingly, it seems that this new emerging cross-border regional geography is only affecting the Galician-Portuguese border but not the internal border with other Spanish autonomous regions. In the latter case, and although there are some experiences, there is evidence that there is a persisting division. For instance, two Biosphere Reserves have been named Ancares, one for Galicia and one for Castilla y León; the mountainous region is obviously the same, but divided amongst two autonomous regions; this situation clearly contrasts with Gerês/Xurés, an institutionalised cross-border mountainous region at a middle scale between Galicia and Portugal. The hypothesis is that the European frameworks are sustaining the creation of cross-border regions, while this does not happen in the internal borders within Spain.

TRANSPORT INFRASTRUCTURES AND MOBILITY IN METROPOLITAN AREAS OF GALICIA: FROM SPATIAL PLANNING TO THE REAL WORLD

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Galicia is an autonomous region located in the Northwest of Spain, with a traditional deficit in transport infrastructures. Since the 1970s, a great investment effort was made by the different levels of the Spanish administrations, with the purpose of recovering the lost time.

In the framework of a model based almost exclusively on the private automobile, an ambitious program of construction of high-capacity roads began, allowing Galicia to be linked to the exterior and also internally structured.

However, territorial planning in Galicia is late and has not resolved the main mobility problems of the Galician population, especially in urbanized spaces. The private car is still the most used means of transport, without a clear sustainable mobility alternative.

The Territorial Planning Guidelines of Galicia defined a territorial model in urbanized spaces at the end of the 2000-2010 decade, in which great importance was given to soft infrastructures and sustainable mobility as key spatial figures. Among the proposals to structure the most urbanized spaces were the creation of commuter railways, metropolitan eco-boulevards and modal integration of different transport systems.

However, at the end of the decade 2010-2020, the comparison between the designed scenario and reality allows demonstrating that not only has not progressed towards the proposed model, but the tendency to the dependence of the car on the urbanized spaces does not stop increasing, compromising the sustainability of the modal split and the global transport system.

THE DEMISE OF “PLACE”? ASSESSING THE COHESION POLICY PACKAGE 2021-2027

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The multilevel dimension of cohesion policy is and remains central to the multilevel governance paradigm (Méndez 2013; Bachtler and Méndez, 2007; Böhme et al. 2011; Zerbinati, 2012).

The negotiations for the 2014-2020 period were paradigmatic of the potentials, limitations, institutional inertia and resistance greater articulation of multilevel actors in Cohesion Policy: the Partnership Principle and the territorial development instruments, CLLD and ITI (Pazos Vidal 2012, 2014, 2016; Polverari and Michie 2009) and integrated territorial and strategic coherence via the Common Strategic Framework and a Common Provisions Regulation covering the EU's Regional, Cohesion, Social, Agriculture and Maritime funds. In so doing the Commission (DG REGIO) was a particularly active policy entrepreneur and dynamiser of subnational Cohesion Policy actors (e.g. Transition Regions) (Piattoni and Polverari 2016; Pazos-Vidal 2019).

However, the May 2018 proposals for the 2021-2027 period constitute a volte-face of this trend of more empowerment, partnership and coherence among the EU funds. It showed the limits of the previously successful multilevel coalitions in 2003 (AGRI and REGIO) and 2012 -Common Strategic Framework- (CPMR 2017) in the wake of stronger forces outside the EU Cohesion Policy community (Bachtler, Berkowitz et al, 2016, 110-116) while the constituencies around CP policy were resistant to change even in the face of external challenges (McCann 2015; Dotti et al 2016; Pazos-Vidal 2016; Dotti et. al 2018). The place-based rationale (Barca 2008) and integration of funds and their policy communities risk being diminished post 2020, risking the resurgence of the policy silos of the past.

This workshop provides the opportunity for a first assessment of the 2021-2027 Cohesion Policy package from the perspective of the various actors involved in Cohesion policy formulation as by June 2019 both Parliament and Council would have laid out the main lines of travel of Cohesion Policy for the next programming period.

HOW TO FOSTER THE DIGITAL TRANSFORMATION OF A MACRO-REGION: EVIDENCE FROM A MULTI-STAKEHOLDER ANALYSIS

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Aims: During the last decade, the increasing use of digital technologies has been radically transforming production, business models, and society (“digital transformation”). Let us think for instance to the Fourth Industrial Revolution, which is on the way. The goals of this paper – which is part of the Interreg Italia-Austria project A21 Digital – are: (1) to investigate the main challenges faced by a moderately innovative macro-regional eco-system in addressing the digital transformation; (2) to identify a set of actions that should be carried out by the different stakeholders to foster such a digital transformation (Triple Helix approach).

Methods/Approach: The paper adopts a qualitative research methodology. We carried out 60 semi-structured interviews to economic and institutional actors of the macro-region Tyrol-Veneto: firms, business associations, education and research centres, utilities, and local governments.

Results/Findings: Based on our empirical analyses, we identify the most important challenges in the digital transformation of the macro-region Tyrol-Veneto, and propose a set of concrete actions that should be carried out by the different stakeholders (companies, research and education centres, policy makers). These actions can be organized into four levels of interventions: infrastructure and technology; know-how and competencies; culture and organization; and institutional framework.

Implications: The proposed set of challenges and concrete actions provide managers and policy makers with a decision-making toolbox suitable to foster the digital transformation as well as give guidance to scholars for future research in this field.

URBAN AND REGIONAL PLANNING AT THE CROSS-ROAD AMONG SPATIAL TRANSFORMATION, SOCIAL INCLUSION AND ECONOMIC DEVELOPMENT. NEW APPROACHES IN THE BRUSSELS REGION

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After a long period during which top-down planning sounded anachronistic, we observe a re-route in favor of a more active role of governments in selecting the directions of regional developments. The quest for an holistic approach that leverages on planning tools to address economic and societal challenge for urban areas entails increasingly complex tasks for regional planners who are called to play a major effort in redefining their tools and shaping new urban and regional policies through the lenses of different disciplines. This paper aims to contribute to this debate by looking at Brussels region as a specific exemplar case of innovation in planning policies. Indeed, Brussels is a peculiar case of urban-sized regional entity, whose governance is structured in a wide set of agencies that recently put forward a bundle of programs pointing to manufacturing re-shoring, social resilience and circular economy objectives. These programs fit into a nuanced model of regional planning that softens the top-down approach with co-creation tools, and mitigate the conflict between short-term and long-term vision through public incentives to temporary uses of productive spaces. Furthermore, these urban regeneration and planning policies and tools tried to answer the call for envisioning and make space for manufacturing activities, taking in account the specific needs of co-habitation of the urban with the productive areas.

In this regard, the paper focuses on the renewed interest in getting manufacturing back in the city by attracting small-scale maker-entrepreneurs who, according to the suggestions of the so-called “Maker Movement”, will reinvigorate production economies of urban areas cities. Indeed, “new urban manufacturing” is seen as a chance to create new job posts, enhance social inclusion of differently skilled workers, improve urban metabolisms by shortening of consumption and supply chains, and eventually enable cities’ economies to be more resilient from external shocks. These new perspectives call for preparedness to “envision and make” space for new digital manufacturing plants in transformed neighbors. On such basis, the Brussels region supports the emergence of place-based makers through a pilot planning tool centered on the mixed-use of previously abandoned sites aimed at favoring functional and economic diversification (ZEMU – “Zone d’Entreprises en Milieu Urbain”) while avoiding an abrupt eviction of existing activities through a structured set of incentives to temporary uses of abandoned buildings.

A second aspect we deal with is the innovative use of European structural funds FEDER made by Brussels Region to implement urban regeneration projects and enhance socio-economic reactivation processes of the urban milieu at the regional scale. This planning practice grounds on a horizontal coordination mechanism lead by universities and research centers, which entails the design of an ex-ante top-down strategy. Meanwhile, it relies on a bottom-up approach based on co-creation for implementing the projects and establishing new networks.

At the empirical level these research questions on the role of regional planning in promoting socio-economic development in urban areas under transformation are addressed by looking at three urban

districts where these urban planning tools and policies are currently in place. Methodology is mixed, grounding on both quantitative-based evidence stemming from input-output tables and balance sheets data, and qualitative evidence based on a set of interviews conducted with relevant actors of these urban changes: planners, entrepreneurs, researchers, and social actors.

ACHIEVEMENTS AND FAILURES OF THE EUROPEAN COHESION POLICY: A LONG TERM ASSESSMENT

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European regional policy (ERP) aims to reduce economic and social disparities between territories and stimulate growth in areas lagging behind. But does the ERP really work? Many studies have tried to give an answer, but the estimate of the impact remains controversial. The main reason for the uncertainty is the strong heterogeneity of the effects of politics, which is reflected in the difference in the impact among regions. On the basis of recent literature, the paper analyzes three of the main causes of this heterogeneity: the different intensity of the financial support received; the differences in the institutional and managerial capacities of the local authorities; the effects of spillover (ie spatial interaction) between neighboring regions. Moreover, the impact of place-based policies has often been estimated in periods of economic expansion, and studies on the effects of place-based policies in times of crisis are still rare. We present some evidence with respect the regions of Southern Italy, suggesting that the observed increase in regional inequalities in Italy during the Great Recession is not due to the ineffectiveness of place-based policies, but rather to the reduction of public funds to the least developed regions that in times of economic crisis need more rather than less public support.

OIL EXTRACTION AND LOCAL DEVELOPMENT: EVIDENCE FROM BASILICATA

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Natural resources have always been considered as a strategic element for the location of towns and the development of their economies. Recently, however, economic literature has highlighted that the effect the abundance of natural resources has on growth is even negative. The aim of this paper is to estimate the impact of mining activities in Basilicata as a catalyst for new businesses. Through a methodology of Geographic Regression Discontinuity Design, the spatial variation of the number of companies in Lucania's municipalities has been analyzed and it has been estimated that the oil would increase the presence of about 0.01 firms per inhabitant over the whole area where royalties have side effects. By using a difference-in-discontinuities approach, the significance and the estimate of this result is maintained.

REGIONAL PROFILES IN EU RURAL AREAS BASED ON SOCIOECONOMIC AND DEMOGRAPHIC INDICATORS

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Boyan Kavalov

Ricardo Barranco

European rural areas are very diverse in terms of physical, socio-economic, demographic and environmental factors. They have also been undergoing significant changes in the last decades due to exogenous (e.g. globalization, EU's Common Agriculture Policy, demographic trends, deployment of transport infrastructure) and endogenous processes (e.g. intensification of agricultural production,

abandonment of marginal lands, rural-urban migration, urban development). Even more changes can be expected in the future because of policy reforms, climate change and socio-economic developments.

Given the ongoing transformation of rural areas and rural challenges, an assessment of the future of Europe's rural areas and rural policies is called for. However, rural areas and rural policies often have complex interactions with society, economy and ecology as a whole, so that any assessment should include much more than just the rural sector. Specifically for such integrated framework, the LUISA Territorial modelling platform of the European Commissions' Joint Research Centre (JRC) is used. That platform is able to transform independent macro-economic projection from different sectors (agriculture, demography, economic, energy, etc.) into indicators that can be used as key elements for assessing regional and local impacts.

This work presents an overview of a LUISA study on the situation of EU regions from a socio-economic and demographic point of view, with special emphasis on rural areas. For this exercise a set of indicators were developed in order to better understand future spatial patterns and trends in rural regions, namely: rural-urban population, agricultural production systems, agricultural land abandonment, employment and GVA (Gross Value Added) in the primary sector. Subsequently these indicators were combined using spatial clustering techniques, which in turn sketched distinct socioeconomic and rural-related profiles, allowing for comparability (similarities/disparities) amongst countries and regions.

IN-BETWEEN | ZWISCHENSTADT: SOCIO-NATURAL TRANSFORMATIONS IN A ERA OF PLANETARY URBANISATION

Camilla Perrone, University of Florence, Italy

Thomas Sieverts in his masterpiece *Cities Without Cities (Zwischenstadt)* offers a lucid glimpse into the complexity of post-urbanised landscapes. Specific attention is given to the societal relationships with nature. Urban planning's singular trust in the creative potential of the built environment is replaced by a free-falling entry into the world of urban - nature dialectics.

This contribution digs into the word in-between to trouble the traditional urban/rural and society/nature distinctions as spatial, conceptual, and disciplinary boundaries. The current debate on Urban Political Ecology (UPE), not of the city but of urbanization, offers some thoughts to work across traditional disciplinary divisions and retheorize the city as a product of metabolic processes of socationatural transformation in a era of planetary urbanisation.

ADMINISTRATIVE EFFICIENCY AS A MODERATOR FOR THE EFFECTIVENESS OF STRUCTURAL FUNDS: EVIDENCE FROM GREECE

George Petrakos, University of Thessaly, Greece

Dimitris Kallioras, University of Thessaly, Greece

Vassilis Monastiriotis, The London School of Economics and Political Science, UK

Maria Tsiapa, University of Thessaly, Greece

EU has devoted a significant amount of structural funds in order to boost economic growth, as an active form of solidarity, and in the light of the goal of creating conditions of optimum economic space. On the completion of a 30-year period from the actual operation of Cohesion Policy, nuanced questions on the conditions that shape the (diversity of) impacts that the latter can bring about in the EU regions are brought to forefront. Particularly, it appears timely to address questions such as "what

works”, “for whom”, and “where”. This is particularly true for Greece, the country that benefited the most, in relative terms, from the EU structural funds, within the context of Cohesion Policy, and yet remains still in a, rather, backward economic situation. Taking stock from the research on the regional growth impact of the EU structural funds, the paper introduces the parameter of administrative efficiency as the ratio of the cumulative to the total payments. Treating the administrative efficiency as a moderator for the effectiveness of structural funds, the paper provides clear-cut empirical evidence for the Greek case (NUTS III regions). The paper, studying the Programming Periods 2000-2006, 2007-2013, and 2014-2020, and performing a 2-stages least squares (2SLS) analysis, detects the determinants of administrative efficiency, and investigates whether and how administrative efficiency, in its turn, affects regional growth. The analysis utilizes payments data, obtained from the Hellenic Ministry of Finance, broken down into seven thematic categories (i.e. research and technology; entrepreneurship; human capital and social care; environment; transport; administration; and technical support). The findings of the paper may single out a set of high-level policy implications, with respect to capacities of the Greek governmental authorities to engage in the appropriate kinds of design, implementation and evaluation of regional policies and the, overall, utilization of structural funds.

EMPOWERING DUTCH REGIONAL ENERGY STRATEGIES: ENERGY JUSTICE AS A GUIDELINE TO REVIEW RENEWABLE ENERGY LOCATIONS

Ruben Peuchen, TNO, The Netherlands
Lieke Dreijerink, TNO, The Netherlands
Koen Straver, TNO, The Netherlands

The Dutch government has decided to re-introduce regions as a decision-making level for the national CO₂ reduction and renewable energy production targets. In the so-called Regional Energy Strategy (RES) renewable energy goals from different municipalities will be gathered and aggregated. In forming these strategies, decentralized governments will collaborate with societal stakeholders, grid operators, the industry. Hereby the region is acknowledged as an arena to reach sustainable energy goals, and stimulate cooperation and inclusion. Public participation is one of the mandatory aspects in the process of the RES.

Obvious solutions to reach renewable energy goals will be large onshore wind- and solar parks. In our current research of policy and public participation surrounding solar parks, using desk research and interviews, we found that although there seems to be a shift towards more de-centralized design and policies, the public participation process has a limited to level of community involvement. In addition, an Energy Justice framework (Mundaca et al. 2018) is used to analyze the RES for stakeholders and the community. Besides the objectivity, timing, and adequacy of the information flow towards a community, and the distribution of the costs and benefits amongst stakeholders, ‘recognition of a community’ is a decisive factor to be addressed by decisionmakers in order to develop just policies (McCauley et al. 2013).

Next to these energy justice factors, we will identify a number of additional psychological, demographic and good governance factors, to assess the Dutch energy landscape. Many of these factors are at the moment underexposed in the regional energy analysis maps provided by a nationally coordinated program. Our research sets out to quantify a selection of regions on these factors. Furthermore we will review the set up and process of the RES, and the influence of the RES on the specific region.

SOCIALLY-INNOVATIVE ENERGY PROJECTS IN PERIPHERAL REGIONS

Stefan Philipp, ZSI - Centre for Social Innovation, Austria

Johannes Suitner, University of Technology Vienna, Austria

The presentation will feature the main results of the PLAISIR project (www.plaisir.at), which studied socially-innovative (SI) energy project in structurally weak regions in Austria. The project builds on the assumption that energy transition cannot be achieved with technological innovations alone and therefore focuses on social processes in order to inform regional development policy to better support these initiatives. Based on an international comparison of SI-projects, the regional institutional and policy framework conditions and development paths are scrutinised. Based on these in-depth understanding of regional institutional settings and paths, four SI project have been studied in-depth, deploying an innovation biography approach. These examples discuss the ideas, actors, drivers and barrier of these project over and give valuable insights for future projects and policy frameworks. The projects cover educational initiatives, financing models, the development of a cogeneration plant for heat and electricity in a difficult setting and subsequent creation of a regional one-stop-shop for energy solutions. The findings show a multi-level bricolage of institutional actors and regional initiatives, that if working together in a bottom-linked format, can initiate, plan and realise SI energy project in difficult environments. The role regional actors link the management of regional climate and energy model regions, an Austrian programme supporting energy transition, as well as the LEADER as central players with sectoral knowledge and local networks proved to be crucial. Further, these regions turned location-disadvantages into opportunities and created new economic paths within the regional context.

FINANCIALISING CITY STATECRAFT

Andy Pike, Newcastle University, UK

Recognition has grown of local states as arenas and agents for financialisation: embroiled in a recursive process in which they are actively financialising and being financialised in their relations with other actors in socially and spatially uneven ways. This contribution seeks to explain why, how, with whom, and where financialisation has moved on in certain places and spatial, temporal and institutional settings while in others it has been constrained and limited. A conception of statecraft at the city level is articulated to remedy accounts where the idea is invoked but not specified. Informed by a multi-actor and multi-scalar framework, city statecraft is defined as the art of government and management of state affairs and relations at the national and local levels within cities, in centre-local relations, and with other para-state and non-state actors in the private sector. Building upon characterisations of 'asset price', 'entrepreneurial', 'financialised' or 'managerial' urban governance, this formulation tries to support conceptualisation and theorisation of forms of city statecraft more capable of grasping and explaining the mixing, co-existing, and mutating ways in which financialisation is ensnaring city governments in the current conjuncture in certain spatial, temporal and institutional settings. A wider contribution is sought towards more grounded, measured and balanced conceptions of 'financialisation-in-motion' that recognise its social, spatial and institutional constitution, unevenness, implications, and limits.

ELECTORAL POLITICS, FIRM-LEVEL CORRUPTION AND PERFORMANCE: EVIDENCE FROM TURKISH REGIONS

Mehmet Pinar, Edge Hill University, UK
Pinar Deniz, Marmara University, Turkey
Can Karahasan, Piri Reis University, Turkey

There has been an extensive set of literature that examines the relationship between firm-level bribery and performance. One stream of literature argues that bribery harms the economic performance of firms. Whereas, another stream of literature argues that firms can speed up the bureaucratic procedure by bribing and that the bribery contributes positively to the performance of firms. Even though some of the determinants of the bribery is examined such as the perceived bureaucratic and legal obstacles, and the quality of public provision of goods, there is no study examining the effect of the role of electoral politics (i.e., political competition, political distance between regional and central ruling parties) on the bribery practices of firms. To examine the role of electoral politics on the bribery practice of firms, we use the firm-level data from Turkish regions as Turkey is considered to have a low bureaucratic capacity and high political volatility. We find that there are lower levels of bribery in electorally competitive regions compared to the regions where electoral competition is low. We also find that bribery harms economic performance of firms after controlling for the standard region- and firm-specific characteristics. The findings of this paper suggests that there are higher levels of rent-seeking activities in regions where there is less of electoral competition and that electoral politics plays an indirect role in firm performance. Central government could increase the auditing practices in electorally less competitive regions where the ruling party has had the political power over a longer period to eliminate bribery practices, which would increase the firm performance and also eliminate the regional inequality across Turkish regions.

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MORE INFRASTRUCTURE AND FEWER BOATS. EUROPEAN FISHERIES POLICY AND THE ARTIFICIALISATION OF THE COAST IN GALICIA REGION (SPAIN)

Angeles Piñeiro-Antelo, University of Santiago de Compostela, Spain

María José Piñeira-Mantiñán, University of Santiago de Compostela, Spain

In a context of crisis for fishing activity in Spain -with its profound socioeconomic implications in coastal communities that are highly dependent on fishing-, there has been a notable increase in the facilities and equipment of the ports that provide services to this venture in recent decades. This paper examines the relationships between fishing production and investment in port infrastructures, with special attention paid to the situation of two ports in Galicia (Spain). By analysing the artificialisation of the coast and the changes in land uses through a Geographic Information system (GIS) over a period of 30 years, we deepen the relationship between the activity of auction ports and the evolution of the surface and port facilities. The objective is to evaluate the role of the European fisheries policy - through successive financial instruments- in the process of expansion of port infrastructures and the consequent artificialisation of the coast. The results of this work reveal significant port growth in a context of overexploitation of resources and a contraction of the size of the fishing fleet. The authors underscore the need, on the one hand, of a master plan to orient investment in fishing ports on a regional scale, and port planning instruments to harmonise services with the relative specialisation of each port, on the other.

MAPPING CULTURAL AND CREATIVE INDUSTRY CLUSTERS IN A WORLD HERITAGE SITE: A RELATIONAL APPROACH

Athena Piterou, University of Greenwich, UK

Jin Hooi Chan, University of Greenwich, UK

Intan Hashim, Universiti Sains Malaysia, Malaysia

Suet Leng Khoo, Universiti Sains Malaysia, Malaysia

Hooi Hooi Lean, Universiti Sains Malaysia, Malaysia

This study focuses on the development of a cultural and creative industry cluster in the city of George Town, Penang, Malaysia. Since George Town was awarded World Heritage Status in 2008, there has been an increase in cultural/creative ventures, activities and projects. The city is characterised by its rich, multicultural heritage which includes both architectural and non-tangible heritage embedded in traditional crafts, oral history and the lived experience of the residents.

Besides this rich tradition, new initiatives developed by young cultural entrepreneurs, artists and policy-makers aim to position George Town as a cultural hub and enhance its attractiveness as a tourist destination. The study is positioned within the discourse regarding creative cities, cultural and creative clusters (cultural districts) with a geographical focus on South East Asia.

The paper applies a relational approach to study the development of George Town's creative and cultural cluster using Social Network Analysis Methodology (SNA). The relational approach shifts the focus from the characteristics of individual actors to their connections with others since social embeddedness is a fundamental aspect of cluster development. Data were collected from 115 organisations from different creative sub-sectors. Attribute data on the participant organisations were collected (such as subsector, age, size). The survey also examined the organisations' entrepreneurial orientation based on constructs such as innovativeness, proactiveness and risk taking. The organisations' social networks resulting from different relations such as collaboration in projects, funding flows, advice exchange are visualised. The network structure indicates local clustering. Analysis of the network structure for each relation identifies organisations with the potential to act as intermediaries in the cultural cluster. Metrics regarding network cohesion and

heterogeneity indicate how social networks can support different forms of innovation. Further analysis examines to what extent the organisations' network position affects their entrepreneurial orientation.

PRODUCING REGIONAL KNOWLEDGE: THE RISE, FALL, AND RETURN OF REGIONAL GOVERNANCE IN CHICAGOLAND, 1957-2018

Donald Planey, University of Illinois, Urbana-Champaign, USA

The Chicago region is often described as hopelessly fractured: Split between 1,800 municipalities and across three states, the geography and planning literature holds it up as a paradigmatic example of the structural constraints on regional governance in the USA. This narrative misses the endogenous sources of regional planning's resilience in metropolitan Chicago from the postwar period through today. This paper draws on extensive archival data from the Northeastern Illinois Planning Commission (NIPC) and the City of Chicago to document the NIPC's accomplishments in the 1960s and 1970s in the areas of water infrastructure, housing density, zoning, and perhaps most importantly, the spread of 'planning culture' across Chicagoland's municipal and county governments. This would set the stage for a resurgence of Chicagoland regional coordination projects in the 2010, even after the NIPC's federal support collapsed in 1978. I argue that the 'Chicagoland' project indicates a need for the reassessment of the theoretical framing of U.S. regional planning in the geographic and planning literature. Firstly, while the U.S. context creates structural limits to regional planning, there are strategies for regional coordination that can work around, or even take advantage of, the U.S. federal structure. Secondly, some policy programs or regionalist projects in today's Chicagoland regionalism, which are usually assumed to be downstream from Federal policy or uniquely modern globalization challenges, instead represent historically continuous projects of cultural import to the Chicago region's political and economic elites.

POVERTY AT A LOCAL LEVEL: COMPARATIVE ANALYSIS BETWEEN SPAIN AND THE UK

Maria Plotnikova, Aberystwyth University, UK

Diana Gutierrez-Posada, University of Birmingham, UK

This study is part of work carried out in Horizon 2020 funded Integrative Mechanisms for Addressing Spatial Justice in Europe (IMAJINE) project. Studying spatial inequalities in Europe at local level is one of the aims of the project. In this paper we aim to provide additional evidence on the spatial distribution of income and the characterisation of poverty at the local level for Spain and the UK. To accomplish this, we use the estimations of local income and the AROPE rate in 2011 computed in the IMAJINE project along with data from the national censuses of the countries considered. Methodologically, our objective is to explain local poverty by means of the Foster-Grier-Thorbecke indexes (Foster et al., 1984). With these tools we try to characterise the incidence, intensity and inequality of poverty (Jenkins and Lambert, 1997). Furthermore, the geographically weighted regressions (GWR) approach (Brunsdon et al., 1996 and 1998) is used to provide additional insights on the heterogeneous spatial effects of the explanatory variables such as the employment rate, age profile, population density, distance to the main urban areas. Preliminary results show that the more detailed spatial depiction of the processes at work brings out local clusters of poverty that had remained hidden or inadequately portrayed due to the averaging effect produced when larger units are considered.

REGIONAL SOCIOECONOMIC DEVELOPMENT AND ADOLESCENT FERTILITY: THE CASE OF LITHUANIA

Gintare Pociute-Sereikiene, Lithuanian Social Research Centre, Lithuania

Vaida Tretjakova, Lithuanian Social Centre, Lithuania

Rūta Ubarevičienė, Lithuanian Social Centre, Lithuania

Lina Šumskaitė, Lithuanian Social Centre, Lithuania

Lithuania is one of the countries that has a relatively high level of adolescent fertility. Despite the fact that adolescent fertility rate (AFR) has decreased in the last decades, this indicator in Lithuania is still around three times higher than in Scandinavian countries and two times higher compared to Western European countries.

According to worldwide analysis (United Nations, 2013), higher levels of adolescent fertility are characteristic of developing and poor countries. In those cases when high AFR is observed in developed regions, research links it to social and economic inequalities within countries (Santelli et al. 2017) and inadequate sexual education. Therefore, probable determinants of high AFR hide inside Lithuania: it might be the gap in sexual education or influenced by unequal socio-spatial development of the country. In this presentation we leave the topic of sexual education aside and focus our attention on the socioeconomic environment of the country. Our findings show that AFR is significantly higher in less developed peripheral rural regions and lower in the municipalities of major cities.

The object of this presentation is to look into the association of adolescent fertility rate and a number of different demographic and socioeconomic indicators. Based on the findings of the correlation analysis we intend to answer the question of how much of the spatial differentiation of adolescent fertility rate can be explained by macro level regional socioeconomic disadvantage.

The presentation introduces the geographical component of the research project "Spatial differentiation of adolescent fertility in Lithuania: socioeconomic environment, the role of sexual education and individual experiences" (financed by the Lithuanian Research Council, contract No. S-MIP-17-115).

PARTICIPATION IN RURAL DEVELOPMENT – THE VIEW OF NON-PARTICIPANTS

Kim Pollermann, Thünen-Institute of Rural Studies, Germany

To address the challenges in rural areas the support for rural development with participatory approaches has a long tradition in EU funding programmes. One corresponding instrument is LEADER/CLLD, which is a place-based, participatory approach to bring together public, private and civil society organisations. Within LEADER the different stakeholders come together in a Local Action Group (LAG) as a type of a public-private partnership. Those groups collaborate on the basis of an integrated local development strategy (LDS) and administer own budgets to support projects.

Although there are usually broad participation opportunities, some observations in literature mention problems like that only the "usual suspects" (age over 40, higher education, male) get involved in such participations.

It is a well established instrument to ask the participants of such processes about their view of the cooperation within their LEADER decision making body to examine their satisfaction with decision making procedures or their estimations about the output quality. But for some research questions an external view would be more appropriate. Thus, this contribution brings into focus the estimations of non-participants to examine their opinions about possibilities for participation or the legitimacy of decision-making within LEADER-processes.

To collect this information an online-survey is used. Therefore, in eight LEADER-Regions about 50-100 non-participants (per region) got e-mail invitations for this survey in four different federal states in Germany. The “non-participants” were defined as persons who are neither members of the decision making body nor beneficiaries of the LEADER-projects. Respondents come from municipalities as well as from different associations of the civil society.

This presentation contains preliminary results concerning the external views of the work of LEADER to gain insights about the possibilities of participation and possible obstacles to participate.

FROM SMART GROWTH TO SMARTER EUROPE: LEARNING FROM SMART SPECIALISATION IMPLEMENTATION

Laura Polverari, European Policies Research Centre, University of Strathclyde, UK
Viktoriya Dozhdeva, European Policies Research Centre, University of Strathclyde, UK

In line with the growing focus of EU objectives on innovation-driven competitiveness, recent Cohesion policy reforms have led to stronger concentration of resources on ‘smart growth’ priorities, including through increased ESIF allocations to R&I, ICT and SME support. Smart Specialisation, introduced as a new strategic approach for 2014-20 Cohesion policy programmes, is seen as key for helping regions tap their innovation potential, strengthen competitiveness and unleash smart growth. Commission proposals for post-2020 Cohesion policy suggest building further on the Smart Specialisation approach as a basis for R&I investment under ESIF, Smart Specialisation Strategies (S3s) seen as a cornerstone to the ‘Smarter Europe’ goals. At the same time, EU-level data shows that the S3s being a prerequisite for receiving ERDF funding, the take-up of this new approach remains diversified. Some regions have engaged with the approach more successfully than others, and innovation excellence in the EU continues to remain highly concentrated in a limited number of regions. The process of designing Smart Specialisation Strategies had often been complex and implementation remains characterised by a number of challenges. Against this background, our paper provides an overview of the state of play with the implementation of the S3s in 18 national and regional authorities from 15 different Member States, and takes stock of key implementation challenges, first outcomes and lessons learnt.

REGIONAL RESILIENCE AND DISCONTENT IN THE EU

Nicola Pontarollo, JRC, European Commission, Italy
Chiara Ferrante, Sapienza University of Rome, Italy
Marco Colagrossi, Joint Research Centre, European Commission, Italy

The effects of the Great Recession have been unevenly distributed across European regions. While some promptly reacted to the shock, others were not able to restore their growth path. Such dynamics contributed in generating feelings of discontent across Europe, particularly in those places that experienced a stronger decline. This resentment toward institutions and traditional parties is now shaping a new political geography, being the expression of people’s attitude in the territories.

In this article, we contribute to the understanding of the drivers behind the increasing support for populist parties. We assess whether different degrees of economic resilience to the economic and financial crisis played a role in shaping the voting behavior. To this end, we explore two dimensions of economic resilience. We begin by considering the classical approach, which takes a dynamic perspective on few key variables such as (un)employment and GDP per capita. We then move towards a more comprehensive framework, following an evolutionary approach. This acknowledges that regions are characterized by an inner complexity, where multiple actors such as firms, institutions, and workers interplay with each other and establish relationships with the external world. To proxy

these dimensions we examine, among others, sectorial variety, network capacity and institutional quality. To carry out our analysis, we use a novel dataset on voting behaviour at NUTS-2 level covering the whole EU-28 over the period 2000-2018. Through the understanding of the different reactions to the crisis, we clarify the determinants of populist support, and deliver important insights to shape effective policy responses.

SPATIAL PROXIMITY TO CULTURAL FACILITIES OF EUROPEAN CITIZENS: A METHODOLOGICAL FRAMEWORK

Nicola Pontarollo, JRC, European Commission, Italy

Valentina Alberti, JRC, European Commission, Italy

Valentina Montalto, JRC, European Commission, Italy

Francesco Panella, JRC, European Commission, Italy

In a context of growing social inequalities, the role of culture is more important than ever to bridge socio-economic gaps. Eurostat data shows that cultural participation rate is higher in urban areas, however, almost one third (31%) of Europeans living in cities do not participate at all in cultural activities. From a geographical perspective, the number of cultural venues, their spatial configuration across Europe, and their distribution within urban areas, can be seen as a basic proxy to measure arts and culture accessibility.

Spatial proximity indeed represents? a meaningful measure of local provision which interacts with other factors to provide information on enabling resources or “opportunity structures”. Drawing on these considerations, the objective of our paper is to develop an “Inequality in Cultural Proximity Index” (ICPI) capable of providing an initial layer to explore inequality in culture accessibility opportunities in 191 European cities.

We proceed by steps. The first consists in collecting information on cultural venues, which is done using data from TripAdvisor and Facebook. In the second step we create a distance matrix relating each population grid cell to the cultural venues. In the last step, we calculate the ICPI. This includes the creation of a table with the population count per grid cell and the culture proximity index for the whole grid. The records are then sorted in ascending order of proximity and, finally, we calculate the ICPI using the same formula of the Gini index. The ICPI calculated for each city will allow us to compare the absolute number of cultural venues with the degree of inequality in their proximity.

This raw index aims at building a first comprehensive, Europe-wide approach relating georeferenced data on cultural venues to population distribution in European cities. The study may lay the foundations for further analysis, support the debate on the policy implications of spatial inequality and access to culture, and provide inputs for sustainable urban planning and design.

THE THERMODYNAMICS OF RIS

Igone Porto Gomez, Deusto University, Spain

What: The objective of this work is to suggest a closed thermodynamic approach to the explanation of relationships between the subsystems that shape a Regional Innovation System. Therefore, we suggest a better understanding of Entropy (disorder) and Enthalpy (order) concepts and a proposal of how these terms would arise in the Innovation Systems Literature.

Why: Regional Innovation Systems do not behave always in the same way although having the same stakeholders. That’s where questions such as “What kind of relationships takes place among these

players?” or “Which are the external conditions so that successful relationships occur” appear. In the state of the art, we find several references which employed Entropy and Enthalpy without heavily explain how these terms appear and which variables should be consider if proposing a thermodynamic approach. Why is it interesting this kind of perspective? Energy principles have been found to be useful and interesting so as to provide explanation for economic systems (Jaber, 2006).

Where: In order to propose and validate this approach, we first make a review of the different thermodynamic terms employed in different economic samples exposed in the literature. After, we suggest an approximation to the Basque Country which has been for long considered a successful RIS, and we compare this case with other possible cases.

PLACE-BASED, NONPROFIT, AND CIVIC LEADERSHIPS IN EU COHESION POLICY

Oto Potluka, CEPS, University of Basel, Switzerland

The research interest in place-based leadership in regional development has been omitting the role of civic engagement and nonprofit leadership. It concerned mainly the leadership of politicians and public administration servants. Currently, it moves towards a collective place-based approach, including informal place-based leadership in which civic engagement and nonprofit organizations (NPOs) play an important role.

The paper reacts to this development and provides the readership with a comparison of three approaches to place-based leadership. It aims to answer the research question what type of networks in EU Cohesion Policy do successfully lead to local development and in what societal circumstances. In the first approach, the political systems define the formal roles of stakeholders, including NPOs and participation of individuals in policy-making. The second view concerns partnership that might be both formal and informal. It represents a structured place-based leadership because it involves cooperation between the public sector and NPOs at the organizational level. The third approach represents voluntary civic engagement in place development in which informal networks and activities play a crucial role.

We study the examples of policies aiming at urban development in which various types of cooperation appear. These policies define requirements of the partnership between public administration and NPOs on the institutional level, and cooperation between public administration and individual stakeholders as well. We study these policies in various countries to compare circumstances for its successful implementation.

Our paper discusses the successes and failures of the formal and informal place-based leadership and their variations in the EU Cohesion Policy. The three concepts as mentioned above do not stay isolated one from others, but they do interact. While the partnership is more structured and organized due to cooperation at the organizational level, civic engagement at an individual level lacks such official structures.

A CHEQUERBOARD FRONTIER: HOW CHINA IS REMAKING THE SPATIAL ECONOMY OF FRESH FRUIT PRODUCTION IN MAINLAND SOUTHEAST ASIA

Bill Pritchard, The University of Sydney, Australia

Koji Kubo, IDE-JETRO, Japan

Aye Sandar Phyö, University of Sydney, Australia

China is the world's second largest importer of fresh fruit, and the countries of mainland Southeast Asia are major suppliers in this trade. The organisation and regional development ramifications of the value chains connecting sites of fruit production in mainland Southeast Asia with supply channels in China have, however, elicited surprisingly little research attention. This paper makes conceptual and empirical contributions to this lacuna. It asks what 'selling to China' means for the mobilisation of value chains and the capture of value within producer regions, and then illustrates these themes through a case study of China-destined melon value chains in Sagaing Division, northern Myanmar. China's melon imports from Sagaing have grown from zero to 800,000 tonnes in the space of a decade, yet because official trade statistics do not accurately report this trade, it has largely escaped purview from the outside world. Field research conducted by the authors reveals that melon production in Sagaing is incorporated into the orbit of Chinese demand through a chequerboard of different value chain modalities that contribute to significant regional income gains that are spread across a large range of industry participants. However, these chains also generate dependencies and vulnerabilities for the region, including barriers to value chain upgrading and substantial negative environmental externalities in the form of water extraction and plastic pollution. As China's demand for fresh fruit imposes ever-larger footprints on agricultural production regions in mainland Southeast Asia, their futures will increasingly be framed by the benefits and costs of being incorporated into China-centric value chains, making the lessons from the Myanmar melon case speak loudly to an important regional development agenda.

GENDER AND REGIONAL STUDIES: METHODOLOGICAL AND PRACTICAL CONSIDERATIONS

Rhiannon Pugh, Örebro University, Sweden

In this article we consider the methodological and emotional implications of gender imbalance based on our lived experiences "in the field" as women researching regional economic development. Specifically, we present four issues we face in carrying out qualitative research within the regional studies field, and consider how gender dynamics and issues impact on our methodological approaches, data collection, and potentially thus on our research findings. We discuss the following issues in terms of the implications they may have for our own research but also for the wider field as a whole:

- gender imbalanced networks at the regional level, and implications for snowballing methods
- power imbalances between the (usually male) "researched" and the (in our case- female) researcher
- ease of access to and responsiveness of participants based on gender
- lack of female leadership on both the regional governance and academic side

These themes emerged in a "bottom up" manner through our conversations about our research as issues that may be impacted or somehow related to gender issues and our positionality as young female researchers. This paper is inspired by feminist practices of collective writing (Mountz et al., 2015; Fem-Mentee Collective: et al., 2017; Wright et al., 2017) and is the result of a dialogue between two early career women who use writing and talking, and sharing our experiences and feelings as a way of processing the realities we face, and also considering the implications of these (gendered) realities on our research practice and findings. We draw on the discussion of gender within regional studies (Forsberg and Stenbacka, 2018; Hanson and Blake, 2009; von Berlepsch et al., 2019) to unite

this broader consideration of gender as a key factor in understanding regional economic development, with the more micro level issues we face as women researchers “in the field”.

INNOVATION POLICY AND PERIPHERAL REGIONS: A RESEARCH FRAMEWORK ENCOMPASSING ECONOMIC, ENVIRONMENTAL, CULTURAL, AND GEO-POLITICAL PERSPECTIVES

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This paper presents a theoretical contribution by assessing the current state of the art and proposing a future research agenda regarding innovation policy in a particular sub-set of regions that are somewhat enigmatic and under-explored to date: peripheries. Whilst we have a strong knowledge bank about regional innovation policy in various settings, a lacuna remains when we consider peripheries, and especially those extreme peripheries which are hard to access and far from the political, cultural, and economic centres of gravity. Meanwhile, innovation policy is widely touted as a valuable tool in addressing economic development challenges and inequalities, and is a focus area for national and regional governments worldwide. However, research pertaining to innovation policy and innovation in peripheral regions to date has been focussed overwhelmingly on the economic dimensions of innovation, and firm level innovation as a driver of economic development. This paper increasingly, the conceptual frame of innovation policy and governance is being expanded to encompass issues beyond the purely economic, integrating environmental and societal challenges. However, because of a lack of research into innovation policy and governance dynamics and practices in peripheries, we have limited knowledge about the potential and means through which it can be harnessed to meet the complex needs and challenges of such places. As such, the purpose of this paper is to pull together the various contributions that do exist regarding innovation in peripheral regions, and specifically the policy and governance pertaining therein, and also to consider what the term periphery means when we talk about innovation and economic development. As such, it identifies a number of gaps that need to be filled if we are to conduct better research, and help create better policy regarding innovation in peripheral regions. In addition to narrowly defined innovation for economic growth, this paper considers how innovation policy can be harnessed to address the profound social, demographic, environmental, and cultural challenges facing contemporary peripheries. This paper presents a framework for the study of peripheries along four lines: economic, environmental, cultural (including race and gender), and political, which will help to fill the gaps in our knowledge about the functioning and potential of innovation policy to meet the complex needs and challenges in peripheral regions.

REGIONAL PLANNING CULTURES IN AUSTRIA AND FINLAND

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This paper addresses practices of regional planning and regional governance in Austria and Finland. In Austria, regions – if understood as the federal states – have a traditionally strong and independent position. The situation is less clear in Finland, where regions stand awkwardly between the strong central and municipal administration. As a result, discussions about reforming regional governance are ongoing and expected to result in more independent and politically autonomous Finnish regions. The legal and administrative framework alone, however, cannot explain the practices of regional planning observed in Austria and Finland. In order to understand these practices, this article turns to the concept of planning cultures (Knieling & Othengrafen, 2015). We understand planning culture as “dynamic institutional configurations generated in specific contexts, where the values and perceptive patterns of actors come together to influence actions” (Reimer & Blotevogel, 2012, p. 13). Based on

extensive interview data from both countries, this paper puts a spotlight on regional planning cultures and suggests distinguishing between two distinct meanings of the term. On the one hand, we are interested in the cultures of regional planning, i.e. the question what aspects of planning are addressed at the regional scale. On the other hand, we investigate the planning cultures in regions, i.e. the question how planning practice unfolds in a regionally specific manner within the two countries. Both perspectives are necessary to reveal differences regarding regional governance, to understand changes related to regional planning practices and to explain the diverse effects of external influences, such as EU Regional and Cohesion Policy.

SUCCESSFUL DIVERSIFICATIONS: IMPLICATIONS FOR REFINING SMART SPECIALISATION: STRATEGIES IN LESS DEVELOPED REGIONS

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The objective of the paper is to identify regions that have managed to successfully diversify their economic structure to generate growth over the time period 1931 to 2000. The cases are Polish counties, and growth is proxied by tax income measures. It is anticipated that insights into the long-term evolutionary patterns of economic diversification provide an avenue to further refine smart specialisation strategies in less developed regions. We identified the positive and significant role of both the related diversity in 1931 and related diversification over seven decades on income growth. Then, we identified 40 poor counties in 1931 that gained the highest growth rates over the period and analysed both the settings and industries responsible for growth. While the results confirm some of the general theories concerning the positive impact of related diversification on economic growth, they also call in question the general belief that the process of evolution always follows the predetermined path from related to unrelated diversification; the present investigation suggests that it can also work the other way around pending on initial condition, the spatial proximity to other, perhaps more developed economic spaces, etc. These are important findings and given that studies in Evolutionary Economic Geography rarely focus on less developed regions and extent timeframe over seven decades, these results provide unique insights into the evolution of the space economy and offer ample opportunities to refine smart specialisation strategies for places that are not at the centre of the global economy. To conduct the analysis, we used data from the first and second censuses for Poland, conducted in 1921 and 1931, and statistical data for 2000. The data for 231–246 counties (NUTS4 level) covers both the employment in 150 industries and 15 sectors that were present in both 1931 and 2000 and regional settings.

REGIONAL PATTERNS OF UNRELATED DIVERSIFICATION: THE ROLE OF ACADEMIC INVENTORS

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Alessandra Scandura, University of Torino, Italy

The debate on regional smart specialization strategies (S3) has long attracted the attention in policy and academic circles. Put forward in 2008, S3 refer to a process of regional specialization based on a bottom-up entrepreneurial discovery of what a region (or a country) is best at doing in terms of R&D and innovation (Foray et al., 2011). Much literature has worked to strengthen the theoretical foundations of the S3 grafting the results of the investigations about the role of regional branching (Boschma and Gianelle, 2014).

This approach stresses the importance of relatedness in the evolutionary dynamics underpinning the emergence of new industrial and technological activities out from the array of existing local activities. The regional branching literature has in fact provided large evidence showing that regions will stay close to their existing capabilities when moving into new products and technologies (Boschma and

Frenken, 2011). Accordingly, relatedness is proposed to be a key pillar of the S3 approach (Boschma, 2014). Smart specialization emerges as an outcome of the regional branching process, in which the proximity or relatedness to the existing structure of local competences constrains the direction of possible diversification avenues (Boschma, 2017; Colombelli et al., 2014).

More recently, the debate on regional strategies of diversification patterns has started questioning the desirability of relatedness-driven strategies, because of path-dependence and lock-in effects. The pursue of diversification strategies mainly based on the entry in related activities can in fact be dangerous in presence of negative sector-wide performances, due either to structural change or short-term fluctuations. For these reasons, the capacity to enter in new and unrelated activities might prove to be a key asset for regions willing to activate long-term development patterns. Unrelated diversification is likely to ensure enduring economic growth and decreasing unemployment (Frenken et al., 2007; Davies and Tonts, 2010; Neke et al., 2018).

In this framework, understanding the factors that help regions to develop the capacity to diversify in loosely related activities becomes of paramount importance. The few existing investigations stress the role of foreign firms in engendering regional structural change, as well as the specialization in cross-cutting technologies like Key Enabling Technologies (D'Ambrosio et al., 2017; Montesor and Quatraro, 2017; Neke et al., 2018). Yet, other factors are highly relevant in this context. Notably, while the contribution of university-generated knowledge to local economic development is unquestionable, its role for regional diversification trajectories remains an open question.

This paper contributes to this stream of the economic geography literature by investigating whether and to what extent the participation of university-based inventors into local patenting dynamics influences the regional patterns of technological diversification as well as the (constraining) role of relatedness for diversification. In the first place, we unveil whether academic inventors increase the entry of regions in new and loosely related technological domains. Secondly, we assess whether the involvement of academic inventors in local patent invention dynamics constrains the impact of technological relatedness on regional diversification trajectories. The theoretical underpinning of our arguments is twofold. On the one hand, we rely on the conceptualization of novelty creation as the outcome of the recombination of heterogeneous and dispersed knowledge components (Weitzman, 1998; Fleming and Sorenson, 2004, Saviotti, 2007) and on the well-acknowledged assumption that the inputs of such combinatorial activity can hardly be concentrated in one single individual. Indeed, invention dynamics are more and more a collective activity, involving the collaboration of different agents able to process knowledge inputs from a variety of sources (Scandura, 2017). On the other hand, our arguments rest on the theory of regional diversification proposed by Boschma et al. (2017), according to which, when investigating regional patterns of diversification, one should also account for processes of unrelated diversification by looking at enabling and constraining factors at various spatial scales (Boschma et al., 2017).

We test empirically the positive effect of academic inventors' involvement on the entry of regions in new technological domains; additionally and crucially, we hypothesize that the higher is the involvement of academic inventors in local innovation dynamics, the lower the impact of relatedness on the entry of regions in new technological specializations. The empirical investigation focuses on the Italian NUTS 3 regions over the period 1998-2008, and relies on the combination of different data sources, including the OECD RegPat Database, the Academic Patenting in Europe (APE-INV) dataset, and the Cambridge Econometrics European Regional Database. We test our hypotheses via linear models in a panel data setting. We also develop spatial panel data regressions to account for spatial effects.

Our results are in line with the extant literature as for the positive influence of relatedness on the entry of regions in new technological areas. More importantly, we show that academic inventors positively contribute to entry in new technological domains and that their participation to patenting activity limits the impact of relatedness on diversification. These findings contribute to the extant literature, particularly to the economic geography strand of literature that considers the role of related and unrelated technological variety for regional development patterns. Our findings also yield important implications for regional policies aiming at promoting smart specialization strategies oriented towards long-term economic development.

INNOVATION AND CREATIVITY IN TRANSFORMATIONAL ECONOMIES: AN ECOSYSTEMS APPROACH

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Creative and cultural industries are considered a driving economic force in many countries, and unsurprisingly developing economies are interested in developing these industries for economic growth. Our study takes place in Vietnam. As the Vietnamese economy continues its transformation from a State Planned to a Market Driven economy the Vietnam Government now has a strategy for the growth of the creative and cultural industries. However, as it stands there is little or no infrastructure to support organizations in creative sectors. Regional Innovation Systems (RIS) have become a panacea in policy making when States look to develop their economies and promote innovation by encouraging a co-operative culture (Cooke etc) and providing the existing sectors with institutional support. This paper argues that RIS is not an appropriate lens through which to investigate creativity in transformational economies, and it proposes to use an ecosystem approach instead for three main reasons. Firstly, much of the literature on RIS is western or developed economies based. Instead, Vietnam is a transformational economy emerging from Communism and thus many of the features of RIS are not as relevant in this context. Secondly, many RIS authors presuppose that sectors want/need the support of governance institutions to get on and be creative and innovative. Thirdly, RIS focuses predominantly on economic value, whilst creative industries are known for producing a different set of values.

Our analysis demonstrates that the creative/cultural industries in Vietnam operate as an ecosystem which is already embedded within its community and that this ecosystem is creating a range of different values within that community including social and cultural value, as well as economic.

REGIONAL HIGHER EDUCATION INSTITUTIONS AS KEY ACTORS IN PLACE-BASED LEADERSHIP: A COMPARATIVE STUDY OF NORDIC AND BALTIC PERIPHERIES

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Two keywords have been often mentioned in recent leadership literature: „place-based” and „higher education institutions” (HEI). Place-based leadership has quite recently emerged as a concept that constructs territorial innovation, networks and social capital. And at its extreme, regional HEIs have been taken by some authors even as Development Anchor Institutions, actors pushing regions beyond their borders.

The existence of a university campus itself does not guarantee the well-functioning entrepreneurial ecosystem. Entrepreneurial processes and learning are driven by individuals, HEI people can boost human capital, promote a conducive entrepreneurial culture, enable innovative policies, improve the availability of appropriate finances, extend creative product markets, and provide a wide range of institutional support.

Peripheries with low organisational thickness might be able to innovate much faster than core regions characterised by thick and rigid institutional structures. In the case of well-orchestrated leadership, significant changes can be carried out in a very short time. The question of survival makes peripheral HEIs proactive and agile actors: they try to impact not only regional decision-making bodies but also intra-university and national policy processes.

So far, we have little comparative knowledge about the place based institutional environments whereby HEIs and other regional innovation system structures operate. In this paper, we going to investigate two groups of regional HEIs: university colleges (7) in Estonia and university consortiums (6) in Finland. We going to identify the critical policy processes, actors, and the motivation behind their decisions. The second ring of questions deals with regional HEIs sustainability. And third, we're going to use the entrepreneurial ecosystem framework when analyzing the agency, entrepreneurial activity and economic development of regional HEIs. The study applies (1) desk research of policy documents, statistics and published surveys; (2) data provided by the regional HEI representatives and (3) Semi-structured interviews with regional stakeholders and regional HEI leaders.

POLITICAL, ECONOMIC AND URBAN DIMENSIONS OF CROATIAN-HUNGARIAN CROSS-BORDER CO-OPERATIONS

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The objective of the study is to present the main features of Croatian-Hungarian political relations and cross-border co-operations. The study will discuss the various eras and specifics of Croatian-Hungarian political relations, the features of the borderland and cross-border relations, the spatial structural and infrastructural bases of the co-operation and the hard and soft factors of relations.

The maintenance of the historically rooted relations, eight centuries of personal union, a rare example of a millennium of peaceful coexistence in Central Eastern Europe is more or less visible. A new period began with Croatia becoming an autonomous state, the era of state-building characterised by inward orientation. Croatia has embarked on the road towards Euro-Atlantic Integration as a symbol of its new orientation at the turn of the millennium, which exerted a strong impact on the perception of borders and effective co-operation, while there has been a gradual deepening of Croatian-Hungarian relations. A period was concluded with the EU accession of Croatia, henceforth co-operations are established between two member states. This, however, does not imply positive practices in all cases. Both countries have experienced profound mutations concerning their ideas on borders over the past 30 years, which resulted in the strengthening of cross-border relations and the enrichment of the cooperation by a specific geopolitical and minority policy element. From the aspect of cross-border cooperation, the underdeveloped state of the borderland and its unfavourable economic and demographic processes are of crucial importance. Among the spatial structural specifics, special attention must be given to the unique geographic position of the countries at the intersection of peripheral regions with the fluvial frontier also serving as a dividing boundary along the majority of the border section. CBC in the immediate proximity of the state border can only be detected in two small areas, resulting in the predominance of cooperation between relatively remote urban nodes. The relatively small size of the countries in question and their centralised state organisation leaves its mark on the co-operations. Interstate political relations are therefore essential from the perspective of cross-border relations.

THE FUTURE OF ADVANCED MANUFACTURING IN THE SHEFFIELD CITY REGION: AN ANALYSIS OF ECONOMIC STRATEGY AND POLICY DEBATES

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Over the last decade, there has been an increased focus on harnessing regional economic potentials, as one of the cornerstones of both regional and national development strategies. In the EU, this has particularly been happening through the Smart Specialisation approach, but the general thrust is the same in other countries as well – to identify areas of regional economic strengths and create collaboration between relevant stakeholders, who can take effective actions to increase regional competitiveness.

Focusing on the UK's Sheffield City Region as an internationally recognised hub for advanced materials and manufacturing, the analysis presented in this paper argues that while regional development strategies generally tend to be very detailed in some respects, they are also missing certain key aspects that are needed for creating realistic regional economic plans. Concretely, the strategies tend to not contain analyses of the competitive landscapes that regional firms find themselves in, regional comparisons are also not always made with the most relevant comparator regions, and the set of policy recommendations tends to be relatively narrow. The arguments are made based on an extensive analysis of relevant regional documents undertaken for the ESRC-funded Regional Technology Foresight project (www.regiotechforesight.org), aimed at developing and implementing a technology foresight process to identify technological innovations to maximise the competitiveness of firms in the region.

We offer some reflections on both the strengths of regional development strategies, and on how they can be improved. We pay particular (but not exclusive) attention to the role that technology foresight exercises can play.

EU BUDGET AND THE WESTERN BALKANS: THE EFFECTS OF ENLARGMENT

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Budgetary impact of the Western Balkans enlargement has remained largely neglected in regional enlargement studies, both from the perspective of the effects of accession on EU budget flows vis-à-vis individual Western Balkan countries, as well as from the perspective of the aggregate effect of the Western Balkans enlargement on the EU budget and the EU member states. In this paper we provide a comprehensive analysis of changes in financial flows between the EU budget and the Western Balkan countries before and after their hypothetical EU accession. Based on our estimates, Western Balkan countries can on average expect a nearly seven-fold increase in allocated funding from the EU budget relative to the pre-accession levels, amounting to close to 4% of their GDP. Since a large part of estimated funding increase will be dedicated to development purposes, its sheer magnitude can act as a “pull factor” for the Western Balkans governments to continue with their “Europeanization” efforts and comply with accession conditionalities. At the same time, overall impact of the Western Balkan enlargement on the EU budget is found to be relatively limited. This means that direct budgetary costs of the Western Balkans enlargement for the remaining EU member states are relatively low. The benefits, on the other hand, in terms of increased stability of the region which has often been dubbed “the powder keg of Europe”, as well as increased economic opportunities, could be significant. This can act as a “push factor” for the EU to sustain the necessary political momentum of the enlargement process until accession as the ultimate goal is achieved.

ENTREPRENEURIAL UNIVERSITIES AS REGIONAL DEVELOPMENT ENGINES: MYOPIA OR WISHFUL THINKING? LESSONS FROM BRAZIL AND PORTUGAL

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A growing body of literature has emphasised that innovation is the driving force behind the nations' economic success, and also that regions are strategic actors in this process based on the use of their regional specificities. Within this context, universities have emerged as key players in the enhancement of regions' competitive capacity and the epitome of this perception is the entrepreneurial university, whose proactive role in the regional development process is intrinsically related to the commercialisation of knowledge generated inside its walls. As a consequence, universities around the world came under pressure to change their traditional character and have been challenged to become more innovative and entrepreneurial in their regional context. Following these recent trends, Brazilian and Portuguese universities restructured themselves to better meet society's regional demands. This paper aims at analysing the imbalance between the increasing societal demands and the ability of Brazilian and Portuguese universities to respond, highlighting similarities and specificities of universities from both countries.

NATIONAL OR REGIONAL RECRUITMENT: MARKET AREA OF THE PORTUGUESE UNIVERSITIES

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Depopulation of eastern Portugal and concentration in the coast has been a longstanding process. The oldest Higher Education Institutions (HEIs), Coimbra, Lisbon and Porto, are also at the seashore or near it. Since 1973 new HEIs has been disseminated around the country and nowadays every Portuguese region holds a set of HEIs. However, those closer to the coast tend to have a higher demand than those more distant. It is not clear if each one has a kind of restricted market area such a spatial monopoly in its neighbouring area or if there is national recruitment for some of them.

This paper is an exercise of determination of these areas for the Portuguese public network of HEIs. We use a database from the Ministry of Education (DGEEC-Ministry of Education) with information of the pair, place of residence (municipality level) and respective HEI, for enrolled students. Through techniques of Exploratory Spatial Data Analysis (ESDA) we will look for clusters of municipalities that could be market areas for each HEIs considered. Beyond this, a logit model will test some hypotheses present in the literature regarding the student's choice of an HEIs.

This article aims to analyse these issues and indicate some critical points to be taken into consideration by decision-makers.

CROSS-BORDER COOPERATION AS A POLICY INSTRUMENT FOR TERRITORIAL DEVELOPMENT AND COHESION: THE GALICIA-NORTH PORTUGAL EUROREGION

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The policy of the European Union has been supporting territorial cooperation to promote the implementation of shared strategies, with a view to regional development and territorial cohesion. Cross-border Euroregions were created based on the European acknowledgment of its importance for

regional development and considering the dynamics of proximity relations between the communities of different countries. Given the recent scenario of deconstruction of the European project and the effects of the economic and financial crisis, the Euroregions appear as a sustained contribution to regional development, as their purpose is to build collaborative, relational and complementary spaces, anchored in regional strategies of innovation and territorial governance.

This paper seeks to understand how the European cross-border cooperation programme influences the shaping of cross-border collaboration in the Euroregions and foster the construction of collective territorial intelligence.

Methodologically, a relational approach is applied, analysing the territory from the perspective of flows, networks and community building. That is, territorial systems incorporate several nodes (actors) and several networks (relations), which have been intensifying at different levels and scales, internally and with other territories. The study was applied to the Galicia-North Portugal Euroregion, focusing on the projects approved under the Cross-Border Cooperation Programme: Spain-Portugal (POCTEP) of the previous and the current community framework. The analysis is based on the social network analysis and the Exponential Random Graph Models, to characterise the actors involved in the projects and the relationships established, to explain how the network is structured and its territorial implications.

The challenge is to contribute to the reflection of the territorial development of European cross-border regions, analysing the collaborative networks, incorporating a dynamic and relational perspective. Questioning the role of actors and policy instruments for the Euroregions in promoting more collaborative, relational and complementary areas in order to strengthen European territorial development and cohesion.

THE HYDRA OF LERNA AND THE IMBALANCE IN DEVELOPMENT OF EUROPEAN REGIONS

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The paper aims to analyze the theoretical and empirical aspects related to the concept of balance/imbalance in development at regional level. From a theoretical point of view, the vision of regional sustainability refers to the ability of a given territory to ensure its inhabitants a lasting development in economic, social and environmental terms. Starting from these theoretical considerations, the paper focuses on the methodological implications deriving from them and in particular on the topic of composite indicators and of the variables' aggregating methods. A sustainability index is calculated starting from some elementary variables observed in the European regions with different methodologies of measure. A relevant topic is the balance between the three dimensions of the sustainability (economy, society and environment) and to its possible measurement at the territorial level. A sustainability indicator can in fact derive from homogeneous ranking levels in the three spheres or from means of indicators of each pillar with different positions. Then the paper calculates the imbalance indices between the spheres of the sustainability in the European regions and the relationships between the composite sustainability index and the imbalance index. Furthermore, various hypotheses for the calculation of synthetic sustainability indexes that contain the imbalance values between the elementary variables are proposed (Mazziotta-Pareto index, concave average, principal component analysis, geometric mean).

POWER OF UPCYCLING – CASE STUDY FROM POLAND

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To prevent negative consequences, resulted from dynamic cities development, their expansion, overwhelming rural areas and natural environment degradation being in progress, we should take up activities tending to reuse this city space, which has lost its original function, and has become a kind of urban badland. These areas can gain ‘second life’ by urban space upcycling, processed with plan and holistic attitude.

The article’s goal is to evaluate transformations in urban space in the context of its upcycling, presenting changes and revitalization of urban space. The article also refers to urban planning, which are formal-legal frames of this kind of activity. The selected example of upcycling process is the area of ‘Jordanki’ in Toruń, which due to its location – in the very city center was transformed from reduced area into the place with creative city-forming functions. The ‘Jordanki’ change should be satisfactorily assessed and upcycling conception implementation contributes to the city part revitalization and creating new public space.

THE REGIONAL FACET OF A GLOBAL INNOVATION SYSTEM: EXPLORING THE SPATIALITY OF SYSTEM RESOURCES IN ONSHORE WIND ENERGY

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The framework of “Global Innovation Systems” (GIS) was developed by Binz and Truffer (2017) as a conceptual enhancement to debates on innovation systems and sustainability transitions. It draws attention to the multi-spatiality and multi-scalarity of technology-specific innovation and diffusion. For these processes to function properly, the system relies on emergently constructed resources: Knowledge, markets, investments and legitimacy. But these system resources are not ubiquitous. As they are created somewhere, they are unevenly distributed across space and cannot be accessed by all actors at all times and in all places.

In this paper, we explore the regional facet of resource formation in onshore wind energy. Previous studies often concentrated on the (inter)national level and activities related to innovations in the technology’s manufacturing. We take a bottom-up perspective, asking how and to what extent system resources are mobilized at the regional level. By including firms and stakeholders from wind farm planning and operation into the analysis, we also focus on technology diffusion and valuation. Empirically, we investigate resource mobilization within in the Oldenburg region (Germany), a leading area both in wind energy development and diffusion. The case study is informed by qualitative interviews with regional stakeholders and complemented with expert interviews from outside the region and the analysis of additional material and data.

Our results show the important role of the regional level in market formation (siting decisions) and technology legitimation (community acceptance), as well as the close interplay and spatial stickiness of these two resource formation processes. We also find that demand for knowledge on grid integration and turbine operation is increasing. Knowledge required to solve these issues is more codifiable, than the tacit knowledge needed in the design-intensive process of early wind turbine development. In total, our results suggest that the spatiality of resource formation in the contemporary onshore wind energy industry can be characterized as “market anchored”, with a rather “sticky” system for valuation (markets, legitimacy) and a rather footlose system for innovation (knowledge).

SOCIO-SPATIAL RELATIONS OF ENERGY TRANSITION: TERRITORIALIZATION, PLACE-MAKING, RESCALING AND NETWORKING AS ACTOR STRATEGIES IN RENEWABLE ENERGY REGIONS IN GERMANY

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The ubiquity of renewable energy resources and the liberalization of energy supply led to a spatial decentralization of energy infrastructures and a diversification of the actor constellation. The Renewable Energy Sources Act (EEG) triggered an incentive-driven dynamic development of renewable energies in Germany since 2000. But the resulting landscape change and a lack of regional participation led also to emerging conflicts. The constitution of energy regions as action arenas like Bioenergy or 100% RES regions has been a response to these phenomena in order to increase acceptance and economic participation by facilitating collective action at the regional scale (Gailing and Röhring, 2016). In the presentation the socio-spatial relationships of energy regions as action arenas will be explored using the TPSN framework (Jessop et al. 2008). It aims at the relations between territory, place, scale, and networks as structuring principles of energy regions but also as fields of action, resulting in actor strategies of territorialization, place-making, rescaling and networking. Finally benefits and limitations of the TPSN framework for the analysis of socio-spatial relations in energy transitions at the regional level will be discussed and additional conceptual approaches outlined (c.f. Gailing et al. forthcoming).

EXPLAINING REGIONAL PERCEPTIONS OF BUSINESS OPPORTUNITIES IN CHILE

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This article aims to identify the factors that influence the regional perceptions of business opportunities in Chile, a developing country with remarkable differences in natural resources and human capital endowments at a regional level. We analyze whether the factors that affect these perceptions at a national scale vary when we consider the differences between core and peripheral regions. For this purpose, the GEM Chile database of 2016 is used, particularly the Adult Population Survey (APS), in order to obtain information about self-perceptions on the capabilities for entrepreneurship among the adult population and some characteristics of the individuals and entrepreneurial activity. The sample is composed of 7,950 observations. The technique of data analysis used is the binary logistic regression analysis since it is the technique that best fits the characteristics of the variables and the objective of the study.

We analyzed four models: a general one in order to identify the factors that affect the perception of business opportunities at national level and three additional models that estimate the differences among the northern and southern periphery and the core of the country. These three areas are remarkably different both in terms of their endowments, economic activity and the type of entrepreneurial activities. In the general model, the perception of business opportunities is negatively related to education, while knowing an entrepreneur and the control variable age have a positive relationship. Significant differences emerge when comparing the core and the periphery. In the core region, only age is significant, while in the northern periphery, knowing an entrepreneur and age are the significant factors, and the southern periphery, the poorest part of the country, replicates the general model.

ADDRESSING REGIONAL POLICY IMPLEMENTATION CHALLENGES IN CATCHING UP REGIONS THROUGH THE ANALYTICAL LENS OF SMART SPECIALISATION STRATEGIES

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Smart Specialisation Strategy (S3) research has so far contributed to advance understanding of the framework's conceptual underpinnings (Capello and Kroll, 2016; Foray, 2016). However, a growing number of European regions has trouble in turning S3 theory into practice (Papamichail et al., 2018). The investigation to understand why S3 development is challenging and uncertain at the regional level (Thissen et al., 2013; Landabaso, 2014) has brought into focus the development challenge of smart specialisation (Morgan, 2015).

This paper addresses this challenge by investigating S3 implementation in two Greek regions. Firstly, it asks under which circumstances specific institutions and features of the institutional environment lead to the emergence of policy implementation barriers (Morgan, 2017), which helps us understand why institutional change is needed (Rodriguez-Pose and Wilkie, 2015; Kyriakou et al., 2016). Secondly, it examines how such change happens in catching up regions.

A qualitative case study approach is employed, using interview data from Crete and Central Macedonia. Fifty semi-structured interviews were conducted in two different phases over the 2015-17 period.

We show S3 implementation challenges are primarily associated with a region's key institutional features, including the limited institutional power it has to counterbalance state-centric intervention and capacity to develop new regional legislation to favour effective implementation practices. In addition, we find that weak mechanisms to promote inter-organisational connectivity prevent knowledge sharing and learning among key entrepreneurial actors, hindering entrepreneurial discovery. Finally, a key downside characterising the institutional environment is the chronic lack of entrepreneurial capacity, a key pre-condition for S3 implementation.

Regarding how change happens, we use Mahoney and Thelen (2009) four modes of institutional change to show that institutional change can affect S3 implementation through the replacement of existing rules by new ones, the mode of displacement, as well as by introducing new rules alongside existing ones, i.e. the mode of layering.

REGIONAL SPECIALISATION WITHIN GLOBAL VALUE CHAINS: A COMPARATIVE STUDY OF CRICKET BAT MANUFACTURING IN INDIA AND THE UK

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The future of manufacturing in the UK has been a subject of major policy concern for many years. This paper uses a case study of global cricket bat manufacturing to explore the nature of contemporary manufacturing in the context of global value chains and the consequences for regional specialisation and economic development.

The manufacture of cricket bats has historically exhibited regional specialisation with production concentrated in the South East of England, especially the counties of Essex, Suffolk and Kent. Location was largely a function of raw material supplies (willow), access to skilled craft labour and proximity to

centres where the game of cricket was first played. As the game developed into a national pass-time (or obsession) during the 18th and 19th Centuries, manufacturing too became more dispersed (Birley 1999, Barty-King 1979).

The introduction of cricket to India is best seen as a function of empire. As participation in the game developed, a domestic manufacturing industry emerged that was centered first on Sialkot (in modern Pakistan). This development was supported by a strong tradition of hand-craft production and the availability of domestic supplies of willow grown in Kashmir. Partition in 1947 forced many producers to re-locate to India. Helped by land grants from the Indian government, regional specialisation developed with production strongly concentrated on the cities of Meerut and Jalandhar, in northern India. Reliance on Kashmiri willow limited the export potential of this emergent industry.

Growing exports of English willow to India and Pakistan from the late 1970s facilitated the rapid growth of off-shore manufacturing of bats for the UK and Australian markets allowing Indian producers to become far more export orientated. The 1980s and 1990s saw the development of global value chains for the production of various types of sporting goods including cricket bats. This led to a sharp decline in bat production in Britain. Many of the leading brands outsourced production to India - resorting to a global value chain in which they effectively became 'manufacturers without factories' or 'fab-less firms' (Millberg and Winkler 2013). It became common for many brands to import fully finished bats to which they did little more than add their brand label, a practice often referred to as 'white labelling'. Some leading British brands ceased trading altogether. As a result, Indian bat makers now dominate the global mass market. Remaining production in the UK tends to be small scale and specialised in nature.

Drawing on fieldwork conducted in 5 UK and 3 Indian firms, this paper explores the nature of these global value chains, evidence of interdependencies between producers in India and the UK, regional specialisation and the implications for manufacturing and regional economic development.

REFUSING HOSPITALITY: WOMEN'S WORK AND COMMUNITY BELONGING FOR SYRIAN REFUGEES IN ISTANBUL

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Anthropologists and other scholars have long suggested that hospitality plays a key role in most societies. But, researchers do not agree about whether hospitality should be interpreted negatively as an element of harsh competitive arenas characterized by symbolic violence (cf. Meneley 1996) or positively as the basis of neighborly care and a symbol of feminine virtue (cf. Petersen et al 2016). This paper examines both the competitive and also the virtuous dimensions of hospitality in order to re-figure integration theories, which are too often focused on functional indicators and the supposed achievement or failure of migrants. In recent years, hospitality has gained the attention of migration researchers, who have sought to analyze the philosophical basis for migration laws and human rights provisions or to understand hospitality as a social practice in contexts of migration (cf. Dagtas 2018). Drawing on interviews completed with Syrian women in Istanbul as part of an EU Horizon 2020 project, RESPOND-Multilevel Governance of Mass Migration in Europe and Beyond, I suggest that we examine hospitality as part of on-going participation in reciprocal relationships in newcomer communities. Hospitality is significant for women who see it as connected to their self-image and social roles. Syrian women related that they feel extremely sad because they are rejected by Turkish neighbors who refuse their overtures of hospitality. Examining hospitality brings to light the seriousness of social class conflict and women's roles as representatives of families in neighborhoods, women's labor to establish social bonds and the impact of language barriers, gossip and rumors on migrant women's emotional lives.

DO HIGH PRODUCTIVITY CLUSTERS REFLECT SMART SPECIALIZATION STRATEGIES' PRIORITIES IN THE BALTIC STATES

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The main aim of applying smart specialization strategy throughout all European Union was an attempt to focus resources of the regions on most promising & productive economic activities. Did the highest productivity economic activities or groups of them reflect the choice of smart specialization priorities in the Baltic States (Estonia, Latvia, Lithuania)? Do the highest productivity clusters remain the same over the analyzed period. Do the Baltic States are similar in regard to clusters of economic activities grouped by productivity & employment. First, the author made cluster analysis by exploiting employment and labor productivity variables of 4 digits NACE Rev.2 economic activities for 2008 and 2016 in the Baltic States. The cluster analysis was done treating three Baltic States as one region and by exploiting k-means method. Then the author analyzed the composition of economic activities clusters of highest labor productivity and compared clusters with the choice of priorities of smart specialization strategy. Few preliminary conclusions could be done. First, the highest productivity clusters are not the same at the beginning and the end of the analyzed period. Second, smart specialization priorities of three Baltic States are quite similar in choice. Third, most productive clusters of economic activities do not always reflect the choice of smart specialization priorities. This is true for 2008 and for 2016 data. Even having in mind the limitations of the data and method of analysis, the questions on the choice of smart specialization priorities, on the framework on how to choose priorities remain.

ASSET MODIFICATION FOR REGIONAL DIGITAL TRANSFORMATION

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In recent years, new digital technologies and improved digital infrastructure has created new opportunities and challenges. As a response, regions must transform their regional innovation system (RIS) to better adapt to these changing conditions. Recent research has argued that transformation of RISs can be explored by studying the process of asset modification. The literature argues that asset modification processes can take place both within regional organisations and at the regional level itself. However, how such processes unfold in practice, has still not been properly addressed.

In this paper we investigate the process of asset modification initiated by digitalisation in both the private and the public sector. The paper explores the role of firm-level entrepreneurs and system-level entrepreneurs in such processes, as well as how asset modification is expected to influence future path development. We address the organisational level and the regional level both separately and combined, when exploring i) how existing assets can be renewed, ii) how new digital assets can be created, iii) to what extent digitalisation promotes a need for existing asset destruction, and iv) how various mechanisms for asset modification is expected to influence future path development.

Empirically, the paper draws on in-depth interviews with firm leaders, municipal managers and policy representatives in the Agder region of southern Norway. The cases investigated are the tourism industry and the home-based healthcare sector. Preliminary findings show that digital transformation can start both at the organisational level and at the system level, but that assets must be created at both levels to ensure high impact of digitalisation. Further, in this study it seems like processes of asset destruction and new asset creation mostly support path renewal.

SOCIALLY SUSTAINABLE NEIGHBOURHOODS: DOES URBAN FORM MAKE A DIFFERENCE?

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Despite the theoretical and practical significance of the issue of social sustainability in the build environment, the nature of this phenomenon has remains controversial. Research in this area is confounded by a lack of clear and robust definition, conceptualisation and measurement. In addition, there has been limited empirical research on the determinants of social sustainability at the neighbourhood scale. The purpose of this study is to contribute towards bridging these research gaps. Specifically, this paper aims to meet two broad objectives: First, to develop, and empirically test, an urban social sustainability (USS) measurement model that captures the multifaceted nature of this complex phenomenon. Our conceptualisation of urban social sustainability incorporates six main dimensions: social interaction, sense of place, social participation, safety, social equity, and neighbourhood satisfaction. Second, to use the proposed USS model to examine the role of different physical (urban form) and personal (socio-demographic) factors in promoting or weakening urban social sustainability. Our findings from 251 respondents in five case study neighbourhoods of Dunedin city, New Zealand, provide evidence that the effects of physical and personal factors can differ according to distinct USS dimensions. We found that, of the six USS dimensions, “sense of place” and “neighbourhood satisfaction” are more influenced by physical factors, while “social participation” and “social interaction” are more related to personal factors. Our results confirm that urban social sustainability is a complex and multidimensional phenomenon and failure to consider each of the USS dimensions may yield an incomplete picture of this concept.

CLUSTER OR ENCLAVE?: SANTA CRUZ AND TAKORADI IN OIL AND GAS GPNs

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The effects of extractive industries on developing countries have been assessed from various perspectives, revealing economic, environmental, political and social pitfalls of the integration into corresponding global production networks (GPNs). With regard to economic development, it is argued that the specificities of the ‘strategic coupling’ of local and foreign firms are critical. I contend that the state of research neglects that instead of suffering from unfavourable forms of strategic coupling, many local firms fail to plug into GPNs. Such local economies are – except for their resources – irrelevant to the global economy. Enclaves dominated by foreign lead firms and foreign contractors mark them. For strategic coupling to occur and to trigger economic development, these enclaves would have to turn into clusters, characterised by intense interaction of local and foreign companies. This paper begins with a presentation of clusters and enclaves as ideal cases. Against this backdrop, I compare dynamics in Santa Cruz (Bolivia) and Takoradi (Ghana), based on field research conducted in 2017. Santa Cruz has been the centre of Bolivia’s oil and gas sector for almost a century. Local companies are well integrated into GPNs. In spite of certain challenges, they serve as specialised suppliers of foreign lead firms. Some of them have managed to internationalise their business, becoming active elsewhere in South America. In Ghana, meanwhile, oil and gas resources were found only in 2007. Takoradi has become the hub for international firms that explore and extract these resources. Links with the Ghanaian economy are non-existent, with the exception of a few generic services. Practically all inputs for the sector are imported and, at maximum, distributed by local firms.

CROSS-BORDER PUBLIC SERVICES (CPS) IN EUROPE: KEY RESULTS OF A FIRST EUROPEAN-WIDE EMPIRICAL SURVEY

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Until now, only little empirical evidence is available on CPS in Europe, mostly derived from individual case studies. To fill this information gap, the targeted ESPON CPS research project for the first time collected a European-wide, structured and cross-thematic overview of CPS in Europe. The paper presents selected project results: Which border regions are active in the development and supply of such services? Which themes and topics are addressed? Who is participating in the delivery of the service? Upon which legal basis are the services implemented? What are their target groups? How long does it take to implement a service, and which obstacles are to be overcome? This European perspective will be accompanied by selected results of ten in-depth case studies, part of the ESPON CPS project, where the current and future demands, challenges, historical legacies, stakeholder compositions and legal aspects were explored in cooperation with regional stakeholders. Based upon this broad empirical evidence, the project developed a policy guide for practitioners in border regions how to develop new or improve existing cross-border services.

Despite the large variety of themes, actors and administrative models applied by the several hundred services currently provided in European border regions, the empirical survey shows that challenges are quite similar everywhere – but that the solutions found are mostly very specific, accounting for the specificities of each border region. Although some CPS have already been initiated in the early 1970s, CPS are still a quite new and innovative instrument for many border regions to secure service provision – both for border areas with high population density (i.e. high demand for services) and those with extremely low population densities (i.e. joint CPS may be a model to secure service provision at all).

BETTER POLICIES THROUGH EX ANTE CONDITIONALITY? A COMPARISON OF DIGITAL GROWTH INVESTMENT CHOICES IN COHESION POLICY PROGRAMMES 2007-13 AND 2014-20

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Since 1988, EU cohesion policy has been a driver of innovation in policymaking. More recently, the 2013 Common Provisions Regulation (CPR) introduced a number of new principles and tools aimed at improving policy design and strengthening effectiveness. One of the most significant innovations was the introduction of ex ante conditionalities linked to the policy fields supported by the policy (the 11 Thematic Objectives) and to the strengthening of public administration capacities in relation to horizontal themes (e.g. public procurement, statistical systems etc.).

The literature on the use of conditionalities in public policies is replete but there is no consensus on the effectiveness of this type of tool and no systematic attempts have yet been made to empirically test this in the specific context of cohesion policy. Our paper provides a first empirical investigation of this. We focus on the investments for digital growth in the EU's less developed and transition regions and hypothesise that, thanks to ex ante conditionality 2.1 (Annex XI CPR), the programmes of these regions have become better targeted. More precisely, our hypotheses are that: first, the regions' investment choices in 2014-2020 are more diversified than in 2007-2013; second, that 2014-2020 programmes present an improved match between financial allocations and digital needs.

To test these hypotheses, we apply a mixed-methods research design, comprising four subsequent steps: (i) reclassification of planned expenditure, under both periods, in four macro-themes (broadband, e-government, infrastructural services, ICT in SMEs); (ii) EU-wide descriptive statistics (to appraise the degree of differentiation of investment choices); (iii) EU-wide OLS regressions (to explore the determinants for the allocation of funds; in particular, the extent to which regional strategies respond to local territorial conditions and/or depend on allocation choices made in previous periods); and, lastly, semi-structured interviews with policy-makers responsible for programme design in a selected Member State (Italy).

TERRITORIAL COHESION AND THE ROLE OF IDENTITY POLITICS IN CONTESTED BORDERLANDS

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Debates on the necessity of a greater place-based focus in Cohesion Policy seem to point to the conclusion that “valuing and reviving territorial identity as a unique asset is the starting point of every place-based initiative” (European Commission 2015:3). While the actual practice of mobilising local identities remains a complex and contested undertaking in more general terms, border regions highlight some of the dilemmas involved in linking territorial politics (and border politics) to questions of place identity. In a normative, policy-oriented sense this is a question of borders as framing conditions for local development. In a more critical and analytical sense this involves interrogating the actual use of borders in politically and ideologically framing territorial interests within a wider European context. This has been discussed in terms of the co-optation of cross-border cooperation programmes by national governments (Scott 2018). However, evidence is mounting the European unease is impacting on everyday perceptions of security thus producing a new emphasis on particularistic identity politics. At one level, European borders are being mobilised within the context of ideological contestations and counter-Europeanisation movements that ‘re-enact’ national rivalries (e.g. Denmark-Sweden, Denmark-Germany, France-Italy). At the local level, dissonance between promoters of de-bordered regional identities and popular imaginations is having divisive impacts in many cross-border contexts (e.g. Øresund, Luxembourg and Greater Geneva cases). We find that a shared sense of belonging is a tenuous thing and that external crises impact on an everyday sense of security and provide opportunities for populist movements to promote xenophobic and anti-cooperation platforms.

With this contribution, I will focus on the need to respond to Europe’s regional and attitudinal-ontological divides. I suggest that Cohesion Policy might require a comprehensive re-set in terms of philosophy, organisation and implementation. Above all, everyday security and well-being should be part of a renewed conceptual toolbox and figure in policy agendas.

SUSTAINABLE FINANCING FOR URBAN INDIA: VIABLE OPTIONS

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One reason for exploring sustainable source of finances is that city finances in India are in poor condition, and they depend on the higher tiers of government for funding their service delivery.

Our objectives in this paper are to:

- Suggest measures to improve the taxation and tax collection mechanisms in the selected Indian cities of Karnataka.

- Review and reform (where necessary) bases of assessments of revenue streams, and suggest enhancement of revenue sources by suitable mechanisms that can be implemented in all cities.
- Estimate revenue capacities of the cities and recommend expansion capabilities, which apply to Indian cities in general.

The methodology of the study involved visits to each of the selected 12 cities, study of their audited financial statements, analysis of their major revenue sources including tax and non-tax revenues, estimation of revenue capacities for each of the cities, and recommendation of measures to improve the taxation, tax collection and revenue generation mechanisms.

Summarizing our findings, increasing revenue compliance from non-paying and unassessed properties as part of the tax base, and taxation of government properties which are of a commercial nature, increases the property tax base for all cities across the board. Given the property tax is the most important revenue source for cities, this is strongly recommended. Once the tax base is expanded, the next step is to increase property values for properties, in accordance with market values, in a gradual manner. Water connections have to be metered given it is a scarce resource although occurring naturally, we find its revenue potential to be nearly the same as that from property tax.

TAILORED POLITIES AND BOTTOM-UP DYNAMICS IN THE SHADOW OF THE STATE'S HIERARCHY: THE CLLD IMPLEMENTATION AND A FUTURE RESEARCH AGENDA

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The paper aims at investigating the characteristics and the implementation of the Community-Led Local Development (CLLD), a new initiative of the EU Cohesion Policy 2014-2020. In the current programming period, it has generated more than 3.000 local initiatives across the EU, and - for the first time - it offers the opportunity to set up integrated local development initiatives that can go from sub-regional to neighbourhood areas. An integrated theoretical perspective has enabled me so far to reflect on the multi-level normative dimensions of these local initiatives. Through a combination of the post-functionalist governance theory (Hooghe & Marks, 2009), the soft space debate (Allmendinger & Haughton, 2009), state-theory and strategic-relational approach (Jessop, 2016), I defined an interpretative framework to be deployed for a dedicated research agenda. The consequent analytical dimensions can be found in: a) the relationship between attendant ad-hoc polity, policy agenda, territorial design and societal processes; and b) the meta-governance dimensions that locate the bottom-up constituency of this institutional technology in the shadow of state's hierarchy.

SWISS LAND IMPROVEMENT SYNDICATES (LIS): AN IMPURE COASIAN SOLUTION?

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A small but increasing number of planners and economists have identified the relevance of the Coase Theorem to the resolution of planning and development issues. According to Coase (1960), market interventions are not always desirable from an efficiency perspective, so long as the transaction costs of exchange are nil and property rights are well defined and freely tradeable. As neither zero transaction costs nor fully defined and tradeable property rights exist in the real world, the Coase Theorem is really about accounting for the costs of coordination and the definition of property rights. The Coase Theorem can be interpreted as meaning that the role of government intervention is to designate and enforce well-defined property rights as well as to minimise transaction costs. While, a pure Coasian solution (where transaction costs are zero and property rights are well defined and freely tradeable) is rare, if exist at all, in the planning contexts, under certain conditions, 'Impure' Coasian

solutions may still be possible. In fact, different authorities have used these 'Impure' Coasian solutions, perhaps unknowingly, in different jurisdictions.

This paper aims to examine the conditions that provide for the use of 'Impure' Coasian solutions through analysing a Swiss policy instrument, Land Improvement Syndicates (LIS) that is used to facilitate land development processes involving multiple landowners. LIS aim to assist landowners reaching agreements regarding the development of their properties through creating an assembly of involved landowners. In line with the Coasian solutions, the main roles of local authorities in the LIS process are to minimise the transaction costs and facilitate the re-allocation of development rights. This paper explains how Swiss planners utilise LIS to coordinate and conduct land readjustments and zoning changes procedures simultaneously and within the same mechanism, which unless otherwise might need separate and disconnected lengthy processes.

NON-URBAN KNOWLEDGE BASES: A GEOGRAPHY OF KNOWLEDGE INTENSIVE SERVICE INPUTS TO CANADA'S WINE INDUSTRY

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It is traditionally thought that knowledge intensive business services (KIBS) primarily locate in larger cities, because cities are repositories of knowledge, information and interactive learning. Indeed, this is verified empirically when KIBS are defined based upon R&D, employee education levels, and symbol manipulation. However, this definition of KIBS – and its implication that knowledge is associated with educational credentials and with non-material activities - excludes the type of practical and experienced-based knowledge that can be developed in rural areas in activities such as agriculture, forestry or fishing. In this paper we investigate where Canada's nascent wine industry - necessarily located in rural areas, and often requiring service inputs related to soils, vines, grape picking etc... - obtain their services inputs. By taking a broader view of the nature of knowledge we show that certain types of KIBS inputs are sourced from small towns and/or rural from wine-growing regions. The fact that certain types of knowledge inputs are drawn from non-urban settings provides a clue as to how innovation – which relies on knowledge sharing and interactions – can occur in rural and peripheral area. These areas can and do generate some specific knowledge bases. It is only by focusing on an industry that is necessarily located outside of urban areas that this comes to light: for many other industries, their larger absolute presence in urban areas means that their KIBS providers will also tend to be urban (because that is where most of their clients are).

INFORMATION MODELLING AND SMART CITY PLANNING: OVERCOMING BARRIERS TO INFORMATION MODELLING AND FAIR DATA USE GOVERNANCE

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Data is not a typical common-pool resource in that it is non-rivalrous and can be excludable. However, it is a common resource in that the public produces it collectively. Over the last decade, data commoning has been trialled as a potential structure to ensure democratic data governance. The search for fair data governance structures comes as data-intensive Building and City Information Modelling (BIM and CIM) gain worldwide prominence, which raises new questions for planning and regional development. This project addresses the new relationship between data use and planning, which is increasingly important given the political push to accelerated the use of BIM. In the UK, for example, the Centre for Digital Built Britain is responsible for helping to deliver the Government's

Digital Built Britain Strategy, which aims to use BIM to digitise the life-cycle of the UK's built assets to improve the way assets deliver social services.

Information Modelling is argued to have the potential to help deliver on goals that many aspiring smart cities share, such as urban sustainability, efficiency and greater citizen public participation in planning. However, most local authorities have not yet engaged with BIM and CIM, and their future potential and opportunities for integration with planning processes are not fully understood. Additionally, governance structures that safeguard the human right to digital privacy, ensure data sovereignty, and facilitate fair value-share between those who provide data and those who monetise it are still in their nascency. This paper first presents barriers and opportunities for BIM and CIM in city planning in three UK case studies, focusing on governance structures to oversee data usage. Second, the it uses international benchmarking to explore how policy-making can deliver fair governance mechanisms to oversee the data upon which smart cities rely.

THE EUROPEAN COMMISSION'S PROPOSAL FOR A CROSS-BORDER MECHANISM (ECBM): DECISION-MAKING PROCESS AND POTENTIAL AREAS OF APPLICATION

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The European Commission proposed a regulation for a mechanism to resolve legal and administrative obstacles in cross-border regions as part of the legislative package for EU Cohesion Policy 2021-2027. The mechanism is known as ECBM, or European Cross-border Mechanism. The regulation will allow one Member State to apply their legal provision in another Member State for a concretely defined case. This proposal is particularly interesting as it does not give further competence to the European level, but changes how Member States may interact with one another, yet, it raises critiques as regards to its compliance with constitutional, international and European law. This paper first outlines the decision-making processes towards the regulation. Second, the paper summarises the main elements of contention in the first draft, which are legal justification, state sovereignty, compliance with the subsidiarity and proportionality principle, thematic and territorial scope, voluntariness and the administrative burden. The paper then discusses the changes proposed in the legislative procedure and discusses areas of implementation in two cross-border contexts. This piece summarises the debate currently held in the European Council and the European Parliament, and argues that the proposal offers a new momentum to address legal aspects of integration on a local and regional scale complementing the existing funding landscape. Examining the proposed regulation and the arguments for and against it offers the opportunity to review the main arguments that will be raised in any future debate on legal proposals on territorial development initiatives, and allows for analytical scrutiny as to needs for legal support and limitations under current conditions.

This paper is an update and addition to of a paper published as Sielker, Franziska (2018): The European Commission's Proposal for a Cross-border Mechanism (ECBM): Potential Implications and Perspectives. In: Journal of Property, Planning and Environmental Law, Issue 3, 2018, DOI: 10.1108/JPEL-08-2018-0024.

LAND CONSOLIDATION, EFFECTS AND RURAL DEVELOPMENT

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Land consolidation in Norway has mainly taken place in rural areas. The first dedicated land consolidation act was enacted in 1821 and the Norwegian Land Consolidation Court has been regarded as a special court since 1882. It is important to note that in Norway land consolidation remains the

exclusive province of the court system. There are three cumulative requirements before land consolidation can proceed in Norway. (1) The Land Consolidation Court may effectuate land consolidation if at least one property or easement in the land consolidation area is difficult to use gainfully at the current time and under the current circumstances. (2) The Land Consolidation Court may only proceed in this way in order to make the property arrangements in the land consolidation area more advantageous. (3) For any given property or easement, the land consolidation settlement shall not result in costs and other disadvantages that are greater than the advantages. All three criteria must be fulfilled. In this paper, we present and analyze cases taken before the Norwegian Land Consolidation Court based on case studies and qualitative interviews with property owners. The observed effect of land consolidation is separated in economic, spatial, juridical, environmental and social effects. Our analyzes shows that the effects of land consolidation is difficult to estimate or to calculate. It is necessary to develop better methods both in terms of valuation and studies of effects.

TRANSPORT INFRASTRUCTURE AND ECONOMIC GROWTH: FROM DIMINISHING RETURNS TO INTERNATIONAL TRADE

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The economic effects of transport infrastructure have been at the frontline of economic research and development policies during the last three decades, based on high estimated output elasticities in the early research, pointing to transport investment as one of the main drivers of economic growth. Based on the analysis of 657 estimates from 48 studies, this paper confirms a positive yet small average output elasticity of transport network. Furthermore, it shows convincing evidence that the marginal returns of transport infrastructure have been falling since 1950s, especially in the USA and China, while the output elasticities in Europe have been stable but traditionally rather low throughout the entire period. This paper also reviews the findings from firm-level studies, which are generally positive but again small: new road infrastructure seems to attract new firms into its vicinity, increase firm-level productivity, wages, export activity, improve their supplier relationships and reduce the necessary stock of inventories. Given the state of research in this field, it is likely that new insights into the economic effects of transport will primarily come from the micro-level studies, but the overall conclusion based on small marginal returns calls for more targeted approach to investment in transport infrastructure, at least for developed countries.

ALTERNATIVE FOOD NETWORKS IN CROATIA – THE PERSPECTIVE OF SOLIDARITY PURCHASING GROUPS

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This research deals with the development and perspectives of alternative food networks (AFNs) in Croatia. The main aims of alternative food networks are relocalisation of food production and reconnection between organic food producers and consumers. These short food supply chains emerged as a response to an array of environmental, ethic and health problems connected with conventional food production. AFNs exist in many different forms such as farmer's markets, community supported agriculture, community gardens, organic boxes deliveries, solidarity purchasing groups. Based on similar models from developed countries, solidarity purchasing groups (in Croatian groups of solidarity exchange or GSR) started to develop in Croatia in 2012, while other forms of AFNs (e.g. farmer's markets) a few years later. Solidarity purchasing groups are self-organized groups of consumers which collectively purchase locally produced organic foodstuffs directly from producers. The emphasis on the word "solidarity" in the name assumes support for small Croatian farmers who generally have very limited access to the market. Currently, organic production in Croatia is just

starting to catch on (only 6,07% of total agricultural area is used for organic production). However, the number of organic farmers is increasing from year to year (from 1.494 in 2011 to 3.546 in 2016; Croatian agriculture 2016). Solidarity purchasing groups are in part responsible for the organic food production growth because they have created a new market for such products (as confirmed by farmers in interviews conducted within the scope of this research).

The process of solidarity purchasing groups development in Croatia was explored through participatory action research as the author is a member of one such group from the city of Rijeka and has purchased food via this group for six years on a weekly basis. The author has also taken part in the organization of delivery of products, online communication and information exchange within the group, group meetings etc. Additionally, 25 semi-structured interviews were conducted at the end of 2017 and in the beginning of 2018. The interviews were conducted with key actors (N 15) from solidarity purchasing groups from two Croatian cities, Rijeka and Zagreb, as well as with organic farmers (N 10) from different regions of Croatia (Eastern Croatia, Northern Croatia, Lika and Istria) who cooperate with solidarity purchasing groups and supply them with organic produce. The questions in the interviews were related to how groups are started, organized and maintained, what are their perspectives and aims, participants' motivations etc. Some of the results will be presented at the conference.

POSITIONING REGIONAL PLANNING ACROSS EUROPE

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Across Europe the regional policy level is difficult to capture analytically, due to the prevailing differences in terms of institutional settings and political contexts, geographic size and scope of regions. Regional planning is not an exception as it is institutionalized differently across Europe and its practical significance varies in regard to mediating competition over the use of land, regulating change and promoting preferred spatial and urban form. In general, the regional level is often considered as an appropriate scale for addressing current challenges in relation to sustainable development; and regional planning as such is appreciated as a sub-national mode of horizontal and vertical coordination to integrate various policy fields. However, the institutional context of regional planning has changed significantly in recent years, which has resulted in weakening its political significance and practical relevance. In this paper, we question and nuance these seemingly diverging theoretical and practical views on the position of regional planning through a comparative analysis of regional planning across Europe. Drawing upon results from the ESPON COMPASS (2018) project, we investigate i) shifts in the distribution of spatial planning competences; ii) changes in regard to regional planning instruments, and iii) the role of regional planning within sectoral policies. We conclude that the institutional and instrumental conditions for regional planning across Europe are extensive and to some extent have been renewed and adapted to changing contexts in recent years. In principal regional planning seems to be well positioned to mediate the use of land and to regulate spatial development. However, the role of regional planning is differently positioned in each country in relation to various sectoral policies and the way statutory instruments are produced and applied. Due to diverging trajectories of regional planning our comparative analysis indicates only minor congruence with earlier classifications of spatial planning traditions across Europe.

METROPOLITAN GOVERNANCE, CHANGE AND SPATIAL TRANSFORMATION: THE DEVELOPMENT OF SECONDARY BUSINESS DISTRICTS IN DUBLIN AND WARSAW METROPOLITAN AREAS

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Metropolitanisation is closely linked to flows of international capital, particularly important for peripheral or semi-peripheral countries as well as countries with comparatively small, open economies. In these places, the beneficiaries of investment tend to be metropolitan areas that can offer high-quality human capital, a critical factor of development in the contemporary information economy. Associated with this inflow of capital is a high demand for particular forms and scales of office space, and this in turn may - under certain conditions - favour the formation of a polycentric structure of the metropolitan area.

The aim of the paper is to show the relationship between the transformation of the metropolitan spatial structure (in particular, the emergence of secondary business districts) and public policy within multi-level governance structures. The selected case studies of Dublin and Warsaw allow the issue to be presented in different planning contexts, but within a similar broad neoliberal development paradigm.

Based on interviews with local stakeholders, the paper attempts to present the changes in spatial structure of the cities in the context of implemented policies and their effects. The issue of how multi-level governance relates to the coordination of these policies, as well as cooperation with the private sector and non-governmental organizations is also analysed. The paper concludes by highlighting the role of public authorities in enabling the creation and functioning of secondary business districts, and the implications for the broader metropolitan area.

PLANNING FOR TERRITORIAL COHESION: FINDING THE MECHANISMS TO DELIVER TERRITORIAL COHESION THROUGH REGIONAL PLANNING

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During the past 10 years there has been a change in the ways in which regional (spatial) planning and regional development have been coordinated across Europe. The 2000s were characterised by forms of spatial planning that attempted to coordinate policy and programmes at a variety of different scales (regional and Europe-wide) that might be described as both Europeanised (see Böhme and Waterhout 2008) and reflective of a 'territorial cohesion approach'. However, since the late 2000s a different trend has emerged in many western European states whereby regional co-ordination in formally identified regions has been downgraded (see Garland 2012 or Allmendinger and Haughton 2013) despite for example, the prevalence of spatially wicked problems of increasing social polarisation or climate change that required a co-ordinated response. The new "regional planning approach" might be characterised as flexi-regional planning firstly whereby boundaries are set in an ad hoc or emergent manner (fuzzy boundaries), or secondly where planning emerges around specific investment problems (such as infrastructure) or thirdly where local agencies increasingly look to welfare as a form of (localised) social investment. Building on work carried out through the Horizon 2020-funded COHSMO project, the paper will explore the characteristics of emergent flexi-planning in fuzzy regions as

witnessed in two institutional contexts: Denmark (beyond Copenhagen) and England (beyond London). In particular, the paper will explore the mechanisms by which ‘territorial cohesion’ outcomes are claimed to be spatially produced through forms of spatially co-ordinated policies, projects and the delivery of services of general economic interest. These are processes that sometimes challenge the role of local government.

BORDERING URBAN NETWORK EXTERNALITIES: BORDER EFFECTS, NETWORK CONNECTIVITY AND METROPOLITAN FUNCTIONS IN EUROPE

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This paper examines the impact of national borders on the metropolitan performance of European cities and, in particular, how the presence of borders moderates network externalities within polycentric urban regions. So far, the many studies that focus on city growth and their performance emphasize primarily the role of agglomeration economies and city networks economies. Given the territorial fragmentation of the European continent and the varying level of regional integration at work, it seems important to take into account the presence of national borders and their effects on the processes that explain urban performance. We hypothesize that the effects induced by borders are of two types. On the one hand, the presence of a border directly affects the metropolitan performance of border cities, either negatively due to classic barrier effects or positively thanks to specific border-related advantages. On the other hand, borders also impact the effects of urban network connectivity, notably the ways in which a city is either likely to benefit from functions located in neighboring cities (phenomenon of ‘borrowed size’) or, on the contrary, to be penalized by its neighborhood due to competitive processes (phenomenon of ‘agglomeration shadow’). The empirical analysis is based on the distribution of metropolitan functions in 1,700 European cities and mobilizes models of spatial econometrics. Preliminary results show that, within the same country, network externalities tend to be negative (i.e., competition effect between neighboring cities in the accumulation of metropolitan functions), whereas in a cross-border context characterized by open borders, network externalities are positive (i.e., complementarity effect). The moderation effect of the border varies according to its duration of opening, the type of functions considered and the size of the cities.

THE IMPACT OF BREXIT ON (RE)LOCATION DECISIONS - THE CASE OF THE FINTECH INDUSTRY

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On 23rd of June 2016, a majority of the British electorate voted in favor of leaving the European Union. This result unleashed a series of developments, referred to shortly as Brexit, including the key date of 29 March 2019, when the UK is to formally withdraw from the EU. The negotiations concerning the terms on which the UK will leave the European Union have proven to be complex and are, at the time of writing, still ongoing. Consequently, the negotiation process is still characterized by a high level of uncertainty regarding its outcome. With shrinking negotiation time and persistent uncertainty, it can be assumed that businesses have started evaluating contingencies plans for different potential negotiation outcomes, including (re)location schemes. Consequently, this paper aims to analyse the effect of three potential negotiation outcomes (‘withdrawal agreement Brexit’, ‘no-deal Brexit’, and ‘no Brexit’) on the (re)-location decisions of FinTech companies operating in the UK, by using a factorial survey analysis.

INTIMATE INTERNATIONAL AID: MIGRATION, SOLIDARITY AND THE TRANSPOLITICAL SPACE BETWEEN SPAIN AND THE WESTERN SAHARA

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How does an aid based on principles of solidarity allow us to think beyond the frames of humanitarian and state-led approaches to forced migration? This paper discusses the goals of an ongoing research project that examines how the intimate ties between a growing presence of Sahrawi refugees in Spain and a large network of Spanish advocates for the Sahrawi national liberation movement (known as the POLISARIO Front) is implicated in the production of trans-political space between the Western Sahara and Spain. The Western Sahara is a territory currently under Moroccan occupation and pending formal decolonization from Spain. Although consecutive Spanish governments have consistently failed to pressure Morocco to uphold international law, a large network of solidarity from Spain's plurinational civil society has supported the Sahrawi anti-colonial movement since its inception. "Vacaciones en Paz", a program that fosters an average of eight thousand refugee children in Spain every summer has become the backbone to a veritable support system between Spain and the refugee camps where the POLISARIO Front organizes its movement. The protracted irresolution of the conflict over the Western Sahara is propelling Sahrawi youth to find futures outside of the camps in which they have come of age, and their foster Spanish parents are important actors enabling their migration to Europe once they become adults. At a moment when the relationship between forced human displacements and the political impasses of the dreams of national sovereignty that animated decolonizing revolutionary struggles during the 20th Century have become more apparent than ever before, this paper will discuss how an aid based on principles of solidarity might be implicated in crafting new horizons of political possibility for a reconstituted North Africa, but also for reconstituted Europe.

NOVELTY AND RELATEDNESS: A RECOMBINANT APPROACH

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Are some regions more likely to produce truly novel technological inventions? Following the recombinant approach which considers novelty as a new combination of existing technologies, this paper investigates the geography of novelty. The literature on regional diversity/variety has shown that the entry of new technologies are on average related to the regional knowledge portfolio, this paper proposes to provide evidence on the link between diversity/variety and the entry of new combinations. These novel inventions at the regional level may combine technologies that are related to their local technology portfolio, that is, regions innovate by combining familiar pieces of knowledge. We know from microeconomic evidence that this is probably the most common situation in the sense that agents tend to reuse familiar knowledge in a new way. However, novel inventions may also combine technologies that are more distant and locally unrelated with their knowledge base, and the issue is then to understand what are the conditions that enable regions to produce more novel and breakthrough inventions.

For this paper, we use REGPAT-OECD EPO patent data to provide evidence on how French regions produce novel technological inventions over the period 1990-2014. We identify for each patent and each region, the new subclass pairs that are combined and enter the region for the first time. Among these, we can also identify those combinations that are also new at the world level, in the sense, that they occur for the first time in the history of EPO patents.

Based on these French data, we first investigate the extent to which regions innovate using rather close/distant pieces of knowledge and whether they are related or unrelated to the local knowledge

base. Second, we study the conditions explaining the regions' ability to produce novel technological inventions by combining unfamiliar and unrelated knowledge. We know from microeconomics, that agents need to access non-redundant and probably extra-regional knowledge. Thus, we investigate two determinants: regional related/unrelated variety as a local source of knowledge diversity and its openness as a non-local and non-redundant source of new technologies.

NEW DATA SOURCES, TEMPORAL VARIABILITY AND IDENTIFICATION OF CAUSES OF LOW URBAN ACCESSIBILITY

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In the past decades, accessibility becomes considered as a crucial factor for well-being and fully-fledged citizenship, while its constraints limit full participation in the social and economic activity of a given society, becoming the main factor responsible for social exclusion. The importance of accessibility is also reflected by a current shift from mobility-centered to accessibility-centered approaches in transport planning. The emergence of new data sources, including big data and time-sensitive network data and recently developed methodologies, enhance our understanding of transport systems and the extent to which they affect the quality of life of inhabitants. The application of the temporal dimension of accessibility enables to evaluate existing transport infrastructures providing insights on a dynamic variation of infrastructure performance.

The aim of the study is to evaluate a temporal and intermodal variability of spatial patterns of accessibility to jobs in Madrid. We use a very detailed spatial road network data, supplemented by information on speed profiles, in order to evaluate the quality of the network and measure the impact of congestion on the scale and spatial pattern of accessibility level. Then, we use schedule-based public transport data (GTFS) to assess a scale of spatial and temporal limitations resulted from the organization of public transport. Then, we propose and test a multilayer model which enables to identify different factors affecting spatial patterns of accessibility, like geography, quality of transport network and congestion levels, as well as the organization of public transport, including its routing, frequencies and timing. Finally, a cluster analysis provides a typology of transport zones. Our results show, that in Madrid we can observe a significant intermodal imbalance, as car accessibility in all areas is far above accessibility by public transport, even in case of the most congested scenario.

THE TECHNOLOGICAL CAPABILITIES OF CITIES: A PATENT-BASED APPROACH AND THE IMPLICATIONS FOR EVIDENCE-BASED POLICY-MAKING

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Large cities – being the centers of education, science, and finance – are traditionally considered as the main drivers of the technological growth. To comprehend their competences and to manage them effectively, policymakers and researchers need to adjust the analytical tools typically used for country-level evaluations to make them fit for the analysis of smaller territorial units. This might be a challenge as some types of data necessary to fulfil this task are aggregated on the national or regional levels only. The paper looks at patent statistics, which is one of the kind. The analysis of patent activity, its thematic structure and dynamics is a typical way to assess technological capabilities and specialization

of different actors including regions and countries, industries and specific types of organizations, but doing such an analysis for cities is a non-trivial task. Available patent databases are not designed for this: they do not allow automated searching for patent documents by region or city of origin (to our knowledge, the only exception is US), or the assignee address is often missing. The paper offers a new combinatory approach to overcome the technical difficulties and imperfections, and discusses the results of its testing. The methodology might be of a particular interest for other countries with no detailed information available on patent activity of cities, along with sub-regions, or clusters.

The results of city-level patent analysis make a considerable contribution to evidence-based policy-making and smart specialization of agglomerations. First, they allow better understanding of the current technological capabilities of the most active territories at the national technological landscape. Secondly, it helps to predict the trajectories of further development of technologies in cities, to understand their potential to diversify. Finally, an analysis of the scope of specialization makes it possible – albeit in the form of hypotheses – to assess the probability of the onset of technological crises in cities and their potential to recover.

CHALLENGES IN MONITORING REGIONAL DEVELOPMENT STRATEGY IMPLEMENTATION

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The main aim of this research is to analyze the established regional governance system in Croatia after EU accession and its complexity in measuring progress in implementation. The EU integration process triggered an institutional adaptation process through changing public management structures, approaches and cultures. Strategic planning practices in Croatia encompass formally participatory approaches, sustainability, social inclusion, innovation, youth unemployment etc. However, concrete monitoring results and impacts of such new policy approaches are still in its infancy as monitoring and evaluation systems are just being established. Methodologically, this research combines findings from a research study on the regional development strategic planning system (Sumpor et al. 2012) linking practical and theoretical insights established within the field of regional planning, policy and governance in the early post accession period. This research is focused on processes that include the design of the National regional development strategy adopted by the Croatian Parliament in July 2017 and the establishment of a monitoring system to measure progress in implementation (MRDEUF, 2018). Results of this research confirm that institutional capacities and integrated development approaches play a key role in this context (Rodriguez-Pose, 2013), while institutions cannot function well without adequate leadership that enables integrated development process in entirely new ways (Sotarauta et al, 2012).

FAMILY FIRMS, CORPORATE SPATIAL RESPONSIBILITIES AND PLACE LEADERSHIP IN GERMAN SMALL TOWNS

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Linking family firms to the two emerging discourses on place leadership (Gibney et al. 2009, Collinge & Gibney 2010, Beer & Clower 2014, Liddle et al. 2017, Sotarauta et al. 2017) and corporate spatial responsibilities (CSPR) (Albers 2011, Knieling et al. 2012, Harrison 2014, Albers & Hartenstein 2017, Albers & Suwala 2018), the paper introduces approaches towards family enterprise-driven urban and regional development. Research on CSPR (also referred to as corporate urban or regional responsibility, CUR / CRR) (Albers 2011, Schiek 2016, Bürcher & Meyer 2018) can be considered as an extension of the well-known concept of corporate social responsibility (CSR), that embraced mainly social and ecological commitment of firms beyond their core economic competencies, focusing on

corporate engagement within urban and/ or regional settings. Based on the complexity, the urban/ regional focus and multi-stakeholder settings CSPR-concepts are dependent on inter-institutional cooperation. Especially, in peripheral areas often highly embedded (family) firms explicitly ask for or just initiate such measures enhancing locational settings or regional competitiveness; Empirically, the study summarizes existing case studies of such family enterprise-driven urban and regional development from literature and ask whether these types of CSPR are extended towards genuine and active place leadership/ or are rather accompanying and passive measures in urban/regional settings. Methodologically, the study rests mostly on data from existing literature and selects different case studies of family firm engagement in Germany according to the 'go for polar types' approach (Meredith 1998) in order to identify extremes or at least opposite situations of CSPR. It will be shown that only in very few cases, CSPR can be linked to an active place leadership / urban and regional initiatives.

CHANCES AND CHALLENGES IN CREATING THE CONDITIONS FOR UNIVERSITY-INDUSTRY CO-CREATION ON CAMPUSES: THE CASE OF AMSTERDAM

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In many cities and regions, the interest in developing campuses and innovation districts is mounting as places which enable new forms of collaboration and co-creation between university departments and industry. For all parties involved, the benefits of co-creation are becoming increasingly evident. For a firm, producing scientific publications helps it to position itself as a regarded research lab, and strengthen its competitive position in recruiting and retaining qualified researchers and in accessing scientific networks (e.g. Bouty, 2000; Ernø-Kjølhede et al., 2001). On the other hand, university departments are becoming increasingly entrepreneurial. University policy tends to favour university-industry co-creation, putting financial pressures on faculty to engage in applied commercial research with industry (Siegel, Waldman, Atwater, & Link, 2003). For cities, more co-creation on a campus is part of a more general strategy to improve a city's attractiveness, innovativeness, competitiveness and standing in the knowledge economy (Boddy, 1999; Sarimin & Yigitcanlar, 2012).

Mounting evidence indicates the importance of three factors in facilitating co-creation (see Hopff, Nijhuis, & Verhoef, 2019): hardware (physical buildings and the place quality of a campus, e.g. Wagner & Watch, 2017), orgware (campus and relationship management, e.g. Huhtelin & Nenonen, 2015) and the software (the use of spaces and their functions). Despite continued policy attention for co-creation, for many campuses and innovation districts it remains a challenge to create the right mix of supporting conditions. Many studies on co-creation focus on what should be done to facilitate it (Van Winden & Carvalho, 2015; Wagner & Watch, 2017), but there is still little attention for the governance of the process in delivering. This is especially important on campuses where co-creation depends on collaborative action of multiple stakeholders.

In this paper, we explore the conditions needed to support co-creation and the challenges facing it on two campuses in the Amsterdam region: Amsterdam Science Park (natural sciences and computing) and the Amsterdam Life Sciences District (medical sciences). As such it contributes to understanding the conditions needed to support co-creation on campuses, including governance in a multi-stakeholder context.

HIGHER PRODUCTIVITY OR NEW CUSTOMERS? A COMPARATIVE EVALUATION OF INNOVATION POLICIES IN NEIGHBORING PREFECTURES IN JAPAN

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This paper evaluates the effect of local R&D support programs on firm performance, comparing between the two neighboring prefectures located in the same region in Japan. We do not only examine the effects of support policies on conventional outcomes like productivity and sales growth, but also on the regional and sectional diversity of transactional networks. This paper contributes to the literature by revealing how the difference in the public support by local government results in recipient's performance depending on its spatial, administrative, and economic conditions. We examine the effect of each support program on firm performance with fixed effect panel estimation with propensity score matching. We conduct a comparison between Prefecture X which includes one of the three major metropolitan areas in Japan and the neighboring Prefecture Y which has a similar industrial structure to X. Financial and transaction data of local firms are obtained from Teikoku Data Bank (TDB), while subsidy data are collected from prefecture websites. The program conducted by X since 2012 subsidizes firms with up to 200 million yen regardless of firm size, and allows multiple subsidies from different agencies, whereas that conducted by Y since 2007 subsidizes only SMEs with up to 5 million yen and hardly allows multiple subsidies. We find that the program in Prefecture X had positive effects solely on SMEs' conventional performance outcomes like TFP and sales growth, while that of Prefecture Y had positive effects solely on the diversity of transactional network of SMEs, though with a time lag of five years. In addition, X's program has even a negative effect on the transaction diversity under certain combinations of the subsidies.

WHAT IMPEDES THE LEARNING FROM SUCCESSFUL TOWN MANAGEMENT

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In management studies, specifically international business management, knowledge transfer is one of the flourished theme in last two decades. Even in town management studies, knowledge transfer research from successful case can be employed. Nonetheless, theory development has been done a lot, but it is rare to hear the successful cases which follow such successful cases.

This paper will formulate the framework what disturbing the learning and knowledge transfer. Moreover, most of successful cases which revived decreased town in Japan are based on original efforts without any knowledge transfer. This paper ask why and what happened in such successful cases.

ESTIMATION OF CAR TRIPS GENERATED BY THE ARRIVAL OF AUTONOMOUS VEHICLES IN THE MONTREAL METROPOLITAN AREA

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We estimate the car trips generated by the arrival of autonomous vehicles (AV) in the Greater Montreal Area. Our research methodology is based on a simulation model which estimates new travel demand associated with AV by measuring differences in travel needs. Given the uncertainty regarding the evolution of critical variables (e.g. vehicle occupancy), we evaluate different scenarios to assess a range of potential effects of AV on motorized travel. Our travel simulation model generates 240 results based on: i) three scenarios associated with changes in the number of driver's licenses by age

category.; ii) 20 average occupancy rates for automobiles and iii) four modal shift variations. Our model predicts a 13% average increase in motorized trips and results range between -2% and 31%. For each of the scenarios assessed in the analysis, we estimate the effects on external costs caused by automobile travel. According to our results, AV could reduce private and social costs by \$ 5,059 billion in Quebec.

IMPLICATIONS OF RURAL CHANGE AND THE USE OF RURAL TOURISM TO DRIVE ECONOMIC DEVELOPMENT:

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Rural areas play a critical role in their national economy. They often form the backbone of the export economy and house significant proportions of the national population. However, recent decades have seen rural areas across the developed world experience significant change as they seek to renegotiate their place within the context of economic and social change unfolding nationally and internationally. The purpose of this research was to understand how specific economic activities have encouraged growth or exacerbated decline in rural areas and understand how various organizations and agencies responded to these changes. The rural district of Westland, New Zealand was selected as a case study because it had undergone significant economic, social and political change in recent decades. A document analysis, questionnaires with the public and key informant interviews were carried out with local council, community groups and local Indigenous groups to comprehend these changes.

The study found that post-productive activities that are predominately market-led like tourism positively promote growth in Westland. While the uptake of tourism has been successful in attracting revenue and visitors to the district, the rapid and aggressive growth of tourism caused issues as the Westland District lacked the infrastructural requirements, significant investment, and the demographic make-up to sustainably stimulate significant economic growth. Various organizations and agencies have been responding to these issues, however they operated in an ad-hoc manner that primarily focused on increasing revenue and improving the visitor experience. Ironically, this promoted growth and marginalization of communities through tokenistic gestures to local Indigenous groups and exacerbated the inevitable decline of those rural communities that have failed to market their point of difference.

STRATEGIC MANAGEMENT AND REGIONAL INDUSTRIAL STRATEGY: CROSS FERTILISATION TO MUTUAL ADVANTAGE

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This paper critically assesses extant perspectives and theories on strategic management (SM) and regional industrial strategy (RIS) and assess the scope for cross fertilisation to mutual advantage. Despite the extensive literature on value capture and value creation and co-creation strategies in SM, there have been few attempts to explore their relevance to building, and capturing value from, competitive advantages at the regional level. Advocates of place-based approaches to RIS (notably Constructed Regional Advantage and Smart Specialisation approaches) advance discussion by recognising the need for commercial potential hence the need not only to create value but also to capture it in the region. Our aim is to go further by exploring the relevance and scalability of SM value capture strategies to RIS, and by showing how the focus of RIS on sustainability and the value co-creation process as a whole can help benefit SM.

WHAT FOSTERS ENERGY TRANSITION IN TOURISM REGIONS? EXPERIENCES FROM AN ENERGY FLAGSHIP REGION IN AUSTRIA

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Energy transition is on the top of political agendas and strategies. However, particularly in rural but energy-intensive regions the implementation of measures from these strategies is complex and requires an aligned bottom-up approach. Even if single actors are ambitious, they still lack power, resources or reach. Thus, it often needs impulses and support for establishing a robust network which drives a concerted energy transition in the whole region. This became clear in a process for establishing a “flagship region” for energy transition in the intensive (winter-)tourism region Pinzgau, Austria.

The process revealed the need for close cooperation in order to identify key actors, urgent regional energy topics and crystallisation points for a regional energy transition. The subsequent pathway towards implementation showed the need for the involvement of ski operators as biggest energy consumers in the region, energy grid operators and the energy provider. All three players have individual interests, but at the same time a joint goal: to optimise energy efficiency and maximize the integration of renewables in the entire winter sports region. Ski operators are interested in staying in the top-league of skiing regions while presenting themselves as sustainable tourism regions and reducing their operational costs. Energy grid operators and energy providers are interested in grid stabilization to provide energy of the same quality and in fostering their good relationship to their main customers. Suitable technological solution – the implementation of a smart grid – requires a re-organisation of the regional cooperation.

The future development needs a coordinated supporting framework that has been found in the Austrian flagship region “New Energy for Industry”. Here, Pinzgau will together with industrial regions in Austria develop technological solutions that enable a regional energy transition.

STRIKING COMMON EMPLOYMENT TRENDS ACROSS THE EU, 2013-8

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EU 28 employment increased by 12.1 million or 5.6 % from 2013 to 2017. This followed a deep recessionary period, 2008 to 2013, in which the fall in employment occurred notably among males, in southern Europe and in all major sectors except services.

From 2013 to 2017, however, employment change was positive in all but a few small member states, with “Cities “ on average drawing ahead slightly of their respective countries’ rates of increase. The paper uses EUROSTAT data, updated to 2018, to assess how much consistency of performance originates from different individual sectors enjoying international similarity of trends, and, by implication, similarity of causation.

Common experience showed several large service sectors varying little between countries in their rate of change between 2013 and 2017. Across the EU, they were led in their level of similarity by the whole sector of “food and accommodation”, including hotels and restaurants, followed by education. These were in turn followed by “arts, entertainment and recreation”, notably including sport and recreation, by “professional and scientific services”, and by “information and communication”, notably centred on large increases in computer programming and consultancy.

Clearly, in individual areas, much of this growth will stand as part of multipliers from other sectors, but its strength may point to a revised view of the characteristic locational requirements of growth, and the mix of skill needs, high and low.

One purpose of the paper is to assess whether the UK's strong growth of employment in certain sectors characterised by low pay and insecurity, leading to remarkably low growth of productivity, was shared in other countries. It was found that the same five service sectors constitute both the UK's and the EU28's leading growth sectors by volume of job growth, thus refuting any hypothesis of UK "exceptionalism".

THE SPATIAL DISTRIBUTION OF POPULATION: A STUDY OF METROPOLITAN PATTERNS AND DYNAMICS IN MEXICO

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At the end of the twentieth century, Latin America had 4 of the 15 largest cities in the world (Mexico City, Sao Paulo, Buenos Aires and Rio de Janeiro) plus 45 urban centres of more than 1 million inhabitants, some of which exceed 5 million (Bogota, Lima and Santiago) and many others with more than one million inhabitants. Most of these urban agglomerations occupy territories that exceed the jurisdictional scope of a local authority, with labour markets that covered several municipalities, sometimes in different states or provinces. In Mexico, the urban future is fundamentally being built on such significant territorial shifts. In addition to its high urbanisation, which the UN and World Bank estimate at 80 per cent, relatively recent urban processes including urban sprawl have involved the functional, morphological and qualitative transformation of many Mexican cities. These urban processes are largely due to metropolisation: the physical expansion of cities beyond their administrative boundaries. The increasing emergence of metropolitan areas has created new conditions for the organisation and performance of urban and regional spaces. Metropolitan areas are growing not just in number but also in significance as economic, political and social territorial entities. To gain some understanding of the dynamics and patterns of Mexican metropolitan areas, this paper discusses their population distribution and growth as well as disparities and urban hierarchies. Data from the 1990, 2000 and 2010 population and household censuses and a 2015 survey from INEGI (the national statistical office) are employed. The analysis includes 74 metropolitan areas. The paper reviews the origins of the metropolisation process in Mexico; an account of the main characteristics of the metropolitan system; and the population distribution and structure across metropolitan areas.

HOW TO PUSH REGIONAL BOUNDARIES? ANALYSING BARRIER EFFECTS ON EXTERNAL AND INTERNAL GALICIAN BORDERS

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In Europe, since at least the middle of the 20th century, multiple initiatives have emerged encouraging cross-border cooperation between territorial authorities on both sides of international boundaries. These initiatives seek to reinforce the European integration project while trying to reduce the barrier effects associated with the presence of a border. In this respect, numerous academic works, as well as EU reports and legal documents, have analysed the obstacles related to the still prevailing international limits.

However, there are other types of boundaries that have hardly been dealt with: administrative limits between territorial authorities belonging to the same state. Nowadays, these internal borders could

imply stronger barrier effects compared to international boundaries. Some particular member states, such as Spain, with strong autonomous regions, are a case in point.

Departing from the existing literature dealing with social, cultural, economic, legal and administrative obstacles in an international cross-border context, this work intends to apply these analytical tools to study obstacles in the context of Spanish autonomous regions. In particular, the Galician case will be analysed, comparing the external border context (North of Portugal) and the internal one (Asturias and Castile and Leon).

BUREAUCRATIC CORRUPTION IS CONTAGIOUS: HOW ANTI-CORRUPTION INITIATIVE WOULD WORK? AN ANALYSIS FOR VIETNAMESE PROVINCES

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This study investigates how three key strategies in the fight against corruption of Vietnamese government, namely, reducing regulation burden, enhancing transparency, and building a monitoring system, would work when the contagion of corruption is considered. For that purpose, this study includes spatial lag of corruption variable as one dependent variable that reflects the contagion of corruption. A dynamic GMM method is applied to run regressions for a panel dataset that cover all 63 Vietnamese provinces/cities from 2009 to 2015. The estimation results show that reducing regulation burden, enhancing transparency, and building a bottom-up monitoring system would lead to lower level of bureaucratic corruption at Vietnamese provinces/cities. Significant positive results of spatial lag of corruption variable also imply that local corruption is contagious across regions. Therefore, anti-corruption initiatives of local government of one province/city have both direct effect of corruption level of that province/city and indirect effect on corruption level of other provinces/cities. The indirect effects differ, depending on geographical distance between regions. While the indirect effects on corruption level of first-level neighbors are considerable, those on corruption level of faraway regions are almost zero.

KNOWLEDGE NETWORKS IN EMERGING MARKETS: THE CASE OF OFFSHORE WIND INDUSTRY

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In the past two decades, the literature on sustainability transitions has contributed significantly in exploring and understanding the shift towards “greener” economies and societies (Markard et al, 2012). Within this literature, Renewable Energy Technologies (RETs) constitute those sustainability-oriented innovations aiming to fundamental changes to the existing energy production regime (Boschma et al, 2017). RETs form project-based niche industries that depend heavily on the intensity of new knowledge creation and diffusion (De Vaan et al, 2013). Only recently, scholars have started studying their spatial perspective, incorporating the dynamics of the networks in which these technologies evolve (Coenen et al, 2012). In particular, very little is known about the knowledge creation and diffusion of RETs as a mechanism used by actors in order to enter the niche market.

In order to fill this gap in the literature, this paper aims to study the relationship between RETs’ knowledge network evolution and the evolution of their emerging global markets, identifying the mechanisms through which actors are able to reach these new markets.

Empirically, we focus on the Offshore Wind (OW) technology, which has emerged as a key RET, with rapid cost decline, and constituting main policy initiative and motivation by national and supra-national institutions (governments, EU). For studying the knowledge networks, we use EU-wide R&D projects, while for representing the market, we map the collaboration network of organizations in

construction of OW farms, for the period 2000 to 2017. To trace the effect of the first network in the later, we use dynamic social network analysis.

The empirical results show that the evolution of the market network is affected by the evolution of the knowledge network in the OW industry. This suggests that the organizations use their position to the knowledge network as one of the “battering rams” for entering the international emerging market.

REGIONAL RESILIENCE IN A MONETARY PRODUCTION ECONOMY

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Recent studies in Economic Geography and Regional Economics have committed many efforts to build a ‘resilience-thinking’ inside many fields and different perspectives. Themes such as regional responses and adjustments to unexpected and diverse shocks, uncertainty, crises and other factors that may influence regional characteristics and their reconversion have been highlighted as regional research agendas. Contemporaneous works approaching resilience had become expressive and increasing, however, money remains treated as a minor issue. Academic productions on regional resilience have almost always neglected the role of monetary and financial aspects. This paper aims to point out such lacunae and highlight the urgency of a systematic body of works exploring the role of money in the multiple dimensions of regional resilience, especially considering that regional resilience happens in a Monetary Production Economy under Keynes' view. In a Monetary Production Economy, money is an element that affects agents' motives and decisions. So, the course of economic events cannot be completely understood without the knowledge of its behavior neither in short nor in long turn, neither during growth or during crises. Therefore, this paper assumes the non-neutrality of money over time and across space. We argue that the Post-Keynesian Perspective about the role of money on economic processes can bring relevant insights to resilience thinking. More than that, the paper shows the evolutionary definition of regional resilience as the definition that allows a wider and more complex role to the monetary elements on the regional responses and adaptation to recessive shocks. We state that, for their characteristics, the evolutionary approach to resilience and the Post-Keynesian Theory are compatible regarding the notion of equilibrium in economic phenomena and also converge in the increasing role of the notion of path-dependence on its emerging issues. Then, the paper explores the dynamics of uncertainty and liquidity preference on regions after the occurrence of a shock to discuss how the financial system can affect the regional resistance to shocks and how its differentiated strategies on territory can explain the uneven capacity of resilience among central and peripheral regions. We argue also that the characteristics of the regional financial system can be important to explain regional adaptability, mainly through the path dependent interactions of finance with the innovation process and with regional productive structure. Finally, we indicate key elements to a future research frontier on the monetary determinants of regional resilience.

THE LARGEST REGIONAL CAPITALS: TRANSFORMATION AND DEVELOPMENT

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The study reveals how the role of the largest cities - regional capitals in the urban settlement system and the economy of the country changed during the period of social and economic transformations

at the turn of XX-XXI centuries. The object of the study is the largest cities with a population of over 1 million people, the administrative centers of the regions. Unlike Moscow and St. Petersburg, these are administrative centers or “capitals” of large territories that have the status of a constituent entity of the Russian Federation. The authors emphasize the special role of cities - regional capitals in post-socialist and developing countries, where there are significant and rapid changes in the distribution of functions between the center and the regions. At the same time, cities - regional capitals are not considered as isolated objects, but as elements of a national settlement system, the leaders among Russian secondary-tier cities. The common features of the evolution of the largest regional capitals, the continuity of the factors of city formation are revealed. Considerable attention is paid to assessing the consequences of the collapse of the Soviet Union for the development of the urban settlement system. It was concluded that the “compensatory” nature of the accelerated growth of the largest regional capitals in post-Soviet Russia. “Compensatory” growth is considered as a form of adaptation of the urban settlement system to the weakening of links between its essential links. A methodical approach is proposed that allows a comparative analysis of the role of the largest regional capitals and the capital of the state in the economy of the country. In the process of testing it, an assessment was made of population dynamics, as well as key economic indicators, such as the volume of products shipped, retail turnover, investments, the volume of work in the construction of major regional pages, as well as Moscow and St. Petersburg. The evaluation results allowed the classification of the largest regional capitals in terms of their role in the economic development of the country, as well as in terms of the extent of the gap between the indicators, on the one hand, the largest regional capitals, and on the other, Moscow and St. Petersburg.

URBAN CHANGE AND THE ROLE OF THE CAPITAL CITY. A COMPARATIVE STUDY OF 3 BALTIC STATES

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Estonia, Latvia and Lithuania – the three Baltic States – have experienced radical changes in their socio-spatial organization due to the transition from the Soviet regime to market-led neo-liberal economies in the 1990s. Since then the general trend in the Baltic States is population concentration in the capital city regions and shrinkage beyond them. The main focus of this study is on the (changing) dominance of the capital city regions. The aim of the present paper is two-fold. Firstly, it attempts to determine the long-term urban dynamics. Therefore, we test how well the existing theoretical models reflect the urban dynamics in the Baltic States and we invite to connect post-socialist cities in advancing these models forward. Secondly, this paper investigates the current state of urban development of three Baltic countries with the aim to better understand the role of the capital cities in the population redistribution in the context of population decline, urbanization and selective migration. Therefore, we analyse the patterns of internal migration to obtain more insight into the (changing) dominance of the capital cities in the settlement systems. This paper investigates weather the capital cities are the “winners” who concentrate younger and higher educated residents at the same time pushing away older and less educated residents. Or maybe the capital cities act as the distributors of the “successful” people to other locations within the countries? This is the first comparative Baltic study on urban and population change, which explores the patterns of internal migration using individual level census data.

INSTITUTIONAL WORK IN INDUSTRIAL DIVERSIFICATION AND CLUSTER EMERGENCE – THE CASE OF UAV TECHNOLOGY IN GALICIA

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This paper contributes to this special session by examining the institutional work associated with the emergence of a new industrial activity in Galicia (Spain). In a short period of time Galicia has developed a sizable industrial activity around UAV technology through a combination of institutional entrepreneurship, active intermediation and demand-side innovation policy.

Existing evolutionary approaches to regional growth tend to emphasise firm-led regional branching based on pre-existing local assets. Insufficient attention has been paid to how strategic or deliberate state action can influence the conditions for new path creation and development (Feldman and Lowe, 2018). The state plays a key role as “producer, regulator, animateur and purchaser” (Morgan, 2013: 337). Despite some exceptions (Martin and Coenen, 2015; Gee and Uyarra, 2013), the literature has been silent on the role of public demand as a driver of regional transformation.

In this paper we seek to understand the role of institutional entrepreneurs in Galicia and how through their actions they enabled legitimacy and leveraged resources to create new institutions for industrial diversification and new path creation.

In order to do this we draw on the literature on institutional entrepreneurs (Battilana et al, 2009), institutional work (Lawrence and Suddaby, 2006; Binz et al, 2016) and path creation (Garud et al, 2010). These approaches adopt a distributed and temporally embedded view of agency (Emirbayer and Mische, 1998, Battilana and D’unno, 2009) - which sees actors as purposively connecting the past with the future in the form of visions or expectations - to attract interest, guide activities, align actors and innovation networks and build enabling hard and soft infrastructures (Steen, 2016). The literature on institutional work helps us to understand the specific activities that institutional entrepreneurs engage in to create new institutions or to transform existing ones (Maguire, Hardy and Lawrence, 2004). These include political activities such as advocacy, whereby actors reconstruct rules, property rights and boundaries that define access to material resources, as well as other activities seeking to change norms or belief systems, educate, imitate or theorise in order to change organisational fields.

Drawing on in-depth interviews to around 20 regional and national stakeholders, we seek to explain the emergence of a new industrial cluster based in AUV technology in Galicia. We look at how the regional development agency acted as system builder and institutional entrepreneur and investigate the different combinations of practices, relational processes, multi-level lobbying and regulatory change associated with the new sector formation.

AN ANALYSIS OF THE LIVEABILITY – SUSTAINABILITY RELATION IN SPANISH CITIES

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The improvement of liveability and environmental sustainability conditions has become the main objectives of cities (European Commission, 2007; Major Cities Unit, 2010). The increasing popularity achieved by these notions has led to confusion about their meanings. Even though liveability and sustainability represent values and behaviours which are supported by society (Gough, 2015), they

also show important differences. From a theoretical point of view, several authors have recently contributed to go in depth in these differences (Howley et al., 2009; Allen, 2010; de Chazal, 2010; Ruth y Franklin, 2014; Gough, 2015). From an empirical point of view, only the work of Newton (2012) has analysed the liveability - environmental sustainability nexus. The results of this work seem to confirm the existence of a negative relationship between both concepts. However, in our view, these results should be carefully interpreted since the sustainability indicator is not estimated at urban level.

The present paper attempts to transcend this limitation and to contribute to the debate on the existence of any kind of conflict between liveability and environmental sustainability. For this purpose, the degree of liveability and environmental sustainability is estimated for 44 Spanish cities by using Goal Programming based composite indicators. The information provided by these composite indicators allows us to make a bivariate analysis in order to shed light on the liveability-environmental sustainability relation in the Spanish context. We also attempt to determine if the different performance on liveability and environmental sustainability achieved by the analysed cities could be influenced by other important urban variables as city size, urban function or economic base.

ASSESSING ENERGY VULNERABILITY IN SPANISH REGIONS: A MULTICRITERIA APPROACH

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In the last years, many developed countries had to face new situations of poverty and scarcity, increasing the concern about their impact in the energy field. This situation has led to a more exhaustive development of the concepts of energy poverty, inequality or vulnerability (European Fuel Poverty and Energy Efficiency, 2009; Bouzarovski et al., 2012, 2014). This study is focused on the concept of energy vulnerability. It considers that in order to respond to its impact on the territories, families and companies, it is required to have instruments which allow its estimation. This is precisely the main objective of the present paper.

Following Day and Walker (2013, p. 16), energy vulnerability is considered in this paper as “a situation in which a person or household is unable to achieve sufficient access to affordable and reliable energy services, and as a consequence are in danger of harm to health and/or wellbeing”. It clearly represents an abstract and multidimensional concept (Day y Walker, 2013 o Llera-Sastresa 2017), depending on factors related to energy market, socioeconomic, residential and environmental conditions. This work uses a goal programming approach to construct a composite indicator of energy vulnerability at a regional level. The energy vulnerability index can be applied to the 50 Spanish provinces. Based on the results of this index, a map of regional energy vulnerability for Spain can be constructed. This approach could be applied to other regions and/or contexts in developed countries.

THE ROLE OF TRAILBLAZERS, ANCHORS, AND THE STATE IN BUILDING AND LEGITIMISING AI ECOSYSTEMS: INSIGHTS FROM MONTREAL

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Developments in evolutionary economic geography (EEG) have seen the fundamental question of where and how new industries emerge regain interest in theoretical debates (Martin, 2012; Binz et al., 2016). However, insufficient attention has been paid to the role of agency (Dawley, 2014; Steen,

2016). In particular, while recognising firms and entrepreneurs as principal agents of economic change, EEG largely neglects the role of non-firm actors, institutions and public policy in creating new industries (Binz et al., 2016; Vallance, 2016). Nevertheless, path creation processes are also conditioned by the way both firm and non-firm actors mobilise and anchor key resources for industry formation (Binz et al., 2016). Moreover, through their deliberate agency and collective interaction, these actors participate in the legitimisation of new industries, a prerequisite for mobilising the required resources and regulatory support (Bergek et al., 2008; Markard et al., 2016). However, how legitimacy is actively built up through the interplay of different actor groups in the early stage of a new industry remains under-researched (Binz, Harris-Lovett et al., 2016; Markard et al., 2016). Drawing on 30 in-depth interviews with key stakeholders from Montreal, an emerging global hub for artificial intelligence (AI), this paper examines the role of 'deliberate agency' (Martin and Sunley, 2010) in the emergence of AI as a new local industry. The findings highlight the role of multi-actor interaction and effort in the development and legitimisation of AI, particularly that of trailblazers, anchors and the state in creating the conditions and institutional infrastructure for AI development.

HOW AUTONOMOUS DRIVING MAY AFFECT RESIDENTIAL AND WORKPLACE LOCATION DECISIONS: A REVIEW OF THE LITERATURE THROUGH THE LENS OF ACCEPTANCE AND VALUE OF TRAVEL TIME

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Automated vehicles (AVs) are often presented as the next revolution in the automotive industry. Car manufacturers worldwide announced that self-driving cars will be available in the next years to come, and test studies are currently being organized with self-driving shuttle buses in various urban areas worldwide. This technological optimism is largely fueled by the many potential advantages that are associated with AVs. AVs are believed to have impacts that reach into most aspects of our lives: fewer traffic accidents and fatalities, lower mobility costs, lower energy resource and land use consumption, but also greater freedom for those who currently cannot drive (e.g., elderly or physical disabled). But AVs might also have important rebound effect. For example, travel time with an AV may be used more productively than before and might therefore be valued differently compared to traditional transport modes like private car use and public transport. In addition, travel time from home to work is often an important factor in location decisions related to residential and workplace location. Given that travel time with an AV might be valued differently, these location decisions might be reconsidered resulting in choosing a residence further away from work (or vice versa). This paper therefore presents an overview of possible AV impacts on residential and workplace location decisions. Many of these impact studies make assumptions on adoption rates and market penetration, and therefore this paper starts with a discussion of studies on AV acceptance and willingness-to-use before addressing value of travel time and location decision impacts of AVs.

FROM CIRCULAR AREA DEVELOPMENT TOWARDS FUNCTIONING CIRCULAR AREAS: APPROACHING THE MULTI-SCALAR CHALLENGES OF A (FUTURE) CIRCULAR ECONOMY

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Aksel Ersoy, Delft University of Technology, The Netherlands

Recently, there has been an increasing interest in circularity as part of economic development. A circular economy has been referred as an industrial system that is restorative or regenerative by intention and design. It targets a series of actors in the city and beyond and unfolds the perspective of economic gains. At its core, it aims at closing linear material flows to facilitate the long terms use of products and activities. Furthermore, it advocates for a new economic system where products or services ownership would be replaced by renting and sharing models. It is an emerging industry couples of different (multi-scalar) systems, from finance, education, politics to industrial processes

and production networks with an aim to reduce waste. In this paper, we explore how multiple actors play in (de-)legitimizing circular economy as part of an emerging industry. Based on our case studies, we explore multi-scalar institutional arrangements that are required towards creating new industrial paths. This will enable us to think what kind of institutional work is necessary to understand the multi-scalar interaction (and conflict) between (local) circular area development and (regional/global) functioning circular areas.

ORGANIZATIONAL AMBIDEXTERITY AND THE CREATION OF SMART CITIES: MANAGING EXPLORATION AND EXPLOITATION IN URBAN MANAGEMENT

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Willem van Winden, Amsterdam University of Applied Sciences, The Netherlands

Wieke Schrama, Amsterdam University of Applied Sciences, The Netherlands

The potential of digital technologies and data-driven solutions to address urban sustainability issues and enhance the efficiency and effectiveness of urban services, has been widely acknowledged by academics and practitioners over the last decade. Smart city solutions which leverage digital technologies and make use of sensors, data and algorithms, allow city governments to adopt more evidence-based and anticipatory ways of managing urban systems and processes, while simultaneously reducing their ecological footprint. In the deployment of solutions based on digital technologies, city governments oftentimes rely on contractual arrangements with actors from the private sector, given their expert knowledge, innovative capacity, and managerial competences to implement and operate these solutions. Across Europe, city governments have engaged in a variety of partnership arrangements with the private sector in this respect, examples of which are Amsterdam Smart City (Amsterdam, Netherlands), Copenhagen Cleantech Cluster (Copenhagen, Denmark), and Forum Virium Helsinki (Helsinki, Finland), in which they seek to balance public and private interests. Such partnerships have been instrumental in initiating pilot projects in the smart city realm, which are typically co-funded by local, national, or European subsidies, and reflect the growing ambition of governments on all levels to support the utilization of digital technologies for urban development. An increasingly recognized problem underlying the lack of real-world impact of smart city solutions developed in pilot projects, is the insufficient level of post-project upscaling once subsidization ends, thus strongly reducing their economic, environmental and social impact on urban development. While it has remained rather difficult for city governments to move smart city solutions from the pilot stage to large-scale implementation (Van Winden and Van den Buuse, 2017), major technology firms are tapping in to the global market for smart city technologies, by developing and marketing a variety of smart city solutions to a large number of cities (Van den Buuse & Kolk, 2018). These firms have developed products and services for smart cities to address specific urban management issues, which they are able to experiment and test in pilot projects, and sell them to multiple cities simultaneously. Hence, while city governments struggle with the wider dissemination of smart city solutions beyond pilot projects, it appears that actors from the private are more capable of scaling up solutions, particularly by replicating solutions developed in city A to city B. In this vein, this paper seeks to provide insight in the ability of technology firms move from a technology development phase (i.e. tests and experiments with digital technologies, products, and services), towards the marketing of smart city solutions (i.e. reaping the financial benefits from digital technologies by bringing products and services to the market). This organizational ambidexterity perspective aims to contribute to the wider debate on the creation of smart cities, by addressing how urban management scholars and practitioners can learn from private sector actors in this respect.

More specifically, by framing the lack of dissemination of smart city solutions beyond pilot projects as an ambidexterity problem faced by city governments, we aim to connect a techno-centric perspective which has been prevalent in recent firm-centric studies on smart cities, with the more holistic, human-

centric perspective of smart cities that adopts a more balanced combination of human, social, cultural, environmental, economic, and technological aspects (Mora et al., 2017). Based on multiple case studies on firm approaches to managing exploration and exploitation in developing and marketing smart city solutions, we aim to contribute to further understand the role of public and private actors in effectively managing urban common resources, as well as the broader governance of smart cities more generally.

YUNNAN AS A MAGNET FOR TRANSNATIONAL LABOUR MIGRATION: A MULTI-SCALAR PERSPECTIVE ON THE CHINA-MYANMAR CROSS-BORDER LABOUR MARKET REGION

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This presentation wants to discuss cross-border labour mobility in the southern Chinese province of Yunnan. Rural-urban migration within China has created a considerably demand for labour in the more rural and peripheral parts of the province, which seems (at least partly) met by an inflow of labour migrants from Myanmar. Trying to understand this flow we apply first of all a threshold approach that was developed on borders, mobility and migration. Central in this approach is the decision-making process of individuals who (plan to) move in space. During this process they have to decide on three geographical thresholds. The first concerns the idea to cross national borders, the second the possible destination (across the border), and the third concerns the mobility trajectories or routes. This decision-making process is embedded in a 'force-field' of impacting factors on different levels of scale. This paper wants to focus especially on the impact of this multi-scalar force-field on labour-market dynamics in the border-region.

GOVERNANCE OF URBAN COLLECTIVES IN AMSTERDAM

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Across European cities local entrepreneurs are joining forces in new ways, forming collectives to stimulate business growth and innovation and to create a more attractive business environment. The value of such collectives is increasingly recognized by local governments and policy measures to stimulate these initiatives are being developed. Amsterdam hosts different collaborative initiatives, including 39 business improvement districts (BIDs). The Knowledge Mile is such a collective in which shopkeepers, other local SMEs, residents work together to collectively improve a large retail area. The city of Amsterdam is also a stakeholder. Government can fill an important role in enabling the creation of collective resource management in urban settings. However, if effective regulation is missing, citizens and governing bodies have to look for incentives to find new means of addressing governance. As such, the potential for collective management of urban commons may be greater than realized so far, as there is still a lack of knowledge in this area. In this paper, we aim to bridge this gap. By means of an embedded case study approach, we analyze the interaction between the stakeholders in their development of a green zone, the Knowledge Mile Park, in the Wibautstraat. In the coming years, roofs, facades and ground level will be changed through a collaboration of residents, entrepreneurs, researchers, civil servants and students in a metropolitan Living Lab. In this Living Lab, solutions for a healthy and social environment, climate resistance and biodiversity are jointly developed, tested and shown. In our study, we will analyze the role of the governing bodies in such initiatives, and make recommendations how collectives can become more mainstream with new kinds of institutions, without an undue burden on the community.

THE HETEROGENEOUS SKILL-BASE OF CURRENT AND FUTURE CIRCULAR ECONOMY EMPLOYMENT

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This paper examines the skills and education that are needed in a circular economy (CE). The CE is divided in direct and indirect CE-related employment based on an analysis of input-output linkages. This results in a broader definition of CE-related jobs than usually envisioned in the literature. Combining occupational skills and education data with this newly introduced definition of CE employment, we compare circular- and non-circular-oriented occupations in terms of skills and abilities. Building on the seminal paper by Consoli et al. (2016) and looking at all occupations within a broad range of CE-related industries, we detect and address heterogeneity in job requirements within the CE in the US. We distinguish core activities within CE employment – focusing on renewable energy, repair, re-use of materials and the sharing economy – from enabling activities, which are focused on management, design, and ICT-applicability of the CE. While core CE-activities generally require more manual and technological skills, enabling activities, in contrast, require more complex cognitive skills. Neither core nor enabling CE sectors, however, are entirely cohesive in terms of skill requirements. At the same time, our analysis shows that many parts of the CE are susceptible to computerization and that computerization will lead to a skill-downgrading in most of the CE sectors, in contrast to developments in the rest of the economy. We complement our analysis with mapping of the diffusion of CE-related employment – this we do for the Netherlands. We also discuss policy implications.

REGIONALIZATION OF IDENTITY POLITICS? A LITERATURE REVIEW OF IDENTITY POLITICS IN REGIONAL DISPARITIES (WORKING TITLE)

Bram van Vulpen, University of Groningen, The Netherlands

This paper aims to give a conceptual review of state-of-the-art research to identify and discuss the current understanding of within-country regional disparities. In doing so, this research applies a theoretical grid of identity politics to review the expansive literature on regional disparities. It describes agreements and disagreements in recent research regarding regional disparities in the light of identity politics.

Recent election results, growing economic inequalities, late forms of resistance and new social movements have (re)fueled debates on regional disparities. These developments instigated a new wave of scientific research consisting of multidisciplinary and international analyses in social, cultural and economic divisions. Geographers, sociologists and political and public administration scientists foremost, have coined various new concepts, categories and themes. For instance Norris & Inglehart (2016) highlight a ‘cultural backlash’ and Goodhart (2017) detaches ‘somewheres and anywheres’. Other scholars accentuate regional aspects more directly, such as Rodríguez-Pose’s (2018) study on ‘places that don’t matter’ and Cramer’s work on ‘rural consciousness’ (2016). Similar to identity politics literature (e.g. Fukuyama, 2018; Castells, 1997; Bernstein, 2005) various regional studies point out social groups who experience a particular dominance or resentment, and who challenge oppressive power by demanding recognition. Identity politics is used as a descriptive term that has ‘divergent notions of power derived from competing theoretical traditions’ (Bernstein, 2005: 21). Accordingly this paper inquires a regionalization of identity politics in four bodies of literature: governance structures, economic inequality, cultural values and social competences. Discussing these bodies of literature aims to give me and other social scientists a theoretical framework to establish further empirical research upon.

REVEALING THE MOTIVATIONAL FACTORS FOR RENEWABLE ENERGY USE AND ENERGY EFFICIENCY – A TERRITORIAL COMPARISON ON THE TWO SIDE OF HUNGARIAN-CROATIAN BORDER

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Ákos Bodor, MTA KRTK Institute for Regional Studies, Hungary

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.

Beside several scholars' investigation on motivational factors for pro-environmental behaviour, there is a wide range agreement on the usefulness of Ajzen's (1991) Theory of Planned Behaviour (TPB) that is proper for explaining various types of pro-environmental behaviour. On the other, we have to mention that there is a significant inconsistency among different domains of pro-environmental behaviour (one may behave in environment-friendly in waste recycling; while behaving in an environment-burdening manner in the transport domain). Scholars usually investigate one or two factors from (TPB) and maybe other additional potential one(s), but looking through the literature we did not find any attempt that made for revealing all the factors in TPB at the same time. Formerly we also made an attempt to analyse secondary data (e.g. Eurobarometer), however, in these surveys do not include all the questions that help to reveal all the factors of a certain (e.g. waste management) pro-environmental behaviour at the same time either.

Due to the above mentioned findings, in the HUHR Interreg V/A RURES project we elaborated a survey with questions that meet all the factors of TPB (and more). The survey was conducted in two counties of the Hungarian-Croatian border, bearing similar socio-economic situation but with different socio-cultural heritage. The sample was represented by the two rural areas for settlement structure, age group and gender equally. The survey focused on the potential use of renewable energy and energy efficiency as a topic. The analysis of the survey showed – in some cases – significant differences in attitudes and behaviour between the two territories baring different socio-cultural heritage. The results of correlation analysis can also show the factors (and their territorial differences) in predicting pro-RES and pro-energy efficiency behaviours.

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LOCAL COMMUNITY AS AN ACTOR IN SHAPING REGIONAL SOCIAL INFRASTRUCTURE SERVICES

Gintare Vazoniene, Aleksandras Stulginskis University, Lithuania

The role of local community is growing in shaping the environment of living area, enhancement and implementation of changes in social infrastructure services. Social infrastructure is a key part of areas social and economic system, the development level of which predetermines satisfaction of needs of local residents, fulfilment of their range of choices and alternatives. Though social infrastructure is the most important elements of living area which determines mobility of local people, their choices, availability and accesibility of various services – what makes preconditions for accepting the decisions related to SI shaping in the regions – however the analysis of the role of local community in the science is still limited. The following research question has been addressed – what is the potential contribution of rural community towards promotion in shaping social infrastructure servces in the regions. The research object – the role of local community in shaping social infrastructure services in the regions. The research aim – to analyse the role of local community in shaping social infrastructure services in

the regions. It was found that the role of local community mostly is determined by their needs' analysis for these services, though more and more attention require significant demographic challenges (decreasing birth rates, population ageing emigration) which also determine the priorities in providing social infrastructure services, their incidence and significance for the vitality of the region.

THE IMPORTANCE OF ENVIRONMENTAL PUBLIC GOODS FOR LOCAL ECONOMIC DEVELOPMENT: THE CASE OF KAUNAS REGION

Bernardas Vazonis, Aleksandras Stulginskis University, Lithuania

The growth of landscape value, development of recreational spaces influence the priorities and decisions of residents and business entities, what can enhance the processes of economic development. Attractive and healthy environment, for the leisure and recreation favourable infrastructure determines the flows of tourists, people decisions while choosing the living place. Towards urbanization processes the migration to the areas full of environment public goods is increasing, the demand for the real estate, daily consumption goods and services is growing as well and this is a stimulus for the development of various businesses. The state of environmental public goods is related not only to regional economic growth, employment, real estate prices, but even to demographic indicators. The research object – the importance of environmental public goods for local economic development in Kaunas district. The research aim – to evaluate the interface between environmental public goods and economic development in Kaunas district. The research results disclosed that public goods such as landscape, biodiversity, clean air and water reflect in the prices of real estate and its rent prices in the district, also in the wages, where migration in part is influenced by the differences of environmental public goods in various regions, but not only by the economic motives – employment possibilities, the differences of wages in the regions.

LONG RUN PRO-TRADE EFFECTS OF DIASPORAS: FIRST EVIDENCE ON ITALIAN REGIONS

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This paper uses Italian regional data on world-wide gross migration flows in the age of mass migration (1876-1925) to assess the so-called diaspora effect on Italian regions export in the 2000s. While the literature has mainly focused so far on the contemporaneous impact of migration on trade, we provide first evidence of long run pro-trade effects of migration exploiting the regional dimension of a newly constructed dataset. Evidence supports the view that diaspora effects may emerge in the long run and shows heterogeneous results both in terms of categories of export (high vs low technology sectors) and main trade partners.

ASSESSING RESILIENCE FROM AN ECONOMIC WELLBEING PERSPECTIVE: THE CASE OF SPANISH REGIONS DURING THE GREAT RECESSION

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The differential ability of territories to cope with shocks has been analysed during the last years using the concept of economic resilience. However, when trying to measure it, there is not one single approach to adopt. Thus, many studies on resilience have focused especially on unemployment rates and on GDP, which are variables that fail to capture the whole impact of economic crises on population. In this sense, a multidimensional approach to resilience based on economic wellbeing can

better assess this impact, including aspects such as inequality of income distribution and economic insecurity.

Hence, we suggest a procedure for analysing regional resilience using Osberg's (1985) framework for economic wellbeing, whose components are consumption flows, stocks of wealth, economic equality and economic security. Particularly, we focus on the resistance dimension of resilience as described by Martin (2012), which means assessing the initial impact of the shock on the economic wellbeing of regions. Besides, we measure it in a way that reflects not only the difference between the pre- and the post-crisis situation, but also the intermediate impact on its wellbeing during the economic crisis. Finally, we use an aggregation technique based on goal programming, which allows to account for the degree of resistance of the region, in terms of its ability to maintain the levels of economic wellbeing previously achieved. This methodology is applied to the case of Spanish Autonomous Communities during the Great Recession, showing regional differences in the resilience of their economic wellbeing.

RELATION BETWEEN TOURISM AND URBAN LIVEABILITY: THEORETICAL AND ASSESSMENT ISSUES

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International tourist arrivals worldwide have doubled in the last 20 years, from 531 million in 1995 to 1,322 million in 2017 according to data from the World Tourism Organization. Tourism plays a prominent role in the economy of cities, generating positive impacts, but recently it has begun to focus on the negative impacts of this activity and terms such as “tourism-phobia” or “tourismification” have become very popular.

We consider that there is a bidirectional relationship between tourism and urban liveability. Tourism allows increasing the quality of life and the wellbeing in the cities, contributing to their liveability. However, at the same time, it can also generate negative impacts in the form of saturation, congestion or the increase in rental prices that reduce urban liveability. On the other hand, urban liveability, a comfortable environment from the economic, social and environmental point of view, can attract tourists, who are satisfied and therefore stay longer, spend more and recommend the destination, generating a greater economic impact on the cities.

Despite the media news, there is currently not too much scientific literature or empirical evidence to help clarify the relationship between tourism and urban liveability. Therefore, the objective of this paper is to propose a framework for the analysis of the impact of tourism on urban liveability, and how this, in turn, can condition the arrival of tourists and their behavior in cities.

SPANISH LAND-TAKE EXPANSION IN SPAIN. HAVE MUNICIPALITIES GONE TOO FAR?

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Is there any economic rationale behind the Spanish land-take expansion??

The aim of this research is to provide a deeper understanding of the territorial determinants of land take for the WHOLE Spanish territory, not only in big cities, to provide more effective policy instruments.

The "artificial" land use (or urbanization, meaning industrial, commercial, and residential and use and transport infrastructures) is mainly related to the size of the municipality, to the city structure

(monocentric vs polycentric), to population or income growth, to climate conditions and to transportation costs.

There is a strong negative sentiment against urban expansion or the growth of artificial land use (at expenses of agricultural land). This sentiment might have a rational justification connected to the increased demand for housing generated by higher income, growing population, and the decline in transport cost (Brueckner, 2000); or might have no justification, as it could occur in circumstances of declining population and number of households (Haase et al., 2013).

Should urban planning designers (municipalities) encourage urban densification and land expansion discourage or should municipalities apply no restrictions about land use, allowing agricultural and natural land around the urban fringe to be remarkably low as they would narrow people's utility by limiting housing supply?

Such controversial dispute can only be answered after understanding what factors have explained land take in Spain the last decades.

WHO DELIVERS SUCCESSFUL ENERGY TRANSITIONS? COMPARING BUILDING ENERGY RETROFIT STRATEGIES IN SCOTLAND AND GERMANY

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Reducing carbon dioxide emissions from buildings requires major retrofitting to improve energy efficiency. Despite this, no European country has yet devised an effective policy and institutional framework to achieve the scale and standard of retrofitting needed to meet climate targets (Rosenow et al., 2017). Further, different regions, with their distinct energy planning histories, governance frameworks and policies are approaching this problem in distinct ways, with varying levels of success. This paper compares the policy frameworks and roles of different actors in the delivery of energy efficiency retrofit in Scotland and Germany. Historically, the UK has adopted a more conservative view of the value of energy efficiency than Germany. In 2015, the Scottish Government departed from this approach by defining energy efficiency as a national infrastructure priority, with the aim of upgrading all buildings by 2040. Governance is taking shape through a programme coordinated jointly by central and local governments, but numerous challenges are emerging. Germany has an annual target for 2% energy renovation across the building stock. Actual upgrades are estimated as half this, despite improved initiatives for area-based renovation programmes and low cost finance for property owners from local banks and KfW (public infrastructure bank). Regional (Länder) and municipal authorities also exercise far more control over energy efficiency budgets and initiatives than in Scotland. However, there is no direct equivalent to the Scottish 'infrastructure priority' model, and some of the Länder oppose tax changes to incentivise retrofit.

Through analysis of policy documents and interviews with actors from local authorities, national government and relevant organisations in Scotland and Germany this paper explores institutional frameworks and social mechanisms needed to accelerate energy efficiency retrofit. It considers whether the Scottish model can go further and faster than policy in Germany and the Länder, despite a German history of greater ambition and resources.

THE MERITS OF MODEST EXPLANATORY APPROACHES: CRITICAL REALISM AND URBAN ECONOMIC GROWTH

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With city-regions now posited, by many policy bodies, as being sites of central importance within national economies, a resurgent narrative has emerged regarding their actual and latent growth potentials. Despite this, attempts at explaining urban growth trajectories, and what sits behind their divergent performance, remain wanting. Whilst single factor accounts - such as the skilled city and the creative city - may have the appeal of analytical parsimony, economic geographers suggest that a multiplicity of structures, processes, practices and events often sit behind the origin and subsequent cultivation of urban growth trajectories. Given the complexity of this challenge, this paper appeals for a sense of modesty in the explanations we put forward. In making this appeal, and building on previous suggestions for application (Yeung, 1997; Jones and Murphy, 2011), I argue that critical realism - and related heterodox approaches - may lead to useful explanatory insights on urban economic growth (Castellacci, 2006). Indeed, by embracing notions of emergence and a layered ontology - coupled with recent literature offering suggestions on approaches to empirical application (Hu, 2018; Fletcher, 2018; Steffansen, 2016) - I will argue that critical realism, when thoroughly worked through, may productively contribute to an "engaged pluralism" in economic geography (Barnes and Sheppard, 2010).

HOW DOES OWNERSHIP AFFECT THE USE OF PUBLIC SPACE IN HONG KONG

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The quality of urban public space is related to multiple factors, e.g. urban design, location, environment, facility, etc. In Hong Kong (HK), apart from the parks and playgrounds provided by governments, private developers are encouraged to provide public spaces around their properties. How will the ownership (private or public) of open space affect the use of these urban commons? Focusing on the city of HK, the study aims to demonstrate the relationships between the ownership of land and the use of the common spaces. Questionnaire survey and statistical analysis were conducted to elaborate the relationships. The advantages as well as the shortages of two kinds of ownership in shaping urban commons were demonstrated and discussed.

TOWARDS A SPATIAL PERSPECTIVE ON SOCIETAL CHALLENGE-ORIENTED INNOVATION POLICY

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Policies for research and innovation typically seen in the sphere of national governments have experienced a proliferation in terms of spatial scale. Innovation is now a top priority on all policy agendas from the urban and regional to the supra-national level. At the same time, 'transformative' or 'new mission-oriented' policy approaches have entered the scientific discourse, with new rationales beyond market and innovation system failures and clearly targeted at societal challenges such as climate change, aging, or energy security. As these 'Grand Challenges' are likely to differ for regions and may affect places to a different extent, the conditions to implement a one size fits all innovation policy may be as limited as the opportunities to develop and transfer one 'big solution' across regions. Yet, questions regarding the place-based dimension of innovation policies addressing wicked (i.e. contested, complex, ill-defined, without a single best solution) societal problems have been rarely asked.

This paper aims at conceptualizing the spatial dimension inherent in challenge-oriented innovation policies. Our starting point is the contextual nature of societal challenges, which unfolds not only in a diversity of priorities and exposure to problems across regions, but also in diverging capabilities, opportunities and barriers to develop innovative solutions. By combining insights from sustainable transition and innovation studies with the policy studies literature on wicked problems, we develop a conceptual framework to distinguish different types of challenges and scales of policy coordination (local/regional - multi-regional - supra-national). This allows revealing conditions for the implementation of challenge-oriented innovation policies at different spatial levels. To address contested and multi-dimensional problems, we argue for societal challenge-oriented innovation policies at the regional level, given the opportunities to combine contextual knowledge and learning of diverse actors at the supply side with collective need articulation and local market formation for innovative solutions at the demand side.

PROBLEMATISING 'REGIONAL' CREATIVE INDUSTRIES POLICY: LOCAL ARTICULATIONS AND NETWORKS (DIS)CONNECTIONS IN THE MUSIC ECONOMY OF NORTH WEST ENGLAND

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Policies seeking to foster economic growth through 'regional' creative economies tend to centre upon a spatially bounded cluster paradigm. Yet, recent academic scholarship has emphasised the region as being both territorially articulated and consisting of polymorphic spatial relations. Drawing on a unique case study of the music economy of North West England, this paper emphasises the importance of practice-focused, grounded empirical research in interrogating the spatial concept of the region. On the one hand, the paper highlights how music scenes are locally articulated, marked by informal supportive social relations and practices. On the other hand, music scenes become 'stretched' beyond the region through scene-based social practices, such as touring. Most significantly however, the paper identifies how the economic success of local music scenes is shaped by disconnection as much as connection, specifically disconnection with the hub of the music industry in London. This disconnection, it is argued, has both territorial and network dimensions, that both determine, and are a product of, differing social and economic practices. The paper demonstrates how interrogating the socio-spatial practices of individuals and firms located within the North West region problematises the notion of a static 'regional' creative economy as understood in policy terms.

DEGROWTH, COMMONS, GOVERNANCE, CARE AND CONVIVIALITY IN TOURISM: THE CASE OF THE PILGRIMAGE ROUTE TO SANTIAGO DE COMPOSTELA (SPAIN)

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Tourism is an activity that helps modern society to disconnect from increasing rapidity, rivalry, and uneasiness experienced in work live. Additionally various regions of the world are deeply in need of tourism that serves as an income base and sustains families. However, the on-going ecological crisis is escalated by the ever increasing social metabolism of tourism due to various factors such as long distance air travel, pressure on water resources by hotels, land degradation due to increased construction of tourism and recreational facilities. Additionally tourism has created social struggles due to unequal distribution of tourism incomes, and local communities have suffered from tourism related gentrification and rebounds created by the "sharing economy" (e.g. Air BnB). This paper analyses the contemporary utilization of the medieval pilgrimage routes to the Galician shrine of Santiago de Compostela as form of "socially-sustainable" degrowth and as an alternative concept to

modern socio-environmentally sensitive mass tourism. This research is based on a qualitative/quantitative methodology. Quantitative data is conducted on tourism streams but also on food prices, accommodation, and land housing prices along the Camino de Santiago. Qualitative data collection is generated by participant observation and intensive involvement with stakeholders of the Camino de Santiago including pilgrims, locals, volunteers, associations of the Camino de Santiago, representatives from municipalities, regions, church etc. At this stage of research 15 interviews had been conducted with experts from the mentioned groups. The findings suggest, that while pilgrimage tourism (involuntarily) follows a growth-based trajectory, environmental impacts can be minimal. On the “consumer side” many people across Europe can even start hiking or cycling to Santiago de Compostela from their home city. The route provides pilgrims an emotional journey as a form of spiritual path or retreat for spiritual growth but it is also popular with hiking and cycling enthusiasts. It is also seen as an experience of togetherness, sociability and sharing as some pilgrims and locals explained at the beginning of the interview process.

SOCIAL MOVEMENTS FOR SUSTAINABLE CITIES AND COMMUNITIES – THE CASES OF BOTH MOVEMENTS GERMAN ANTI-COAL AND FRENCH ANTI-NUCLEAR

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States shape environmental and climate change policies of their countries. Putting themselves in the forefront of sustainability as for example at the 21st Conference of the Parties of the UNFCCC near Paris, especially Western European states are often regarded as environmental leaders. On the other hand, they often rely and support unsustainable forms of energy production such as nuclear or coal fired power stations. Foucault (2010) argues that governments try to shape narratives of mental production, trying to produce the citizen best suited to fulfil those governments' policies. Drawing on this concept, this paper investigates how and why both the French and German states advocate seemingly unsustainable forms of energy production when environmental impacts and risks are well known. More specifically this paper investigates the organized practices (mentalities, rationalities, and techniques) by which subjects are governed in terms of energy and sustainability related fields in Germany and France. It draws on data on environmental conflicts collected for the EJOLT (ejolt.org) project, which aims to catalogue and analyse ecological distribution conflicts and confront environmental injustice. This contribution also applies Foucault's (2010) notion of 'counter-conducts' to study the dispersed, heterogeneous and variegated forms of resistance in contemporary environmental struggles. It investigates strategies and forms of local resistance against coalmines, coal fired power stations, nuclear power station, and (proposed) nuclear waste sites and how activists connect to wider networks of environmental justice. A famous example is “Ende Gelände” a large civil disobedience protest movement in Germany to limit global warming through fossil fuel phase-out. Similarly, in France there are “Zone à Défendre” (ZAD) as occupations intending to physically block environmentally sensitive projects such as the proposed nuclear waste storage site in Bure. We argue that in both cases German Coal and French Nuclear the will of being governed like that is decreasing and that in the end these counter-conducts will result in withdrawal from the unsustainable forms of energy production resistance to governmental strategies is decreasing.

FROM INTERREGIONAL KNOWLEDGE NETWORKS TO SYSTEMS

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Albeit the importance of extra-regional knowledge interregional learning remains largely ignored. This is surprising given its importance in Smart Specialisation's 'outward looking' approach, particularly in less advanced regions. This paper explores the rationales and dimensions underpinning interregional learning including networks and systems. First, it suggests a definitional clarity in the concepts of networks and systems. Second, it identifies four types of interregional learning networks and the barriers and incentives for such learning. Third, it introduces the concept of Inter-Regional Innovation Systems (IRIS) and sets a new agenda for studying formation and evolution of such innovation systems.

HIGH-SPEED RAIL AND THE DEVELOPMENT OF INTERLOCKING FIRM NETWORKS OF THE KNOWLEDGE ECONOMY IN GERMANY AND EUROPE

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Accessibility is a key location factor for knowledge-intensive companies. Most importantly, spatial accessibility enables actors to meet in person and obtain non-codified knowledge, which is key for innovation processes. Currently, upgrading and new construction of rail infrastructure, especially in the form of High-Speed Rail (HSR), has appeared back on the agenda of policymakers particularly in Asia and Europe. HSR, typically defined as running at 250 km/h or more, is competitive with both car and air travel in medium distances between about 150 and 1000 km, and usually connects the centres of agglomerations and larger cities, but sometimes also smaller municipalities en-route, greatly increasing their accessibility. At the same time, conventional rail services that serve intermediate cities are sometimes discontinued where a parallel HSR line is opened.

The expansion of HSR raises the question if, and how, companies adapt to changes in rail-based accessibility. This paper examines changes in intra-firm networks of knowledge-intensive companies and compares these networks with the changes in long-distance rail accessibility in Europe. We assume that increased accessibility of urban centres is reflected by a spatial polarisation of the intra-firm networks between the dense, urban agglomerations on the one hand and smaller, peripheral areas on the other. The analysis begins with a connectivity analysis based on the Interlocking Network Model with 270 advanced producer services (APS) for the years 2009 and 2019. The firm sample includes the 30 largest firms of several APS branches each in Germany and their locations worldwide. Using an accessibility model for European rail transport, we try to explain the changes in connectivity.

CO-CREATION OF PUBLIC SERVICES AS A NEW POLICY TOOL IN URBAN GOVERNANCE. PROPOLAB AS A GOOD PRACTICE IN POLAND

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The proposed paper is a part of the current debate on urban resilience in Poland upon Europeanisation in terms of governance patterns which include new approaches to the delivery of public services. Lack of satisfaction from the existing forms of provided services prompts public organizations to look for new arrangements. One of them is co-creation which occurs when end-users participate actively in delivering and designing the services they receive. This form of improvements of existing practices in

this field can occur both in the aspect of co-initiating and -designing, co-deciding, and then co-governance and co-implementing of public services.

In the paper, one focuses on local public service delivery practice in Poland, where this process is the consequence of the rebirth of a market economy with a public sector that was limited in size and the intense development of the private suppliers market. However, the transfer of managerial and organisational techniques and models developed from the private sector to public administration, is more and more supported nowadays by the participatory techniques which go beyond the concept of NPM. In this context, co-creation could be regarded as a resilience securing policy tool of public service delivery.

Thus, this paper provides an overview of the development of co-creation arrangements in public service provision at the urban level in Wrocław (Poland). The case study of ProPoLab will be presented, where the innovative model of senioral co-housing in Popowice (residential area with 15 000 inhabitants) has been developed and implemented. The main objective of the paper is to identify different types of co-creation in urban governance and the relevant drivers and barriers that account for the success or failure of co-creation processes at the local level as a new policy instrument in urban governance in a long-term perspective.

The proposed paper is an element of the international research performed upon the project “Co-Creation of Public Innovation in Europe” (acronym “CoSIE”) financed upon Horizon 2020.

SMART SPECIALISATION AND REGIONAL ENERGY TRANSITIONS: INSIGHTS FROM GIPPSLAND, AUSTRALIA

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As a nation which has relied predominantly on coal-fired electricity and natural gas, Australia is at the forefront of the challenges related to zero-carbon energy transitions. In the face of these challenges, Australia’s federal system of government has proved to be manifestly inadequate in developing appropriate policies for addressing the implications of these transitions. The multilevel difficulties have been compounded by deep political divisions, meaning that even technical debates about the relationship between fossil fuels and climate change have become deeply partisan.

The consequences of these disjunctions have been felt particularly in those regions linked directly with the energy sectors, and now at the heart of the transition process. In one such region, the Latrobe Valley in Gippsland, in the south east of Australia, the immediacy of the policy vacuum was felt sharply when a large electricity generation plant was closed with only a few months’ notice.

Federal, State and local governments have conducted a series of consultation periods and trialled various institutional configurations designed in an attempt to better interact with the community and the set of complex, interrelated transition challenges facing the region. However, the legacy of recent decades has damaged levels of trust in government and residents speak of having consultation fatigue, while simultaneously feeling disenfranchised about the decisions and changes that affect their lives. In that context, the state government of Victoria responded by establishing the Latrobe Valley Authority (LVA) to lead a process of intervention. This focused initially on the individuals and families affected directly by the decision, moving subsequently to support recovery and reconstruction of the regional economy.

To assist with the reconstruction process, the LVA drew on European experience with smart specialisation (S3). Initially, the smart specialisation process has explored opportunities which have significant potential competitive advantage in global value chains, focusing initially on food and fibre and now the energy sector.

In the absence of a clear policy framework, there has been a flurry of activity in the region, post-closure. Some of this has focused on possible uses of vast coal reserves, others on renewable energy sources, some small scale and others massive. As well there has been interest in bio-fuels and energy from waste processes.

Throughout the S3 process, the project has focused on engaging with stakeholders from the quadruple helix, meaning business/industry, government (federal, state and local), education/training (higher and vocational education/research institutes), and civil society (non-government organisations, community networks). This has been a complex process as some stakeholders focus primarily on national and global issues, others at a state level, while others have a place-based focus, in the regional itself, and they have divergent, sometime contradictory (and conflicting) perspectives on the transition opportunities. Relevant stakeholders have been identified through a snowball process, while their willingness to participate has rested in part on the legitimacy of the LVA, and in part on their own perception of interest.

This paper charts the evolution of engagement with stakeholders undertaken as part of the smart specialisation process, exploring the insights revealed into the social and spatial dynamics of transition in this particular energy region. It reflects on the contribution which this experiment with S3 makes to the emerging theorising about regional transitions.

IMPLEMENTING SMART SPECIALISATION: EXPERIENCES FROM THE NORDIC REGION

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Smart specialisation (S3) has been widely adopted in the Nordic region, but the nature and characteristics of its implementation has not been subjected to comprehensive investigation. In this comparative study, we address how different Nordic regions have translated S3 on the ground and analyse the added value of S3 in this context. The case study regions represent Nordic territorial and typological diversity, and the material draws on the insights of key regional and national actors.

In this paper, the case studies indicate that the way the Nordic innovation systems and markets are organised are reminiscent of, and largely compatible with, the theoretical foundations of S3. This resemblance carries a notion of de facto smart specialisation and may aid and incentivise the implementation S3 strategies regardless of a country's EU-membership status and ex ante conditionalities. The regions relative characteristics and the administrative capacity of the regional public authorities coupled with the presence of multilevel governance approaches are decisive for S3 implementation. Rural regions with strong industrial sectors and a greater reliance on natural resources seem to be more eager to use S3 actively to ensure global competitiveness, than their urban counterparts. Moreover, critical mass accumulated through transnational collaboration in the Arctic also plays a significant role and demonstrates alternative adaptations of the policy concept.

Based on reports from 2018 on Nordic and Arctic S3 by the authors, this paper reveals that the current organisation and implementation around the concept of S3 differ markedly between the Nordic countries. However, the similarities between the underlying structures may eventually translate into

a 'Nordic model' of S3. Furthermore, the nature of S3 in Nordic and Arctic regions reveals a case of regional 'optimal sizes'. We conclude that unique regions require unique policy approaches. The success of S3 depends on discrete guidance; not rigorous rules.

I JUST RUN ONE LASSO REGRESSION

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The purpose of the article is to identify factors of income convergence between countries and regions with the use of regularized LASSO regression. According to the author's best knowledge, this algorithm has never been used in growth regressions before.

Durlauf et al. (2009) indicate difficulties in verifying conditional beta convergence. There is no consensus on what set of conditioning factors is the best. Conclusions regarding the significance of individual factors may contradict each other. Different approaches were used to select a best subset of convergence factors. Sala-i-Martin (1997) considered all combinations of 62 variables and estimated two million regressions, measuring the significance of individual explanatory variables by weighted statistics based on all regressions. This approach was criticized by Hendry and Krolzig (2004), who indicate that one regression and the "general to the specific" approach should be used. Another alternative is Bayesian Averaging of Classical Estimates applied to growth regressions by Sala-i-Martin et al. (2004).

In this article an alternative tool is used. The LASSO method (Tibishrani, 1996) is a popular machine learning tool used for pre-selection of potentially important explanatory variables. It can also be used when the initial number of variables exceeds the number of observations. The cost function in the optimization problem apart from minimizing the sum of squared residuals also takes into account the sum of absolute values of the model parameters as an additional constraint. At the expense of a certain bias of the obtained estimates, LASSO often allows to obtain more precise forecasts on the test sample and select the most important factors of the studied phenomenon by eliminating the excess variables from the model. The algorithm is applied on empirical data from Sala-i-Martin X. (1997) and Fernández, Ley and Steel (2001), among others and uses leave-one-out cross validation for selecting the optimal lambda.

FRAMING JUST TRANSITIONS: DISCOURSES AS FACILITATORS AND BARRIERS OF LOW-CARBON ENERGY TRANSITIONS IN GERMANY AND AUSTRALIA

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This paper seeks to compare discursive frames of just low-carbon energy transitions identified in key policy documents steering Germany's and Australia's clean energy transitions. The aim is to outline how and through which activities actors influence transition processes, focusing on the role of framing in maintaining asymmetric power relations between energy stakeholders. Furthermore, this paper examines to what extent pre-existing institutional frameworks condition the transition dynamics, contributing to the session theme in a targeted manner. This paper employs a mixed-methods comparative political science methodology. First, using a policy mix lens, the discursive frames dominating sets of (sub)national policies relating to electricity-sector transformation are analysed, to identify the underlying assumptions of how transition pathways are constructed. Secondly, discourse analysis assesses the conflicting meanings of 'just' transitions and discusses how a diversity of actors influences problem definitions. Since energy transitions are complex processes entailing cross-sectoral policies and regulatory overhaul, a comparative political science approach is useful, identifying key policy facilitators, barriers and trade-offs at the regional, national (and supranational) policy levels.

Germany, commonly referred to as international leader in integrated climate and energy policy, and Australia, lagging in international climate action but holding potential to become a renewable energy (RE) superpower constitute two interesting case-studies. This paper finds that concepts of just transitions are contested in a struggle about meaning, interpretation and implementation. They cannot simply be imposed in a top-down manner, suggesting that it is not solely the structural energy system transformation itself that is important, but also the way in which society makes sense of just transitions pathways. This paper explores actor groups and activities driving transition processes and expands on existing concepts of just transitions to assess the potential for theorising a more holistic concept considering the impact of discursive frames on both RE policymaking and prospects for behavioural change.

THINKING BIGGER AND WIDER - CULTURE, TOURISM AND CORNWALL'S REGIONAL ECONOMY

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This paper will present cultural tourism practice and policy and its role in Cornwall's regional economic development.

Between 2014 and 2018 Cornwall's cultural agency Creative Kernow hosted the Arts Council England and Visit England funded Cultural Destinations programme - Cornwall 365. The overarching aim of the initiative was to encourage collaboration between two different but mutually motivated sectors of the visitor economy - cultural and creative industries and tourism. With specific outcomes including driving new audiences to cultural venues, increasing income and thus the sustainability and resilience of both sectors, repositioning culture as a prominent part of the visitor economy and creating an infrastructure to support working together beyond the life of the project, this was an ambitious project with many interacting strands of activity and stakeholder groups.

Using a Complexity framework for analysis, the paper will examine the challenges and successes of the project, the rural socio-political environment in which it operated, key institutions and partners and its legacy in the uncertain post-Brexit landscape.

THE EFFECT OF INTER- AND INTRAREGIONAL KNOWLEDGE FLOWS ON INNOVATIONS: A MICRO-FOUNDED ANALYSIS

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Innovations are crucial for the survival of firms and their growth. They are also beneficial for the growth of regions. To be innovative, firms need a continuous inflow of knowledge with labour mobility as the single most important channel. Boschma et al. (2014) point out that the portfolio of competencies of newly hired employees as well as the geographical proximity of their former place of work to their current (new) one (in the sense of a cultural imprint) have a measurable effect on productivity growth of firms. Miguelez and Moreno (2017) at the example of European regions show the type of knowledge that gets channelled into firms to be of utmost importance for the local innovation output (in terms of patents). In this study I analyse the effect of the in- and outflow of skills on the innovativeness of firms. I apply the concept of "skill-relatedness" (Neffke et al. 2017) to, first, determine the portfolio of skills within a firm as the result of labour mobility (inflows, outflows). Second, I examine the impact of changes in the skill balance of firms on their innovativeness. In particular I distinguish process and product innovation, and in the case of the latter between incremental and radical innovation. I use data that combine the Integrated Employment Biographies (IEB) of the IAB and the IAB Establishment Panel, containing information on 14,000 firms in Germany and their employees. Between 2007 and 2015, these firms report to have generated nearly 54,000

innovations. Preliminary results from correlated random effects models suggest that not only is the type of knowledge inflow of importance for successful innovations but also the point in time at which the knowledge is available in the innovation process.

PATH TRANSPLANTATION IN CROSS-BORDER PRODUCTION OF ELECTRONICS TRANSNATIONAL CORPORATIONS IN VIETNAM: DIVERGENT PRACTICES OF DEVELOPING INDUSTRIAL PARKS

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Since early 2010s, there emerges a rapidly growing body of literature on path creation of regional development mainly from the Evolutionary Economic Geography (EEG) perspective. Recent studies reflect upon increasing interests in multi-scalar and multi-actor approaches to explain why regions differ from each other in nurturing new paths. Drawing upon this line of conceptual development, this study attempts to enrich the literature by examining divergent path transplantation in the process of cross-border investment engaged by various tiers of transnational corporations (TNCs) in the global electronics production networks, particularly from Korea, Taiwan and Mainland China in Vietnam since the late 2000s. Based on intensive field investigation and in-depth interviews during the period of Mar. 2016 and Feb. 2018, this study explores and compares different practices of TNCs in developing industrial parks by LG, Foxconn and China-base suppliers in Northern Vietnam. It argues that the divergent path transplantation in cross-border investment has been attributed to distinctive extra-firm strategies during the negotiations with multi-scalar governments and salient institutions in Vietnam. The findings of the study are helpful for advancing the literature on path transplantation in EEG approach with connections to insights from the Global Production Networks and geographical political economy perspectives.

MILAN'S BRAND AND THE DEVELOPMENT OF NORTHERN ITALY

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This contribution proposes a reflection about the transformation of Northern Italy as a macro-region characterized by many different meanings in the Italian and in the European context. This is a broad topic that can be defined through the concept of "Global City-Region" and within an interdisciplinary theoretical framework variously inspired to the so-called "Geographies of the North". From the historical point of view I will examine the transition from the "Industrial Triangle" to the "Po Valley Megalopolis" to the current "new global region". In this context, the focus will be on the policies implemented in Milan from the beginning of the post-Fordist phase of the economy, those policies are today redefining their role on the local scale such as on the regional one, and on the global scale. In particular, the paper will analyse the evolution of the city-brand in terms of its concrete effect on the physical transformation of the metropolitan territory and of its narrative effect on the redefinition of the meanings of the regional space: locally based, regionally organized and globally projected.

HOW CAN WE MEASURE SOCIETAL RESILIENCE OF REGIONS? SHOCK INTENSITY VIS-À-VIS SHOCK PERSISTENCE

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In the last two decades, the EU society has been exposed to many challenges such as climate changes demographic ageing or migration pressure. These developments require a resilient society, able to adapt to new situations. Since there is no unique measurement framework for resilience, this paper proposes a strategy to assess regional resilience, going beyond economic dimensions and keeping track of the quality of life. The shock addressed in this study is the 2008 financial and economic crisis. We start from a schematic visualization of society (system view), which includes three main pillars: assets, engine and outcomes. Socio-economic indicators have been identified with the aim to capture the response of different pillars of the society to a shock.

Variables to represent this system are gathered at different geographical levels within Europe and checked for suitability and relevance. We propose a metrics which captures the intensity of stress, both in terms of the immediate reaction to the crisis (resilience in impact) and medium run response (resilience in the medium run and bounce forward). Metrics of single indicators have been aggregated in a composite index, which measures the overall capacity of a region to withstand a shock. We compare our metrics with the alternative way to look at the reaction to the crisis: the time necessary to reach full recovery.

Our findings suggest that resilience is strongly dependant on the time frame considered: regions that are more resilient in their short-term response may not be necessarily the ones that perform better in the medium term. Although, shock intensity appear to be correlated with shock persistence, there are important exceptions. For instance, although German regions were very resilient (in size) in the immediate aftermath of the crisis, there is a high heterogeneity in the time necessary to bounce back to the pre-crisis level.

RESILIENCE AND WELLBEING OF EU REGIONS DURING AND AFTER THE 2008 ECONOMIC CRISIS

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In this study, the goal is to operationalize the concept of regional resilience using a novel approach, which goes beyond standard economic dimensions and keeps track of social inclusion, social capital and quality of life in general. We focus on the measurement of the resilience of the EU regions to the 2008 financial and economic crisis, with a goal to obtain a better comprehension of regional wellbeing and learn from this disturbance. Understanding the heterogeneity in regional resilience yields knowledge about specific features of certain socio-economic systems to better absorb, adapt and transform in stormy times.

Our proposed measurement strategy is based on a three-step approach. Focusing on a specific historical episode marked by a synchronized set of shocks, first we select a large list of economic and non-economic indicators. Second, we focus on the joint dynamic response of all system variables to the crisis to derive resilience indicators associated with different time horizons and coping capacities.

Third, we search for some pre-determined systemic features that differentiate resilient regions from non-resilient ones.

We find that the inclusion of social indicators, indeed, does make a difference in terms of assessment of resilience capacities of regions, since their response dynamics does not necessarily follow the same pattern of the purely economic dimensions. Regions with better social inclusion and more favourable conditions for women integration in the labour market perform better in absorbing the effect of the crisis and are, overall, more resilient.

Finally, effective monitoring of the government expenditure on social protection is necessary to build a pre-alerting system for the ability to handle potential future crisis episodes as it is associated with a less dramatic crisis impact.

REGIONAL ENTREPRENEURIAL ECOSYSTEM IN RUSSIA

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The article explains the uneven development of small and medium enterprises (SMEs) in Russia within the framework of the 'entrepreneurial ecosystems' concept. A corresponding typology of the Russian regions was carried out according to the proposed model. The most developed ecosystems with high density and sectoral diversity of SMEs are formed in regions with access to large consumer markets, capital, and low risks for investors: Moscow, St. Petersburg, Novosibirsk, Belgorod, Kaliningrad, Samara regions, Tatarstan, etc. Medium developed ecosystems with industrial clusters formed in Kaluga, Tula, Leningrad, Tomsk and other regions near large agglomerations. The least developed SMEs sector is in areas with high costs of doing business: the North Caucasus, the Far East and the Arctic zone, which requires special measures of state policy. Objective geographical regularities are traced along the axes: north - south, west - east, center and periphery, etc. Therefore, constraints in the development of SMEs cannot always be overcome by improving institutional conditions. The level of development of ecosystems determines their ability to withstand external shocks: the main negative impact is caused by the fall in household incomes. The effect of the FIFA World Cup is positive in the hosting regions and in its neighbors. In conclusion, a number of recommendations for the implementation of a regionally differentiated entrepreneurial policy are proposed.

HUMAN CAPITAL AND ENTREPRENEURIAL INTENTION IN DEPRIVED AREAS

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Most main measures of entrepreneurship indicate that deprived urban neighbourhoods (DUNs) lag behind more prosperous areas (Devins, 2009), because people living in deprived areas would face particular contexts potentially more hostile to starting entrepreneurial activities. Particularly, human capital is lower on average and varies in nature compared to that present in more prosperous communities (Hirsch, 2008), which may hinder opportunity identification and exploitation (Shane, 2000), whilst also impacting on the availability of alternative activities (Potter, 2004). Nonetheless, previous studies that focused on the general relationship between human capital and entrepreneurial intention may be not applicable to deprived areas, which will be addressed in this paper.

This paper will draw upon a classic entrepreneurial intention model, regulatory focus theory and neighbourhood effects to build a new intention model with the relevance of deprived context. The purpose is to test the effect of neighbourhood context on human capital development and the

interactions among neighbourhood context, human capital and two crucial factors relating to entrepreneurial intention (i.e. self-efficacy and self-regulatory focus). In this paper, both the primary and secondary data will be applied to provide a comprehensive view from a broad perspective to specific situations. Binary logistic regressions have been applied in this paper to empirically test these relationships. It is found that higher formal qualification facilitates self-efficacy, particularly for individuals' belief to complete tasks, whilst an interaction between neighbourhood contexts and the development of general human capital has been proven. More specifically, family background and ethnic background play crucial roles in the development of general human capital.

This paper will contribute to knowledge by providing a comprehensive illustration of the key mechanisms at play, enabling a fuller understanding of the connections among deprived environment, entrepreneurial intention and human capital. This is of importance to both policy makers and future researchers.

ENGAGING CULTURAL AND HERITAGE ENDOWMENTS IN SOCIAL AND ECONOMIC DEVELOPMENT OF HISTORIC TOWNS AND REGIONS OF RUSSIA

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It is widely accepted that the economic prosperity in Russian regions is primarily bounded by natural resource endowments and inherited profile of the local economies. However the diversity of the regions has many other dimensions and thus the growth recipes may also vary. The devaluation of the national currency in recent years has provided a number of growth opportunities, particularly it has made the local destinations more attractive and affordable for both domestic and international tourists. In 2017 WTTC reported that the total contribution of travel & tourism to Russia's GDP reached 4.8% and its impact was larger than that of the chemicals manufacturing and automotive manufacturing sectors.

The authors examining cultural and heritage endowments in several Russian regions in order to assess their tourism potential and its valorization options. Along with evaluation of particular heritage sites study covers the analysis of the regional infrastructure elements which are crucial for the tourism industry and influence accessibility and hospitality facilities so to make possible identification of the locations which could be better integrated in to the touristic routes. These aspects are specifically important for the smaller size towns beyond metropolitan areas to take the advantages of their historical and cultural variety.

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